An Investigation of the Comorbidity and Relationship between Post-Traumatic Stress Disorder, Personality Disorders and Axis-I Disorders in a Psychiatric Outpatient Population of Active Duty Armed Forces Personnel

by

Heather Tomlinson

Volume I

Submitted for the degree of Doctor of Psychology (Clinical Psychology)

Department of Psychology
School of Human Sciences
University of Surrey

July 2003

©Heather Deanna Tomlinson, 2003
For my Mum and Dad
I love you both
ACKNOWLEDGMENTS

I would like to express my thanks and gratitude to my fellow Trainees, particularly members of the RPG group. I especially thank Moz McQuillan and Anna Manners for not only the entertaining times, but also for helping me keep relatively sane when things were more difficult. We did it girls! Thanks also to the course team and administrators for their support over the last three years. My warmest thanks and gratitude is for Dr Brian Solts, who provided continuous support, words of encouragement and excellent supervision. Thanks also to all my placement supervisors for their guidance, supervision and feedback.

Thank you mum and dad for your encouragement and love, and also to Christine for resisting the urge to ask me to baby-sit (I can do it now!). Finally, I especially thank you Colin, for never complaining when I had “things to do” over the last three years, for just being there and for all your love. I love you. We can concentrate on our wedding plans now!
COPYRIGHT STATEMENT

No part of this portfolio may be reproduced in any form without written permission of the author, except by the University of Surrey Librarian for legitimate academic purposes.

© Heather Deanna Tomlinson, 2003
STATEMENT OF CONFIDENTIALITY

Please note that the names of all clients and some identifying background information in all of the case reports have been altered to preserve the clients' anonymity.
### TABLE OF CONTENTS

**INTRODUCTION TO THE PORTFOLIO**

<table>
<thead>
<tr>
<th>ACADEMIC DOSSIER – Overview</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ADULT MENTAL HEALTH ESSAY:</strong></td>
<td>3</td>
</tr>
<tr>
<td>&quot;Compare and contrast Cognitive-Behavioural and Psychoanalytic concepts of depression in adults, and the evidence underlying each of these models.&quot;</td>
<td>4</td>
</tr>
<tr>
<td>1. Introduction</td>
<td>4</td>
</tr>
<tr>
<td>2. Definition of depression</td>
<td>5</td>
</tr>
<tr>
<td>3. Psychoanalytic concept of depression</td>
<td>6</td>
</tr>
<tr>
<td>3.1 How does theory link with practice?</td>
<td>7</td>
</tr>
<tr>
<td>4. Cognitive-behavioural concept of depression</td>
<td>8</td>
</tr>
<tr>
<td>4.1 How does theory link with practice?</td>
<td>10</td>
</tr>
<tr>
<td>5. A comparative evaluation of Freud's and Beck's concepts of depression</td>
<td>10</td>
</tr>
<tr>
<td>5.1 Theory into practice, how does it work?</td>
<td>15</td>
</tr>
<tr>
<td>6. Conclusion and clinical implications</td>
<td>17</td>
</tr>
<tr>
<td>7. References</td>
<td>19</td>
</tr>
</tbody>
</table>

| PEOPLE WITH LEARNING DISABILITIES ESSAY: | 23 |
| "Sexually abused and / or sexually abusing: What is the role of the clinical psychologist in working with people with learning disabilities who have been abused or who abuse others?" | 24 |
| 1. Introduction | 24 |
| 2. Learning disability criteria | 25 |
| 3. Consent | 25 |
| 4. Defining sexual abuse | 26 |
| 5. Characteristics of the sexually abused | 27 |
| 6. Characteristics of the sexual abuser | 27 |
| 7. Nature of sexual abuse | 27 |
| 8. Impact of sexual abuse | 28 |
| 9. The role of the clinical psychologist – assessment | 28 |
| 9.1 Why has the referral been made? | 30 |
| 9.2 How much does the individual understand? | 31 |
| 9.3 Why is the individual behaving in a particular way? | 32 |
| 10. The role of the clinical psychologist – intervention | 34 |
| 10.1 Interventions for individuals' who sexually abuse | 34 |
| 10.2 Interventions for individuals' who have been sexually abused | 36 |
| 11. Conclusion | 38 |
| 12. References | 40 |

| CHILDREN, ADOLESCENTS AND FAMILIES ESSAY: | 45 |
| "Anxiety disorders in childhood are fundamentally different from anxiety disorders in adulthood. Discuss with reference to the theory and treatment of two anxiety disorders." | 46 |
| 1. Introduction | 46 |
| 2. Cognitive theory of emotional disorders | 47 |
| 3. Clinical features of panic disorder in adulthood | 48 |
| 3.1 Cognitive conceptualisation of panic disorder | 49 |
| 4. Panic disorder in childhood - are there fundamental differences? | 50 |
| 5. Clinical features of social phobia in adulthood | 52 |
| 5.1 Cognitive conceptualisation of social phobia | 53 |
| 6. Social phobia in childhood - are there fundamental differences? | 55 |
| 7. Treatment of panic disorder and social phobia in adulthood | 58 |
| 7.1 Outcome studies on CBT panic disorder and social phobia in adulthood | 59 |
| 8. Are there fundamental differences in the treatment of childhood anxiety disorders? | 60 |
| 9. Conclusion and clinical implications | 61 |
| 10. References | 63 |
OLDER ADULTS ESSAY:

"Dementia cannot be cured. It takes its course." Critically evaluate with a discussion of known theories of causes and treatment approaches.

1. Introduction .................................................................................................................. 70
2. What is Alzheimer's disease? .......................................................................................... 70
3. Alzheimer disease neuropathology .................................................................................. 72
   3.1 Neurofibrillary tangles ................................................................................................. 72
   3.2 Senile Plaques ............................................................................................................. 72
4. Course of Alzheimer's disease ....................................................................................... 73
5. Theories of causes for Alzheimer's disease ....................................................................... 74
   5.1 Genetic factors ............................................................................................................. 74
      5.1.1 Early-onset AD ...................................................................................................... 75
      5.1.2 Late-onset AD ...................................................................................................... 75
   5.2 Neurotransmitter factors ............................................................................................. 76
   5.3 Environmental factors .................................................................................................. 77
      5.3.1 Age ....................................................................................................................... 77
      5.3.2 Head injury ............................................................................................................ 78
      5.3.3 Education ............................................................................................................. 78
      5.3.4 Depression ............................................................................................................ 78
5.4 Other factors .................................................................................................................. 79
6. Treatment approaches for Alzheimer's disease ............................................................... 79
   6.1 Genetic testing ............................................................................................................. 79
   6.2 Pharmacotherapy ......................................................................................................... 80
      6.2.1 Cholinomimetics .................................................................................................. 80
   6.3 Antioxidants ............................................................................................................... 81
   6.4 Anti-inflammatory drugs ............................................................................................. 81
6.5 Psychological approaches to treatment ........................................................................... 81
      6.5.1 Reality orientation ................................................................................................. 82
      6.5.2 Reminiscence therapy ......................................................................................... 83
      6.5.3 Memory training ................................................................................................... 83
      6.5.4 Behavioural approaches ..................................................................................... 84
      6.5.5 Carers support ..................................................................................................... 84
5. Conclusion ....................................................................................................................... 85
8. References ....................................................................................................................... 87

CLINICAL DOSSIER - Overview

ADULT MENTAL HEALTH PLACEMENT:
Placement details and summary of placement ................................................................. 95
Summary of adult mental health case report ................................................................... 97

PEOPLE WITH LEARNING DISABILITIES PLACEMENT:
Placement details and summary of placement ................................................................. 99
Summary of people with learning disabilities case report ............................................... 101

CHILDREN, ADOLESCENTS AND FAMILIES PLACEMENT:
Placement details and summary of placement ................................................................. 103
Summary of children, adolescent and families case report ............................................... 105

OLDER ADULTS PLACEMENT:
Placement details and summary of placement ................................................................. 107
Summary of older adults case report ................................................................................. 109

SPECIALIST PLACEMENT IN THE MINISTRY OF DEFENCE:
Placement details and summary of placement ................................................................. 111
Summary of case report ..................................................................................................... 113

SPECIALIST PLACEMENT IN A MAXIMUM SECURE FORENSIC SETTING:
Placement details and summary of placement ................................................................. 115
TABLE OF CONTENTS CONTINUED

RESEARCH DOSSIER - Overview

<table>
<thead>
<tr>
<th>SERVICE-RELATED RESEARCH PROJECT:</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Clients' perception of a one day Anxiety Management workshop provided by a Clinical Psychology outpatient service.&quot;</td>
</tr>
<tr>
<td>Acknowledgements .......................... 119</td>
</tr>
<tr>
<td>1. Abstract .................................. 120</td>
</tr>
<tr>
<td>2. Introduction ............................. 121</td>
</tr>
<tr>
<td>3. Method .................................... 124</td>
</tr>
<tr>
<td>3.1 Design .................................... 124</td>
</tr>
<tr>
<td>3.2 Clients .................................... 124</td>
</tr>
<tr>
<td>Table 1: Age range of clients ............ 124</td>
</tr>
<tr>
<td>3.3 Procedure ............................... 125</td>
</tr>
<tr>
<td>4. Results .................................... 126</td>
</tr>
<tr>
<td>Table 2: Means and standard deviations for pre- and post-workshop scores .......... 126</td>
</tr>
<tr>
<td>4.1 Severity of anxiety .................... 126</td>
</tr>
<tr>
<td>4.2 Coping with anxiety ................... 126</td>
</tr>
<tr>
<td>4.3 The effect of anxiety on daily life .... 127</td>
</tr>
<tr>
<td>4.4 Improve understanding of anxiety ..... 127</td>
</tr>
<tr>
<td>4.5 The most useful aspect of the workshop 127</td>
</tr>
<tr>
<td>4.6 Changes in levels of anxiety ........... 127</td>
</tr>
<tr>
<td>4.7 Skills currently used ................... 128</td>
</tr>
<tr>
<td>Table 3: Skills currently used ............ 128</td>
</tr>
<tr>
<td>5. Discussion ............................... 129</td>
</tr>
<tr>
<td>6. References ............................... 132</td>
</tr>
</tbody>
</table>

Appendices

| Appendix I | Handout. What is anxiety? .................. 134 |
| Appendix II | Handout. Relaxation techniques .......... 143 |
| Appendix III | Handout. Behavioural steps ................. 146 |
| Appendix V | Handout. Cognitive approach: reappraisal 158 |
| Appendix VI | Anxiety management workshop evaluation form 161 |
| Appendix VII | Anxiety management questionnaire ...... 164 |
| Appendix VIII | Initial letter to client ................... 169 |
| Appendix IX | Reminder letter to client ................. 171 |
| Appendix X | Remaining themes ........................ 173 |
| Appendix XI | Confirmation letter of presentation .... 176 |

QUALITATIVE RESEARCH PROJECT:

"Social representations of schizophrenia: First year undergraduate students' perspectives"

| Introduction ................................ 179 |
| Aim ............................................. 181 |
| 3. Data collection .......................... 182 |
| 3.1 Focus group .............................. 182 |
| 3.2 Participants .............................. 182 |
| Table 1: Summary of demographic information for participants .......... 183 |
| 4. Analysis ................................... 185 |
| 4.1 Findings ................................ 186 |
| 4.1.1 The Schizophrenic .................... 186 |
| 4.1.2 Emotional responses .................. 186 |
| Table 2: Main themes, accompanying sub-themes and illustrative quotations .......... 187 |
| 4.1.3 Social distance ......................... 188 |
| 4.1.4 Information ............................ 189 |
| 5. Discussion ............................... 192 |
| 6. References ............................... 194 |

Appendices

| Appendix I | Focus group questions ..................... 196 |
| Appendix II | Participant information sheet .......... 198 |
| Appendix III | Consent form ............................... 200 |
| Appendix IV | Consent to video and audiotape recording 202 |
| Appendix V | Transcript of focus group ............... 204 |
MAJOR RESEARCH PROJECT:  
"An investigation of the comorbidity and relationship between post-traumatic stress disorder, personality disorders and Axis-I disorders in a psychiatric outpatient population of active duty armed forces personnel"

Acknowledgments .................................................................................................................. 239
Abstract ................................................................................................................................ 240
1. Introduction .......................................................................................................................... 242
2. Post Traumatic Stress Disorder (PTSD) ............................................................................. 244
   2.1 A brief history of PTSD .................................................................................................. 244
   2.2 Current diagnostic criteria for PTSD ...................................................................... 245
   Box 1: DSM-IV diagnostic criteria for PTSD ................................................................. 246
   2.3 Traumatic events associated with PTSD ................................................................. 246
   Table 1: Traumatic events associated with PTSD ......................................................... 247
   2.4 Risk factors for development of PTSD ................................................................. 247
   Table 2: Risk factors for PTSD ................................................................................... 247
   2.4.1 Personality as a risk factor for PTSD ................................................................. 248
   2.5 Psychometric assessment of PTSD .......................................................................... 249
   2.5.1 Clinician rated interviews ................................................................................... 249
   2.5.2 Self-report measures ............................................................................................ 250
   2.6 Prevalence of PTSD ............................................................................................... 251
   2.6.1 General population .............................................................................................. 251
   Table 3: Lifetime prevalence of trauma ....................................................................... 252
   2.6.2 Military population .............................................................................................. 252
   2.7 PTSD in active duty military personnel ................................................................. 253
   2.7.1 Peacekeeping ......................................................................................................... 253
   2.7.2 Combat .................................................................................................................. 254
   2.7.3 Non-combat duties ............................................................................................... 254
   2.7.4 Pre-military trauma .............................................................................................. 255
   2.8 Considerations when researching PTSD ................................................................. 255
3. Personality Disorders ............................................................................................................ 256
   3.1 Definition of personality disorder .............................................................................. 256
   3.2 The DSM-IV personality disorders ............................................................................ 256
   Table 4: Some definitions of personality disorder ......................................................... 257
   3.3 Categorical versus dimensional classification ........................................................... 257
   3.3.1 Categorical approach ............................................................................................ 257
   Table 5: DSM-IV and DSM-IV-R deleted personality disorders .................................. 258
   3.3.2 Dimensional approach ........................................................................................ 259
   3.4 Axis-I and personality disorder distinction ............................................................... 260
   3.5 Psychometric assessment of personality disorders .................................................. 260
   3.5.1 Semi-structured interview .................................................................................. 260
   3.5.2 Self-report questionnaires .................................................................................... 261
   3.5.3 Comparison of structured interview and self-report instruments ....................... 262
   3.6 Prevalence of personality disorder ......................................................................... 263
   Table 6: Prevalence ranges for cluster A personality disorders in general population .... 264
   Table 7: Prevalence ranges for cluster B personality disorders in general population ..... 264
   Table 8: Prevalence ranges for cluster C personality disorders in general population .... 264
   3.7 Personality disorders in the military ........................................................................ 265
4. Co-morbidity studies ............................................................................................................. 266
   4.1 PTSD and other Axis-I disorders ............................................................................ 266
   4.2 Personality disorders and Axis-I disorders ............................................................. 267
   4.2.1 Comorbid personality disorders and Axis-I disorders ..................................... 268
   4.3 Comorbid PTSD and personality disorder studies .................................................. 269
   4.3.1 Personality disorder features and PTSD ............................................................. 270
   4.3.2 Personality profiles of combat veterans with PTSD ........................................... 271
   4.3.3 Personality profiles of a non-combat sample with PTSD ................................... 272
   4.3.4 PTSD and the full spectrum of personality disorders ......................................... 273
   Table 9: Personality disorders identified in earlier studies ........................................... 274
5. Proposed research ................................................................................................................ 275
   5.1 Hypotheses ............................................................................................................... 276
6. Method ............................................................................................................................................... 277
  6.1 Design ....................................................................................................................................... 277
  6.2 Participants ................................................................................................................................. 277
  Table 10: military and personal demographic information .......................................................... 278
  6.2.1 Demographic information ...................................................................................................... 279
  6.3 Measures .................................................................................................................................. 279
  6.3.1 Posttraumatic Stress Diagnostic Scale (PDS) ....................................................................... 279
  Box 2: Procedure for completing the PDS ..................................................................................... 279
  Box 3: PDS scales and diagnostic criterion .................................................................................... 280
  6.3.2 Millon Clinical Multiaxial Inventory-III (MCMI-III) ............................................................. 280
  Box 4: MCMI-III clinical scales ........................................................................................................ 281
  Box 5: Basic interpretation of MCMI-III BR scores ....................................................................... 281
  6.3.3 Structured Clinical Interview for DSM-IV Axis-II disorders (SCID-II) ............................... 282
  Box 6: Scoring method for the SCID-II ......................................................................................... 282
  6.4 Procedure .................................................................................................................................. 283
  6.5 Statistical analysis ....................................................................................................................... 284
  6.6 Ethical issues .............................................................................................................................. 284

7. Results ................................................................................................................................................ 286
  7.1 PD identified using the MCMI-III and SCID-II .......................................................................... 286
    7.1.1 Hypothesis 1 ......................................................................................................................... 286
  Table 11: Frequency of personality disorders ................................................................................. 287
  7.2 Types of personality disorder and personality traits ............................................................... 287
    7.2.1 Hypothesis 2 ......................................................................................................................... 287
  Table 12: Personality disorders and personality traits identified with MCMI-III ............................... 288
  Table 13: Significance levels for personality disorders and personality traits .............................. 289
  Table 14: Means, standard deviations and Mann Whitney U for types of BR scores ................... 289
  Table 15: Personality disorders identified with SCID-II ............................................................... 290
  Figure 1: line graph of personality profiles for PTSD and Non-PTSD groups ............................... 291
    7.2.2 Personality disorder clusters, appendix and deleted category ............................................ 291
  7.3 Personality disorder and PTSD symptom severity .................................................................... 292
    7.3.1 Hypothesis 3 ......................................................................................................................... 292
  7.4 Comorbid groups and Axis-I disorders ...................................................................................... 293
    7.4.1 Hypothesis 4 ......................................................................................................................... 293
  Table 16: Means, SD and Kruskal-Wallis Test for clinical syndromes – MCMI-III .......................... 293
  Figure 2: Line graph of the clinical syndromes for MCMI-III four groups ........................................ 294
  Table 17: Significant differences between MCMI-III four groups ................................................. 295
  Table 18: Significant differences between SCID-II four groups .................................................... 296
  Figure 3: Line graph of the clinical syndromes for SCID-II four groups ......................................... 297
  7.5 Personality disorder features and type of trauma ...................................................................... 297
    7.5.1 Hypothesis 5 ......................................................................................................................... 297
  Table 19: Type and most distressing trauma experienced ............................................................... 298
  7.6 Further analysis .......................................................................................................................... 299
    7.6. Relationship between PDS and MCMI-III PTSD scale .......................................................... 299
  Figure 4: Scatter-plot of relationship ............................................................................................... 299
  7.7 Trauma experienced .................................................................................................................. 300
    7.7.1 Number of traumas experienced .......................................................................................... 300
  Table 20: Number of traumas experienced ...................................................................................... 300
  7.7.2 Types and most distressing trauma experienced ................................................................. 301
  Table 21: Types and most distressing trauma experienced ............................................................ 301
  Table 22: significance levels for types and most distressing trauma experienced ........................ 302
  Figure 5: Line graph for number and types of trauma experienced ................................................. 302
  Table 23: Mann Whitney for number and types of trauma ............................................................ 303
  7.8 PTSD symptom severity and duration ....................................................................................... 303
  Table 24: significance levels for when traumatic event occurred .................................................. 303
  7.9 Relationship between PDS clusters and MCMI-III PD BR scores .......................................... 304
  Table 25: Correlations for Trauma-no-PTSD group ....................................................................... 304
  7.10 Clinical syndromes .................................................................................................................... 304
  Table 26: means, SD and Mann Whitney U .................................................................................... 305
  Figure 6: Line graph of clinical syndromes ....................................................................................... 305
8. Discussion

8.1 Research hypotheses

8.1.1 Personality disorders identified (Hypothesis 1) ........................................................................... 311
8.1.2 Types of personality disorder and traits (Hypothesis 2) ................................................................. 312
8.1.3 Personality disorders and PTSD symptom severity (Hypothesis 3) ................................................ 313
8.1.4 Axis-I disorders and personality disorder (Hypothesis 4) .......................................................... 313

8.2 Methodological considerations on comorbidity data ........................................................................ 314

8.2.1 Sample ......................................................................................................................................... 314
8.2.2 Measures used .............................................................................................................................. 315

8.3 Further analysis .................................................................................................................................. 316

8.3.1 Sample ......................................................................................................................................... 316
8.3.2 Setting ......................................................................................................................................... 320
8.3.3 Measures used .............................................................................................................................. 315
8.3.4 Number of traumas experienced ................................................................................................... 317
8.3.5 One criterion short group ................................................................................................................ 319

8.4 Methodological considerations on trauma data ................................................................................ 319

8.4.1 Measures used .............................................................................................................................. 319
8.4.2 Setting ......................................................................................................................................... 320
8.4.3 Measures used .............................................................................................................................. 315

8.5 Overall methodological considerations .............................................................................................. 320

8.5.1 Sample ......................................................................................................................................... 320
8.5.2 Setting ......................................................................................................................................... 320
8.5.3 Design .......................................................................................................................................... 321

8.6 Clinical implications ........................................................................................................................... 321

8.7 Service implications .......................................................................................................................... 321

8.8 Further research .................................................................................................................................. 322

9. References .......................................................................................................................................... 323

Appendices

Appendix I Criterion for Avoidant Personality Disorder ........................................................................ 337
Appendix II Criterion for Dependent Personality Disorder ..................................................................... 340
Appendix III Criterion for Obsessive-Compulsive Personality Disorder .................................................. 343
Appendix IV Criterion for Passive-Agressive Personality Disorder ......................................................... 346
Appendix V Criterion for Depressive Personality Disorder ....................................................................... 348
Appendix VI Criterion for Paranoid Personality Disorder ....................................................................... 350
Appendix VII Criterion for Schizotypal Personality Disorder ................................................................... 352
Appendix VIII Criterion for Schizoid Personality Disorder ...................................................................... 356
Appendix IX Criterion for Histrionic Personality Disorder ....................................................................... 358
Appendix X Criterion for Narcissistic Personality Disorder ...................................................................... 360
Appendix XI Criterion for Borderline Personality Disorder ...................................................................... 364
Appendix XII Criterion for Antisocial Personality Disorder .................................................................... 368
Appendix XIII Criterion for Personality Disorder Not Otherwise Specified ................................................. 376
Appendix XIV Participant Information Sheet .......................................................................................... 377
Appendix XV Consent Form .................................................................................................................... 380
Appendix XVI Posttraumatic Stress Diagnostic Scale questionnaire ....................................................... 383
Appendix XVII Posttraumatic Stress Diagnostic Scale scoring sheet ....................................................... 387
Appendix XVIII MCMI-III question booklet and answer sheet ............................................................... 390
Appendix XIX University Ethics Committee letter of approval .................................................................. 390
Appendix XX MoD Ethics Committee letter of approval ............................................................................ 401
Appendix XXI Table 34: Agreement between MCMI and SCID .................................................................. 403
Appendix XXII Table 33: Correlations for PTSD group ............................................................................. 403

Research logbook .................................................................................................................................. 404
INTRODUCTION TO THE PORTFOLIO – VOLUME I

This portfolio contains a selection of work completed during the PsychD in Clinical Psychology training. Volume I comprises three sections: the academic dossier, the clinical dossier and the research dossier. The academic dossier contains four essays covering the core topics: adult mental health; people with learning disabilities; children, adolescents and families, and older adults. The clinical dossier consists of summaries of all placements undertaken and summaries of five formal clinical case reports. The research dossier comprises the service-related research project completed on placement in Year 1, qualitative research completed in Year 2 and the major research project completed in Year 3.

Volume II comprises the clinical dossier of work completed during the PsychD in Clinical Psychology at the University of Surrey. This volume contains five case reports covering four core topics and one specialist topic. Also included in this volume is relevant placement documentation including placement contracts, placement evaluation forms, the logbooks of clinical experience and trainee feedback of the placement. Due to the confidential nature of the clinical material contained in this volume, this volume will be kept within the Psychology Department of the University of Surrey.

The work presented in this portfolio reflects the range of client groups, presenting problems and psychological approaches covered during the course. The order in which the work was completed is retained within the portfolio to illustrate the development of clinical skills over the period of training.
ACADEMIC DOSSIER

OVERVIEW

The academic dossier contains four selected essays from the core client groups studied during the first and second years of training. These essays critically examine the theory and practice of a range of psychological approaches to various issues experienced across the life span.
ADULT MENTAL HEALTH ESSAY

Compare and contrast Cognitive-Behavioural and Psychoanalytic concepts of depression in adults, and the evidence underlying each of these models

DECEMBER 2000
YEAR 1
1. **Introduction**

Interest in the conceptualisation of depression has generated decades of discussion within the various psychological schools of thought. Some theorists consider 'internal' processes (e.g. Freud, 1917; Beck, Rush, Shaw & Emery, 1979), whilst others consider negative 'external' reinforcements (e.g. Coyne, 1976). The variance in concepts also appears to influence how depression is treated using psychological intervention. However, despite this 'obvious' variance, are the concepts really that different?

In order to address the title and proposed question, this essay will first, briefly describe depression in adults, in terms of the clinical definition as defined in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (American Psychiatric Association, 1994), excluding depression with psychotic features.

Secondly, only Freud's psychoanalytic concept of depression will be discussed. The author however, does acknowledge that there are numerous psychoanalytic theories which attempt to explain depression (e.g. Rado, 1928; Klein, 1940). Freud was selected to keep the focus of the essay to one influential psychoanalytic theorist. His views have inspired other theorists to both develop his theory and generate research. Moreover, concepts attributed to Freud (1917) tend to be associated with some contention regarding evidence-base, which will be evaluated. Freud referred to present-day depression as 'melancholia'. This terminology will be used when describing Freud's concepts, but the author will refer back to the term depression in the comparative evaluation.

Thirdly in terms of the cognitive-behavioural conceptualisation of depression, this essay will keep the focus to one theorist. Beck's (1967) cognitive theory and cognitive model of depression (Beck et al., 1979) will be discussed. Although not referred to in this paper, the author does acknowledge that other theorists have attempted to explain depression (e.g. Abramson, Metalsky & Alloy, 1989). Beck's work has been of immense influence in both research and clinical practice. Like Freud, Beck has inspired other theorists to develop, revise and generate research from his original theory of depression.
Finally, the concepts proposed by Freud and Beck will be comparatively evaluated. The available evidence will be considered in terms of support, development and limitations of the concepts and links with clinical practice. With regard to answering the latter part of the question and considering the word limit, this essay has not alluded to outcome studies to consider the efficacy of the models per se. The concepts and models are not mutually exclusive, so the author has considered the evidence in relation to some (not all) aspects of therapeutic application. The essay will conclude by revisiting and attempting to answer the question posed, and to consider clinical implications.

2. Definition of depression

Aptly described as the “common cold of psychiatry” (Seligman, 1975, p. 169), depression appears to be a ubiquitous disorder that nearly everyone will experience in their lifetime. Gotlib and Hammen (1992) propose that the label ‘depression’ is commonly used to describe the typical lowering of mood in response to life events such as loss (e.g. death or separation) and disappointments (e.g. not getting the desired job). This mood can be described as feeling low, sad and unhappy, and may last a few hours or a few days. These feelings may be accompanied by negative thoughts (e.g. “I must be useless to not have got that job”) and the individual may find that their interest in pleasurable activities and motivation has reduced. This experience tends to be transitory and causes little impairment to the individual.

In contrast, when an individual becomes ‘clinically depressed’ the above experiences become exaggerated. This can cause severe impairment and a profound disruption over the psychological and behavioural components of the individual. It can have a devastating impact on intimate relationships, family dynamics and the economy. Depression can be debilitating and potentially life-threatening. If it co-occurs with either an Axis I or Axis II condition, there is a risk of it being overlooked and untreated. This may lead to unnecessary suffering and sometimes suicide, particularly within psychiatric settings (Hirschfeld & Davidson, 1988).

The clusters of symptoms which help to diagnose major depressive disorder are defined in DSM-IV (American Psychiatric Association, 1994). The depressed individual must present
with having at least a depressed mood, or loss of interest and pleasure. In addition, five or more symptoms (below) must have been present for a period of two weeks: Persistent low mood; loss of pleasure and or interest in once enjoyed activities; disruptions in appetite and body weight; difficulty sleeping or over sleeping; slowing down physically, agitation or retardation; lethargy; feelings of worthlessness, or guilt; inability to concentrate; and recurrent thoughts of death and suicidal ideation.

3. Psychoanalytic concept of depression

Freud (1917) hypothesised that depression (and all other forms of psychopathology) can be explained in terms of conflicts within the ego (Smith, 1990). The ego is the executive component of our personality that governs our interactions with the environment and is largely responsible for being "reality-orientated" (Bateman & Holmes, 1995, p. 36). Stress or conflict is removed from conscious awareness by the ego and placed within the unconscious. However, when the ego is faced with a situation which is overwhelming the unconscious conflicts reappear, but in the form of psychological disturbance and symptoms of depression.

Freud compared the process of mourning (grief) and melancholia (depression). He assumed that mourning and melancholia were essentially the same in terms of the psychological processes involved (e.g. ego conflict and regression to the oral stage of development). Indeed, the two processes may even lie along a continuum, whereby melancholia is a severe expression of mourning. However, Freud observed one difference between the two processes; the melancholic demonstrated a "disturbance in self-regard" (p. 252). Freud suggested that what may have precipitated this difference may have been an early experience of loss and a predisposition in the personality.

In order to understand the basis of Freud's concepts of depression (melancholia), this paper will described his observations as postulated in his paper "Mourning and Melancholia" (Freud, 1917). In both mourning and melancholia, the loss of a loved person or object has occurred. In mourning this is usually through death. The reaction of sadness and low mood is acceptable and can be accounted for. But in melancholia, it is the "object of love" that has
abandoned or deserted the individual (p. 253). Because it is difficult to account for what has been lost, the individual’s response is considered both disproportionate to the ‘loss’ and pathologised as melancholia (Karasu, 1990).

The ego bereft that the love-object has gone, attempts to keep hold of it by regressing to the oral stage of development. The object is ‘devoured’ through introjection, an unconscious process whereby the object is identified with and incorporated into the ego. A ‘narcissistic identification’ is formed with the object and the ego becomes self-absorbed. It has a gain from this process; it no longer has to fear losing the object, but the consequence is the eventual loss of external contact. By withdrawing into itself, the ego becomes ‘lost’ and overwhelmed by “the shadow of the object” (p. 258). This causes the ego “impoverishment” (p. 254) and dissatisfaction. Self-respect is lost and the “disturbance of self-regard” manifests (p. 252).

A further characteristic of melancholia appears to be ambivalence. Ambivalence is under the control of the unconscious and reflects ego conflict. The ego struggles with love and hate for the love-object. It loves the object so tries to resolve the anguish and pain towards the loss, but hates the object for leaving, so punishes and torments it. However, this hostility is retroflexed. The anger and suffering is directed inwards which protects the melancholic from openly expressing this vile and sadistic reaction (Gay, 1995). Freud observed that what appears as self-punishment is actually hostility directed at the object. The aggression and rage that manifests through ambivalence erodes away the individual’s self-esteem and feelings of self-worth. This may lead to despair and feelings of hopelessness. A vicious circle of ambivalence and depressive symptoms may develop and continue until the conflict within the individual is resolved. Resolution may be achieved through psychoanalysis, or in some instances, through the destruction of the ego (i.e. suicide).

3.1 How does theory link with practice?

The theory assumes that events from early childhood have a powerful influence over adult behaviour and well being (Abrams & Abrams, 1997). Past experiences are explored through psychoanalysis, because they are assumed to be the origin of the presenting psychological disturbance (e.g. low mood, reduction in appetite, etc.). When an individual presents for
treatment with symptoms of depression, it is assumed that a present day event, such as loss of job, or separation from a loved one, has reactivated the repressed and unconscious conflicts from childhood.

Freud contends that the aim of psychoanalysis is not to treat the symptoms per se, but instead to guide the individual to understand both their unconscious, and issues within their awareness. This understanding helps the individual determine how these processes affect the way they respond to stressful life events (Smith, 1990). This could be explored through free association (e.g. verbalising everything that comes to mind) or dream analysis. When the conflicts have been understood and consolidated within the individual, the depressive symptomology will come to a natural end. Thus, by making the unconscious conscious, psychoanalysis will aim “to replace neurotic misery with ordinary unhappiness” (Freud, 1895: cited in Smith, 1990, p. 30).

4. Cognitive-Behavioural concept of depression

Beck (1964) proposed that depressed individuals develop a negatively biased information-processing system. These individuals shift their cognitive organisation from positive to negative. Thus, all information from the environment, including that which is positive and ambiguous, is processed and interpreted negatively which ‘fits’ with their inherent negative self-beliefs. Beck noted that fundamental to depressive cognitions were three very specific concepts: i) the cognitive triad, ii) cognitive distortions, and iii) schemas.

Depressed individuals develop negative internal dialogues that relate to themes of actual or perceived loss and deprivation (Kovacs & Beck, 1978). This dialogue distorts the individual’s reality and influences the way they perceive themselves (e.g. pathetic and unlovable), interpret their environment (e.g. filled with complications) and consider their future (e.g. hopeless, no end to the misery). This is the cognitive triad. Thus, the negative view of the self may be indicated by statements such as “I’m hopeless”; the environment as “everything is a complete disaster”; and the future as “things will never change, I will always be a loser”. Concomitant with the cognitive triad are streams of negative automatic thoughts that form part of the internal dialogue. These thoughts are ‘automatic’ because they appear
out of the blue, and 'negative' in terms of their content. According to Beck (1967), these thoughts lie on the periphery of consciousness.

Cognitive distortions or 'biases' present themselves as 'thinking errors'. These maintain and validate the individual's negative beliefs about him/herself, and influence how the individual reacts to events in terms of behaviour and emotions. An example of a cognitive distortion is 'personalisation'. The depressed individual attributes all mishaps, mistakes and tragedies etc. to be their fault, even when there is evidence to suggest otherwise.

Early experiences form the basis of schemas. These are relatively stable and unique cognitive patterns that develop over the years and determine how an individual constructs their sense of self and their world. In addition, the individual's schema tends to be outside of their conscious awareness, although not in the unconscious (as Beck, 1967, does not allude to 'unconscious' processes). Schemas that are secure and nurtured form the grounding for a healthy disposition. Schemas that are formed through neglect or disruptions are hypothesised to produce a vulnerability to later psychopathology, such as depression. Thus, the negative dialogue that is recognised in a depressed individual may be indicative of a dysfunctional schema (e.g. "I have to be accepted by everyone to feel a sense of worth").

The above theory formed the basis for the cognitive model of depression. The model incorporates the importance of early experiences upon the developing schemata. Beck contends that should a child experience, for example, parental loss, they may develop a schema that is 'dysfunctional' and constitute the depressive response. However, the depressive schema will remain latent until the individual experiences a situation or 'critical incident' that resembles that whereby the original schema was formed. This activates the dysfunctional assumptions, which in turn generates the stream of negative automatic thoughts.

As the depression develops so too does the presence and persistence of negative automatic thoughts. The negative automatic thoughts increase the depressed mood, which increase the degree of depressive symptomology experienced, which increases the depressed mood.
Hence, a vicious circle is formed (Hawton, Salkovskis, Kirk & Clark, 1989). Beck (1983) affirms that depression is not a consequence of current negative life events, but rather is determined by the interpretation of the event, which is mediated by the depressive schema.

4.1 How does theory link with practice?
In terms of application to treatment, the latter part of the model is of most importance. The negative automatic thoughts, behaviour, emotions and depressive symptomology form the vicious circle. These areas are targeted within a cognitive-behavioural formulation. The techniques used are both behavioural (e.g. activity scheduling) and cognitive (e.g. challenging the negative automatic thoughts). In the initial stages of therapy, behavioural exercises such as increasing activity and rewarding behaviours to increase mood are utilised. These are targeted at the depressive symptomology (e.g. loss of interest and pleasure in activities). Through the process of therapy, the client will learn to identify negative thoughts. Emphasis of therapy will eventually shift to challenging these thoughts and modifying underlying assumptions. The premise is that by targeting depressive symptoms through modifying behaviour, and by identifying, challenging and modifying the maladaptive thinking, the self and world view will change to a more realistic one and depressive symptomology will reduce.

5. A comparative evaluation of Freud’s and Beck’s concepts of depression
Differences to be considered are the historical period within which Freud (1917) and Beck (1967) developed their concepts of depression, and the terminology they both use. Freud’s observations of depressed individuals were written over 60 years previous to Beck. Within the six decades, technology and research into depression has become incredibly sophisticated. There is no doubt that this has had an impact upon how depression is understood and treated.

By contrast, Beck et al. (1979) developed their concepts in a climate of experimentation, sound knowledge base and dissatisfaction with approaches that appeared to fail to address and treat depression successfully (e.g. behaviour therapy and psychoanalysis). However, despite the difference in historical context, what is interesting is that Freud and Beck use different terminology to convey very similar concepts. Freud refers to depression as
'melancholia', the self as 'ego' and depressive symptomology as the result of 'ego conflict'. Beck uses the label 'depression', refers to the development of self as being governed by 'schemas' and considers depressive symptomology as the consequence of the 'reactivated schema'.

Freud (1917) claimed that he did not have the answer for the phenomena of depression. Rather, he observed a small number of individuals and generated a number of hypotheses based on their presentation. In addition, he did not develop a 'model' to explain depression per se, but one that considered all forms of psychopathology. Freud postulated that his observations were not conclusive and cautioned general validity. However, he appeared to have recognised the importance of environmental aspects, but made limited use of this knowledge in his formulation of depression.

Freud's concepts that explain depression (e.g. unconscious conflicts) are essentially hypothetical constructs. They cannot be directly observed, are difficult to localise in the mind and are not amenable to empirical testing. Yet, despite the considerable lack of evidence to support the concepts, Freud's work continues to make important contributions towards understanding the processes involved in depression.

By contrast, Beck had developed a model specifically aimed at treating depression (although is now used to inform all forms of psychopathology). He refined his theory and model from clinical observations and systematic research regarding the cognitive processes of depressed patients. Beck et al. (1979) has made an invaluable contribution towards the role of cognitive-behavioural therapy for treating depression. The model attempts to explain the observable factors associated with depression and on what can be measured (e.g. verbalised negative thoughts). It is very comprehensible, has a clear theoretical framework and places depressive symptomology into a workable context.

The model implies the existence of a causal relationship; insofar that depression is preceded by negative thoughts. Numerous studies both support the theory and model and demonstrate clinical efficacy (Dobson, 1989). Experimental and correlational studies provide
evidence that suggests, in comparison to non-depressed individuals, the thoughts of depressed individuals are more negative in content (Rehm, 1977) and that the individuals appraisal of an external event serves to trigger depression (Blaney, 1977). Furthermore, studies suggest that a relationship exists between depressive symptomology (e.g. low mood) and the cognitive triad (Haaga, Dyck & Ernst, 1991); negative bias in recalled information (Vestre & Caulfield, 1986) and dysfunctional schema (Merluzzi & Boltwood, 1989).

Brown and Harris (1978) criticise Beck for considering environmental factors as only being a 'trigger' for the activation of schemas. Miller and Norman (1986) argue that not all depressed individuals present with a series of cognitive distortions. Teasdale (1988) proposed that vulnerabilities to depression can be accounted for in terms of the Differential Activation Hypothesis (DAH). The DAH suggests that the onset of depression may not be the result of the presence of dysfunctional or negative schema. Instead, when in a depressed state, patterns of depressed thinking are activated that lead to clinical depression.

In the development of the cognitive theory of depression, Beck (1993) recognised that the content of negative automatic thoughts and dreams may actually reveal similar themes. For example, when awake, a depressed individual may encounter an event that activates a negative thought such as 'I'm not worth being loved'. In the dream state, the same individual may have a pictorial representation of people turning away, or being left alone in a deserted place. Thus, Beck postulated that the content of both indicated a "negative distortion of reality" (p. 11) which precipitates a 'faulty' internal dialogue.

Conversely, Freud maintained that the depressed individuals way of thinking is not 'faulty', or a distortion of reality. Instead, it is a true representation of that person "He must surely be right in some way and be describing something that is, as it seems to him to be..." (Freud, 1917, p. 254-255). A depressed individual may be depressed because it reflects their current circumstance. Thus, it is somewhat presumptuous to ignore the environmental milieu, and assume that depression arises from a negative internal dialogue or faulty cognitions. Given that cognitions may be accurate, Bradley and Power (1988) make an important point. How ethical is it for a therapist to try and change what they believe to be an erroneous cognition
that is expressed by a depressed individual? Thus, cognitive-behavioural therapy can be susceptible to therapist subjectivity (the 'therapist blind-spot'), and argued as not always strictly empirical.

Both Freud and Beck consider early experiences as crucial for the development of the sense of self. Also, how disruptions in the process of normal ego or schema development contribute to adult psychopathology (e.g. depression). For instance, a central feature of early experiences addressed by both approaches is the effect of childhood loss upon the developing ego or schema. Loss may be real or imagined, but have sufficient impact on the individual to adversely disrupt the 'normal' developmental process.

Contemporary theorists tend to accept that there is a strong correlation between loss and depressive processes. Kaslow, Reviere, Chance, Rogers, Hatcher, Wasserman, Smith, Jessee, James and Seelig (1998) investigated the core concepts of suicide from psychoanalytical theories and clinical data. The study referred to Freud's concepts of loss, ego functioning and retroflexed hostility. The sample consisted of 99 psychiatric inpatients, those that have a history of attempted suicide, and controls (no history of attempted suicide).

In terms of object loss, Kaslow et al. (1998) found that individuals who had attempted suicide had indeed also experienced early childhood loss, and a recent adult loss. Both Freud and Beck advocate how a 'critical incident' (e.g. recent loss) will reactivate either the dysfunctional schema (Beck et al., 1979), or unleash the unconscious conflicts upon the ego (Freud, 1917). From a cognitive-behavioural view, the reactivation process brings about the upsurge of negative automatic thoughts, cognitive distortions and the cognitive triad. Psychoanalytically, these processes are essentially defence mechanisms mediated by the ego. Despite their finding, Kaslow et al. (1998) acknowledge that they do not address the individuals' desire to be reunited with the lost object which is a central concept to the loss hypothesis.
When considering supporting evidence for Freud, some studies have in part supported and indeed developed Freud's theoretical concepts of depression. Abraham (1924) supports Freud in the assumption that depressed individuals regress to the oral stage of development. Abraham contends that by refusing to eat, the individual is safe from their hostile wish to devour the object. Beck and Hurvich (1959) considered whether hostility was a phenomenon of the depressed. Using scales for hostility developed by Saul and Sheppard (1956), Beck and Hurvich found that depressed individuals were not so much hostile in their dreams but instead a 'victim' of their plight and self-suffering. The depressed individual had become lost, and was "defeated" and "deficient" (p. 8). This finding offers some support for Freud's observation of the disturbance of self-regard.

Kaslow et al. (1998) found little support for self-directed aggression on quantitative measures. However, homicidal ideation was expressed more in those who have attempted suicide than in controls. This supports the formulation that overt suicidal behaviour is mediated by retroflexed hostility. Their study also found no support for ego functioning. This may have been due to the difficulty measuring the unconscious processes objectively.

The latter studies clearly demonstrate theoretical and conceptual differences between the two approaches. Beck et al. (1979) does not adhere to unconscious processes. Unlike Freud, who contends that disruptions in self-regard are under the influence of ambivalent and hostile processes, Beck advocates that such negative self-regard is the work of a negative information-processing system.

More recently, Freud's concepts of "oral incorporation" and "superego formation" have been developed by Blatt and Shichman (1983 p. 733). They put forward two risk factors for a predisposition to melancholia. One is disruption in development, the other being a particular personality type. Personality types can be either, 'anaclitic' which is primarily concerned with interpersonal issues, and the 'introjective', derived from a harsh and punitive super-ego, which transpires into self-criticism and self-denigration. Similarly, in recent revisions of his concept, Beck (1983) has proposed two matching personality constructs; a 'sociotropic' individual who is highly dependent upon interpersonal relationships and the
need to be accepted and loved, and an 'autonomous' individual who is highly independent and strives for perfection.

The two personality types have been derived from different underlying theoretical concepts and explained using different terminology. However, a closer inspection suggests that the two concepts are essentially the same. Both orientations suggest that vulnerability to depression will arise should the anaclitic/sociotropic individual experience a breakdown in interpersonal relationships, and the introjective/autonomous individual experience a loss of control or a compromise of their independence.

5.1 Theory into practice, how does it work?
The symptoms of depression are considered as being mediated by conflicts within the unconscious (psychoanalytic), or the work of dysfunctional cognitive processes (cognitive). Therefore, one can assume that by targeting the above processes, the symptoms of depression will diminish.

Hence, both approaches differ in the emphasis they place on early experiences and how these relate to adult experiences of depression. In psychoanalysis, through the unfolding of the unconscious conflicts that originated in early experiences the current psychological disturbance (e.g. depression) can be understood (Fonagy, 1989). The cognitive-behavioural approach considers early experiences in its formulation, but the emphasis and focus of therapy tends to be on the here and now. Fonagy (1989) criticises the cognitive-behaviour approach for failing to identify the origins that influence the dysfunctional cognitions. However, the development of Schema-focused therapy (Young, 1989) re-addresses this aspect of Beck’s theory, and may assist with more difficult presentations of depression by focusing on problematic schemas in more depth.

Although both approaches differ in their focus (i.e. past and present) they are similar in terms of the change process. Both attempt to help the individual understand their responses to a critical incident, and help identify and clarify thoughts and conflicts in light of current difficulties (Abrams & Abrams, 1997). Also, despite the discrepancy in theory and
technique, both approaches attempt to bring the above processes into conscious awareness. For example, within the cognitive-behavioural formulation, the depressed individual identifies their negative automatic thoughts and records them. The therapist and client will work collaboratively to help modify these thoughts from being maladaptive and negative, to those which are realistic and adaptive. Furthermore, the individual is assisted in developing skills and strategies to prevent relapse and to manage their depression.

In contrast, psychoanalysis attempts to access unconscious conflicts through dream analysis or free association. Resistance in the clients' free flowing dialogue is an indication to the therapist that disturbing thoughts are nearing consciousness. The therapist will make an interpretation and help break down the resistance, which will allow the unconscious to become accessible to the individual. Unlike, the cognitive-behavioural therapist, the psychoanalytic therapist focuses on the therapeutic relationship and interventions such as transference and counter-transference interpretation to address the individual's difficulties. They do not adhere to skills acquisition or relapse prevention.

Bradley and Power (1988) argue that Beck is wrong to assume that changing cognitive processes will lead to a reactivation of more adaptive and functional schemata. Moreover, there is no clear evidence that this change actually occurs. Jacobson, Dobson, Traux, Addis, Koerner, Gollan, Gortner, and Prince (1996) argue that focusing on strictly cognitive-behavioural strategies is no more effective than using purely behavioural or purely cognitive techniques. Roth and Fonagy (1996) argue that evidence for the efficacy of psychoanalysis is difficult to achieve through current methods such as randomised controlled trials (RCT). The authors claim that RCT is inappropriate for psychoanalytic psychotherapy because it impinges on the fundamental therapeutic dynamics (e.g. transference and counter-transference). Frosh (1997), however, argues that the psychoanalytic evidence which is available is still unconvincing, particularly in terms of the processes interpretation and transference (p. 137).

Finally, Freud and Beck had both attempted to develop a scientific theory. Beck's concepts are deemed as measurable and amenable to scientific exploration and Freud had recognised
"an inseparable bond" between research and relief of psychopathology (Freud, 1926). However, Teasdale and Barnard (1993) argue that Beck has devised a 'clinical', but not scientific theory of depression that serves to inform and guide clinicians in their practice. The model is difficult to evaluate because it is "relatively imprecise" (p. 7) and has undergone a number of revisions since its original form. However, the authors note that the original model was revised in the light of critical evaluation. Furthermore, Steiner (1985) argues that it is intrinsically difficult to measure the inner world of an individual, which makes it near impossible to both validate and test the psychoanalytic methods employed by Freud.

6. Conclusion and clinical implications

Through the comparative evaluation, the similarities and differences of the psychoanalytic and cognitive-behavioural concepts of depression in adults have become quite evident. Differences appear in relation to the terminology used, the era in which the concepts had developed, evidence-base and therapeutic application. The similarities included disruptions in the development of the sense of self, critical events, early experiences, vulnerability or risk factors and the aims of therapy.

The comparison has provided food for thought, particularly in terms of clinical practice. For instance, could the two theories be integrated? After all, the two do tend to converge on many of their concepts? Essentially both theorise about concepts which are 'metaphorical' structures. However, the cognitive-behavioural concepts appear more tangible and intervention can be aimed at both cognition and behaviour. The difficulty with the psychoanalytic approach is that the concepts are largely intangible. How do we know an ego is in conflict and the unconscious exists? Concepts may explain the aetiology or maintenance of depression, but just as important are the methods employed for treating depression. The efficacy of the concepts through research, and research on treatment outcome, are a clinical necessity in current practice. If our decisions are based upon evidence, then one may be biased towards Beck's assumptions. However, Freud's concepts cannot and are not dismissed. They do appear to make sense and match a depressed individual's overt behaviour.
By integrating the two concepts maybe a more effective and holistic model could be developed. This would focus on the here and now as well as on early experiences. It would aim to treat the symptoms of depression whilst helping the individual consolidate conflicts within. Maybe the development of cognitive-analytic therapy (Ryle, 1991) has already started the trend towards integrating cognitive and psychoanalytic theories and intervention. Maybe the way forward in clinical practice is to converge aspects from the various concepts and models into one eclectic, effective and modern treatment approach.
7. References


PEOPLE WITH LEARNING DISABILITIES ESSAY

Sexually abused and / or sexually abusing: What is the role of the clinical psychologist in working with people with learning disabilities who have been abused or who abuse others?

JULY 2001

YEAR 1
1. Introduction

The sexual abuse of someone who has a learning disability, and also perpetrated by someone who has a learning disability is a widespread problem (Cooke, 1997). However, prevalence rates for sexual abuse and sexually abusive behaviour are considered an underestimation due to the variation in definition, methodology, reporting and detection (Peters, Wyatt & Finkelhor, 1986; McCarthy & Thompson, 1996). Although it not a new phenomenon, sexual abuse as a serious issue within the learning disability field, has only come to the fore within the last two decades (Cooke, 1997).

The role of the clinical psychologist will be considered in terms of assessment and intervention issues when dealing with sexual abuse and sexually abusive behaviour. Assessment and intervention are not mutually exclusive, but for the purpose of this essay, they will be described separately.

Before these two aspects are addressed, the essay will first provide the criteria used for diagnosing a learning disability as described by the Diagnostic and Statistical Manual of Mental Disorders - 4th edition (DSM-IV) (American Psychiatric Association, 1994). Although DSM-IV uses the term ‘mental retardation’, the term ‘learning disability’ will be used throughout the essay. The criteria are intended to provide the reader with an indication of how a learning disability can affect an individual’s life.

Secondly, a very brief description of consent issues is provided. This considers the difficulties professionals’ face when deciding whether or not a sexual act between two individuals’ with learning disabilities is abusive.

Thirdly, the essay considers important aspects of abuse that have been drawn from the psychological literature. These aspects are intended to provide the reader with an insight into the nature and impact of sexual abuse and the identified vulnerability and risk factors.

Fourthly, the author has attempted to address three issues (presented as questions) when undertaking an assessment to discuss the role of the clinical psychologist. This will comprise
of the main text of the essay. The remainder of the essay considers some issues that may arise when implementing or considering psychological intervention. The essay will conclude by revisiting the question posed.

2. Learning disability criteria

Given that individuals with learning disabilities do not constitute a homogenous group, identifying and diagnosing a learning disability has traditionally relied on the presence of three criteria (DSM-IV, American Psychiatric Association, 1994). These are:

The individual has significantly sub-average intellectual functioning. Four levels of learning disability can be identified based on Intelligence Quotient (IQ) criterion using standardised tests such as the Wechsler Adult Intelligence Scale -Third Edition (Wechsler, 1997). These are Mild (IQ of 50-55 to 70); Moderate (IQ 35-40 to 50-55); Severe (IQ 20-25 to 35-40) and Profound (IQ below 20-25).

The individual presents with deficits in adaptive functioning. This criterion relates to how well an individual can carry out or cope with daily expectations or demands of their environment. Examples include their awareness of social convention (e.g. attempting to hug strangers), language and communication (e.g. in expressing needs or feelings), functional academic skills (e.g. reading and writing) and self-care skills (e.g. bathing and dressing) (Davison & Neale, 1997). When assessing adaptive functioning, the psychologist should also consider the individuals age, socio-cultural experiences and the impact of additional disorders (e.g. epilepsy; Hatton, 1998).

The learning disability must occur before the age of eighteen. This essentially rules out a learning disability acquired later in life through illness or accident.

3. Consent

Consent is granted when two adults have equally agreed to engage in sexual intercourse or other sexual behaviour. The law states that individuals' who have an IQ score equivalent to 50 and below are considered incapable of giving consent to sexual intercourse (Gunn, 1990).
In addition, Sobsey (1994) argues that when an individual is coerced, unable to articulate their refusal or unable to resist because of their particular impairment, consent should not be assumed.

However, Fairbaim, Rowley & Bowen (1995) argue that it is irrelevant whether an individual was unable to give consent because of their level of learning disability. Establishing the presence or absence of consent in learning disabilities is consequential in determining which sexual acts are abusive and non-abusive. Therefore, if the abused is having to act in a way they had not wanted or expected to, or used in a way chosen solely by the abuser, then consent has not be granted (Fairbaim et al., 1995). Thus, whilst there is a lack of standardised criteria to assess whether an individual with learning disabilities can give consent to sexual relations (Parker & Abramson, 1995), professionals will continue to make decisions that are "subjective and influenced by personal attitudes" (Cooke, 1997, p. 369).

4. Defining sexual abuse

Sexual abuse can involve: "...a wide range of sexual activities that are forced upon someone...often unable to choose to stop abuse due to a lack of understanding of what is happening during abuse, the extreme pressure to acquiesce out of fear, a need of acceptance from the abuse or having a dependent relationship with the abuser. ...consists of sexually inappropriate and non-consensual actions, such as exposure to sexual materials...fondling, exhibitionism, oral sex and forced sexual intercourse." (Reynolds, 1997, p. 1).

Although it may seem obvious as to what constitutes sexual abuse, it is a concept that has proved very difficult to define. The current inconsistencies, which may be due to the difficulty in differentiating between what actually constitutes an abusive or non-abusive act (Fairbairn et al., 1995), have resulted in either the inclusion or exclusion of actual cases being reported (Sobsey, 1994). In order to detect acts of sexual abuse and to ensure professionals provide the most appropriate intervention when working with an individual who has been sexual abused or who is an abuser, a universally accepted definition needs to be established (Fenwick, 1994; Fairbairn et al., 1995).
5. **Characteristics of the sexually abused**

Simply having a learning disability will increase the risk of sexual abuse (e.g. Lumley & Miltenberger, 1997; Thompson, 2000). This is regardless of whether the learning disability is severe (e.g. Sobsey & Doe, 1991; Brown & Turk, 1994) or mild to moderate (Beau & Warden, 1995). Although most victims tend to be children and women (e.g. Turk & Brown, 1993; Thompson, 1997), men are also at risk (Murrey, Briggs & Davis, 1992). The factors associated with male vulnerability are if he is a child or is less able than the perpetrator (Brown, Stein & Turk, 1995; Thompson, 1997). Other factors include low self-esteem (Moss, 1998), dependency (Vizard, 1989), deficits in education regarding appropriate sexual behaviour (Reynolds, 1997), learned helplessness (Kelley, 1986) and over-compliance, (Sobsey, 1994).

6. **Characteristics of the sexual abuser**

Abusers tend to have a learning disability within the mild to moderate range (e.g. Lindsay & Smith, 1998; Lindsay, Neilson, Morrison & Smith, 1998), is often known to the victim (Brown & Stein, 1997) and overwhelmingly men (Brown & Turk, 1994). Lindsay and Smith (1998) argue that deficits in the conceptual understanding of sexual behaviour, a lack of role models and appropriate sexual relationships can contribute towards later sexual offending behaviour. Others have suggested that a cycle of abuse develops whereby those who sexually abuse do so because they themselves have been sexually abused (e.g. Williams, 1995; Sobsey, 1994). Other factors include having an emotionally unstable childhood (Richardson, Koller & Katz, 1985), being emotionally immature, having little power in the social relationships with peer’s (Araji & Finkelhor, 1986) and poor attachment (Bentovim & Williams, 1998).

7. **Nature of sexual abuse**

Although sexual abuse is most frequently reported to occur in the home of the abused (Sobsey, 1994), it can also occur in public places and the home of the abuser (Turk & Brown, 1993) and environments that specialise in disability, such as day centres and disability vehicles (Sobsey, 1994). Abuse is likely to be chronic and severe (Sobsey, 1994), although Riding (1999) reported sexual abusive behaviour to be more a result of “crude sexual expression.”
The more competent offenders used force or a surprise attack on the victim (Thompson, 1997). Other offending behaviour was subtler whereby the abuser exploited the abused individual’s characteristics (e.g. have a severe learning disability, uneducated about sexual behaviour, easily coerced). Sexual abusive behaviour can involve ‘contact’, which includes touching genitals and breasts through clothing, attempted or actual penetration of the vagina or anus, and masturbation. Also ‘non-contact’ abuse, such as indecent exposure and verbal sexual harassment (Brown & Stein, 1997; Thompson, 1997).

8. Impact of sexual abuse
Recognising the sequelae of child sexual abuse, such as chronic Post-Traumatic Stress Disorder and long term psychological trauma (Browne & Finkelhor, 1986; Connors, 1996) has helped psychologists to explain particular behaviours demonstrated by people with learning disabilities who have been sexually abused. Indeed, sexualised behaviour, emotional difficulties, ‘challenging’ behaviour and increased cognitive difficulties have been reported (Sinason, 1989; Vizard, 1989; Sobsey; 1994; Beail & Warden, 1995).

9. The role of the Clinical Psychologist - Assessment
Assessment is an important clinical procedure whereby the clinical psychologist can aim to establish a good therapeutic relationship whilst gathering extensive clinical information about the referred individual and their environment. In addition, a comprehensive and thorough assessment that considers all the above information needs to be undertaken within an ethical framework.

A thorough assessment will help the clinical psychologist develop an overall impression of the individual. Their strengths as well as the extent to which their learning disability and medication impinge on their cognitive and physical abilities, level of comprehension, communication skills and manifestation of behavioural and emotional symptoms can be identified.

In terms of the impact of the learning disability on sexual abusive situations, an assessment can identify how communication impairments may lead to an inability to successfully
communicate what has happened (Lang & Frenzel, 1988), how non-verbal methods may be misinterpreted as challenging behaviour or ignored (Vizard, 1989) and how a lack of self-protection skills and physical impairments may make it harder to fight back against an abuser (Sobsey & Varnhagen, 1988). Also, deficits in an individual’s judgement may prevent them reading the environmental cues adequately (Watson 1984).

The above factors can be uncovered through verbal reports from the client, behavioural observations, archival data and if essential and appropriate, psychometric testing. Particularly where verbal communication is impaired, the involvement of care staff, family or other service providers can provide important information about the individual’s behaviour in different environmental settings and with different individuals (Moss, 1998; Clare & Murphy, 1998).

The ecological model outlined by Sobsey (1994) provides a psychological framework that can guide an assessment. It incorporates environmental and cultural factors and the individual’s characteristics. The model is used for abuse prevention and is an excellent resource when assessing the interacting relationships between the abused and abuser, and the context within which the relationships exist. The cultural aspect of the model considers the attitudes and responses of others (e.g. carers, service providers) to abuse and abusive behaviour. This is particularly important because individuals’ with learning disabilities are often dependent on others for their care, safety and protection. Hence, the cultural unit can effectively increase or reduce the likelihood of sexual abuse occurring.

An assessment can lead to significant consequences to all involved. A formulation of the assessment information often leads to the development of an appropriate and individualised, constructional and socially valid intervention (Emerson, 1998). But before this stage is reached, the clinical psychologist must be absolutely clear that they are actually addressing the ‘correct problem’. Particularly where sexual abuse is concerned, the clinical psychologist may need to undertake a ‘detective’ role, and pursue a line of questioning. For example, why has the referral been made? How much does the client understand and why is the client behaving in a particular way?
9.1 Why has the referral been made?

People with learning disabilities rarely self-refer to a clinical psychologist (Emerson, 1998). They are usually referred by their families, another professional or their care staff for behaviour that has been misconstrued as being 'problematic'. Clarifying the reasons for referral may actually reveal that the 'problematic' behaviour is in fact an expression of distress, or is sexually abusive.

Because referrals tend not to be made by the individual it concerns, it is always helpful to return to the referrer and establish their reasons for requesting psychological input. This can also reveal important information about the environmental and cultural attitudes that surround the learning disabled individual. For example, Thompson (1997) reported that even when learning disabled abusers used a degree of force, the response they received from staff suggested that the act was not taken seriously.

Hence, the 'abuser' is more likely to be referred for behavioural problems as opposed to their sexually abusive behaviour. Similarly, although women with learning disabilities are likely to report abuse, they are less likely to be believed (Hard, 1986). Therefore, they are less likely to be referred because of their disclosure of sexual abuse. Thus, even when carers were aware that an individual had been abused, they would refer the individual because of behavioural or emotional difficulties, or inappropriate sexualised behaviour (Beail and Warden, 1995).

The lack of referrals for sexual abuse issues may be because carers do not know who they should report the abuse to (Beail & Warden, 1995), have become desensitised to experiences of abuse (Mental Health Foundation, 1997), or lack appropriate policies and training in sexual abuse detection and reporting. However, in certain cases the reason for referral is explicit. Thus, the referred individual is behaving in a sexually abusive manner, or has been sexually abused.
9.2 How much does the individual understand?

Behavioural observations and the use of psychological tests can help determine whether the individual has the capacity for understanding whether they are behaving in a sexually abusive way or that they have been sexually abused. Also, if they had provided consent and understand appropriate sexual relationships, and even whether the individual has fabricated a story of sexual abuse.

If conducting an interview, the clinical psychologist must be attentive to the individual's linguistic capacities, comprehension of questions asked, attention span, and their expression of distress or discomfort. Questions presented should always be short, simplified and concrete or explained using a range of materials such as drawing and using figurines. This can reduce the probability of getting 'don't know' responses (Prosser and Bromley, 1998).

Establish the developmental stage at which the person is functioning can provide important information about how a sexual encounter is perceived and understood from the learning disabled individual's perspective. Their perception of an act has important implications in terms of whether they continue to be a risk to others or a risk from others. For example, consider whether an experience is actually perceived as sexually abusive. If the abuser appears to perceive their environment from an egocentric developmental stage (e.g. between the age of three to seven) then it is very likely that the 'abuser' may not have the capacity to read the environmental cues (Watson, 1984) or the victim's attempts at refusal. Thus, the abuser is unable to understand what the abused perceives or experiences about the situation. This is regardless of the actual age of the abuser. In this instance, the individual can be considered a continued risk to others.

Similarly, did the 'abused' understand that the act was sexually abusive? Fairbairn et al. (1995) proposed that there can be "an abuser but no victim" (p. 87). Thus, the abuser takes advantage of someone for their own sexual gratification, but the experience is enjoyed by the 'abused'. Even if the sexual act is not harming the person and was 'enjoyed', it is still considered abusive. The individual may lack an understanding of appropriate sexual relationships or may lack attention from the environment. The actual reason may be
revealed through the assessment, but it is clear that their level of comprehension in these matters clearly puts them at risk from future sexual abuse.

When a situation that is abusive comes to light during assessment, confidentiality cannot be fully maintained (Short, 1996). The clinical psychologist has a professional obligation to report the factors involved in the situation (e.g. risk, vulnerability, environment where abuse occurs and individuals' involved) to the significant professionals involved in the individuals' care. This is regardless of whether the learning disabled individuals' themselves perceived or understood the act as not being sexually abusive.

Establishing details about sexual abuse from an individual with learning disabilities is necessary but can be problematic. The psychologist must allow the individual to tell their story, and be attentive to signs or symptoms of abuse (e.g. distress). Through a line a sensitive questioning, the story is often elaborated upon, as the memory of events return. The psychologist needs to clarify the nature of abuse to form a fuller picture of events leading up to, during and after the act. However, it is possible that the information conveyed may be inaccurate or conflicting (Fenwick, 1994). This may be because the abused is afraid to disclose information because they have been told it is a secret or have been threaten (Sgroi, 1982), or because the story has been fabricated.

Moreover, disclosure is often verbal (Turk & Brown, 1993). This has implications for individuals who have impaired verbal communication. Therefore, the psychologist has to be reliant on their skills at behaviour interpretation to determine whether sexual abuse has occurred, or if behaviour is sexually abusive.

9.3 Why is the individual behaving in a particular way?

This question is very important in the assessment process. Assessing why an individual behaves the way they do, rather than what is the behaviour relies much more on psychological theory and evidence. Research has suggested that sexualised behaviour, self-injurious behaviour, heightened distress and challenging behaviour may all be signs of sexual abuse (Sinason, 1989; Vizard, 1989). Yet carers rarely construe such behaviour as an
indication that sexual abuse had occurred, particularly in the absence of concrete evidence (Brown & Stein, 1997).

Drawing on psychological theories and models that have been specifically developed to explain sexually abusive behaviour and the behavioural and psychological consequences of sexual abuse can guide the assessment of the 'problem' behaviour. Araji and Finkelhor (1986) propose that an abuser's own experiences of childhood sexual abuse can contribute to their deviant sexual repertoire. Thus, they abuse because they want to identify with the 'aggressor' in order to combat their own experiences of powerlessness. Alternatively, the Social Learning Model (Bandura, 1977), suggests that behaviour is vicariously learned. Experiences of being repeatedly abused can lead to either the victim-offender cycle (e.g. abused becomes abusers) or the multiple-victimisation cycle (e.g. abused assimilate the victim role in the future).

The model of 'Traumagenic Dynamics' (Finkelhor & Browne, 1986) identifies four trauma-causing factors ('traumatic sexualisation', 'betrayal', 'powerlessness' and 'stigmatisation') that can be used to analyse the experience of sexual abuse. An assessment that incorporates the four traumagenic dynamics allows the psychologist to make a number of inferences regarding the main areas of difficulty and concern for the abused. This information is also extremely helpful for formulating the intervention strategy.

With an emphasis on adopting a scientist-practitioner approach, scientific evaluations and explanations that make sense of behaviour should underpin the clinical psychologist's assessment information. Psychological models and theories provide useful frameworks for conceptualising the impact of sexual abuse and why someone sexually abuses. The models and theories can be adapted and used for people with learning disabilities, particularly as the evidence suggests that their experiences parallel those from the non-disabled population. The only difference between the groups is the manifestation and expression of symptoms resulting from the learning disability (Moss, 1998).
10.  The role of the Clinical Psychologist - Intervention

Through assessment, the objectives for intervention are made explicit, such as what it consist of, who will be involved and how the intervention will be evaluated. Because people with learning disabilities rarely have an autonomous lifestyle, interventions should not only be clear in terms of how the individual's current behaviour or psychological state effects the whole system and vice versa, but also how this system will be effected by the intervention. Furthermore, intervention skills and knowledge used with the non-learning disabled population can be transferred and adapted for the learning disabled population. By employing an eclectic psychological approach, people with learning disabilities who have been abused and who abuse others can benefit (Sinason, 1989; Lindsay et al., 1998).

Emerson (1998) stated that all interventions should be “socially valid, functionally based and constructional” (p.3). Consequently, interventions should result in socially important outcomes, which allow for the development of either new cognition’s and behaviours that may be incongruent with previous ones (e.g. understanding that abuse is morally wrong, not acting on abusive impulse), or the development of additional behaviours (e.g. learning how to protect against potential abuse).

10.1 Interventions for individuals’ who sexually abuse

Relapse prevention that has been developed within a cognitive behavioural or applied behavioural analysis framework is commonly used with sex offenders (O'Connor, 1997; Riding, 1999). However, such interventions come with a number of methodological problems. In the forensic literature there are established models of the development and process of sex offending, however evidence suggesting their applicability to the learning disabled population is lacking (Clare & Murphy, 1998; Riding, 1999). Current research lacks controlled comparisons, and the literature is unclear about how treatment is monitored and outcomes evaluated. The reliability of the measures used are also questionable because they are not standardised for learning disabled sex offenders (Lindsay et al., 1998; Riding, 1999), although some measures are being developed and standardised (Lindsay & Smith, 1998).
However, despite the lack of evidence base, a number of studies have reported promising results when working with this client group (e.g. Lindsay, Olley, Baillie & Smith, 1999; Lindsay et al., 1998; Lindsay & Smith, 1998). For example, relapse prevention targets a range of offending related behaviour and cognitions with the aim at minimising the risk of recidivism. It often involves working within a group forum, rather than on a one to one with the psychologist. These groups have an educational focus, such as increasing sexual knowledge and a range of skills (e.g. social and personal). Psychological and behavioural strategies are employed whereby the offender can learn to recognise and reframe their cognition's relating to the offending behaviour, work with denial and their responsibility for the offence. Although victim empathy is considered, many offenders have difficulty understanding how another individual can feel (Lindsay et al., 1998; O'Callaghan, 1998; Lindsay & Smith, 1998).

Relapse prevention tends to be long-term, very challenging and can cause a great deal of distress and discomfort. The abuser has to admit complete responsibility for their sexually abusive behaviour. However, if they accept responsibility for their action, should they face the same punishment as a non-disabled sex offender? (Thompson, 2000). When considering normalisation, then this would seem an appropriate option. But then, these individuals’ are not perceived as the same as everyone else. Their learning disability can and often does determine their fate, and in a number of cases, the police are not involved and the sexually abusive behaviour is not taken seriously (Thompson, 2000).

Another ethical issue is that the abuser must give informed consent before starting a treatment programme. They must be informed as to what the treatment involves and what is expected from them to ensure the person totally understands what they are consenting to (Brown & Thompson, 1997). However, if they do understand what is involved and refuse to be treated, can their right to refuse treatment be accepted? Or, does the fact that they have sexually abused, exclude their right to refuse the treatment that may prevent further abuse taking place. Lindsay and Smith (1998) reported that offenders were encouraged to stay in treatment as part of their conditions of probation. If they refused, then they would be returned to court to be dealt with. The message the abusers received therefore was that their
sexual abusing behaviour is serious, that they need to be treated and that it will not be tolerated in society.

The clinical psychologist must ensure confidentiality unless there is a risk of the individual re-offending. The psychologist needs to weigh up the implications of respecting the individual’s disclosure within the realm of confidentiality against the potential harm to a vulnerable person (Short, 1996). The repercussions for the individual if confidentiality is breached can be potentially harmful or abusive. Indeed, studies have cited instances where safety for the abuser was not only compromised but also their lifestyle restricted by staff who employed a number of ‘safety’ sanctions. In an attempt to prevent abuse, the abuser may also be at risk from ‘abuse’. For example, they are excluded from services or recreation activities, sex suppressant medication may be prescribed or their autonomy is impinged upon through increased supervision (McCarthy & Thompson, 1996).

To reduce the employment of these sanctions, the psychologist can advise on risk management strategies, or policies and procedures that specifically targets the abusive sexual behaviour (Thompson, 2000).

10.2 Interventions for individuals’ who have been sexually abused

Interventions for people who have been abused can be one to one with the psychologist, within a group, or involve the supporting system. Although current interventions and strategies used with non-disabled survivors of abuse have been adapted, the paucity in the learning disability literature means that there is limited evidence regarding clinical efficacy (Moss, 1998).

However, aside from counselling, many abused individuals are offered training in protection skills and education regarding sex related issues to reduce the risk of further abuse occurring (Sobsey & Mansell, 1990; Lumley, Miltenberger, Long, Rapp, & Roberts, 1998; Baum & Sheppard, 2000). Training can involve learning to say “no”, to leave the abusive situation, to recognise abusive situations and in reporting sexually abusive incidents. Sex education can help to increase the individual’s knowledge about sex related issues, such as pregnancy,
sexual behaviour, risks and choices. Training and education therefore can potentially reduce exploitation and unwanted advances.

Research evaluations of training programmes in self protection skills and abuse prevention with learning disabled individuals' have highlighted a number of important issues. Firstly, individuals' may have difficulty generalising from a role-play situation to real life (Lumley et al. 1998) and difficulty retaining the information learned (Baum & Sheppard, 2000). Secondly, sole responsibility for abuse prevention cannot be left with the potential victims (Sobsey & Mansell, 1990). The message that the responsibility lies with the abuser at all times must be clearly delivered. Otherwise, there is the danger that the abused individuals will feel responsible for not being able to stop the abuse happening. Thirdly, it is essential not to give out mixed messages, and that the skills learned are preventative measures only. They do not guarantee the end of abuse.

Educating and training staff and family members about detecting, responding and reporting appropriately to early signs of abuse, can not only reduce the risk for potential victims, but can act as a powerful deterrent on offenders (Sobsey & Mansell, 1990). Reynolds (1997) suggested the reporting of abuse can be enhanced through improving investigation and prosecution (i.e. that an act is taken seriously) and by creating a safe environment to allow disclosure. Psychologists can facilitate this process by developing policies and procedures that carers can use for guidance on sexual abuse matters.

Brown and Turk (1994) argue that services should undertake compulsory staff training around sexual issues so that they develop their competence in intervening in abusive behaviour. This is pertinent in all situations and particularly where the learning disability significantly impinges on an individual's abilities to communicate 'no' and physically escape. Unless the supporting systems are involved and co-operative, it is very unrealistic to expect a person with learning disabilities to adequately protect themselves, particularly if an abuser happens to be a staff member (Sobsey & Mansell, 1990). Unfortunately, if training fails to increase the staffs' awareness that sexual abuse can and does happen to their clients, then it is likely that the abuse will continue.
11. Conclusion

The clinical psychologist, in working with learning disabled individuals' who are sexually abusive or have been sexually abused, plays a significant and very diverse role.

Their clinical practice has to be bound within an ethical framework to ensure safe practice for both themselves and their clients. They have a duty to ensure confidentiality and ethical considerations when undertaking an assessment and any intervention. Furthermore, their role requires them to work within a scientist-practitioner approach. Understanding the psychological theory of sexual abuse can inform psychological practice and the most effective or appropriate intervention to use.

The role brings with it responsibility. The clinical psychologist is trained in using standardised and non-standardised tests, and skilled in assessment and in interpretation. Thus, they have a responsibility to ensure that clinical inferences reflect the meaning of test scores, rather than the scores per se. Furthermore, clinical inferences should be reflected in the available evidence-based literature regarding the underlying processes of an the individual’s behaviour. Therefore, the clinical psychologist must be aware of the impact of their clinical interpretation, what information they disseminate and to whom. This clinical information can contribute to the way others may perceive and respond to the individual it concerns.

It is often rare to work just with the individual because their lives are often entwined within a number of services. Therefore, the role requires a flexibility that ‘fits’ with the individual and their supporting system. The clinical psychologist has to be adaptive, sensitive, non-judgemental and creative to form a therapeutic alliance that promotes co-operation with all involved.

Much of the intervention when dealing with sexual abuse issues involves training and educating individuals’. By drawing on the range of psychological approaches, information can be taught in an eclectic and meaningful way. Furthermore, because the clinical psychologist is skilled in identifying an individual’s strengths and skills, these too can be
enhanced through training and education. Using a range of materials and adapting psychological interventions can help address sexual abuse issues with learning disabled individuals'. In addition, the clinical psychologist can advise service providers on practice issues through the development of guidelines, policies and procedures.
12. References


CHILDREN, ADOLESCENTS AND FAMILIES ESSAY

Anxiety disorders in childhood are fundamentally different from anxiety disorders in adulthood. Discuss with reference to the theory and treatment of two anxiety disorders.

DECEMBER 2001
YEAR 2
1. Introduction

This essay will discuss whether anxiety disorders in childhood are fundamentally different from anxiety disorders in adulthood by considering the cognitive component of social phobia and panic disorder. The cognitive component has been chosen because not only have comprehensive cognitive models been developed that conceptualise anxiety disorders, but they also form the basis for treatment using cognitive behavioural procedures. The term 'childhood' in this paper considers the spectrum from toddlers (e.g. 2 years of age) through to adolescence (up to 18 years of age). Where specific developmental stages or ages are considered important for the discussion, this will be made explicit.

The essay will firstly briefly describe the cognitive theory of emotional disorders (Beck, Emery & Greenberg, 1985) because the principles are fundamental for understanding the underlying cognitive processes involved in all anxiety disorders.

Secondly, the clinical features and cognitive model of panic disorder in adulthood will be described. Thus, identifying the specific cognitive processes believed to be involved in the maintenance of the disorder. The essay will then consider whether fundamental differences exist in childhood panic disorder as compared with panic disorder in adulthood. The same procedure is considered for social phobia.

Thirdly, the essay considers the procedures of cognitive behavioural therapy for social phobia and panic disorder used with adults and some outcome studies. This will lead on to a discussion of whether fundamental differences exist in terms of treatment for childhood anxiety disorders.

The essay will conclude by summarising the paper and considering clinical implications.
2. Cognitive theory of emotional disorders

The central feature of the cognitive theory (Beck et al., 1985) is that emotion, such as anxiety, is experienced because stimuli in a given situation is processed and interpreted in a negative way. Thus, anxious individuals are more likely to interpret and overestimate ambiguous information as dangerous or threatening, causing them to believe that they will come to some physical or social harm.

When anxious, an individual experiences changes in autonomic arousal (e.g. heart beats faster), behaviour (e.g. avoid anxiety-provoking situations) and attention (e.g. become hypervigilant and scan the environment for possible danger). These responses become maladaptive and inappropriate when activated in non-dangerous situations, and are often interpreted as further sources of threat. The reciprocal relationship between anxiety symptoms and interpretation can develop into vicious circles that maintain or exacerbate the anxiety response. In addition, negative automatic thoughts (NATs) and dysfunctional assumptions and beliefs are activated (Beck et al., 1985). These cognitive processes are argued as fundamental for maintaining the disorder because they fuel the individual’s belief of inherent danger. For example, an individual concerned about the opinion of others might experience anxiety and accompanying NATs, “they think I’m boring” whilst talking with colleagues. This may lead to avoidance of future social situations.

Dysfunctional assumptions and beliefs are learned during the early experiences of childhood and remain latent until activated by a specific situation. Dysfunctional assumptions are characterised by ‘if-then’ statements (e.g. “if I blush when speaking, then everyone will think I’m useless”). Beliefs, considered to be the deepest level of our cognition (Greenberger & Padesky, 1995) are characterised by ‘absolute’ statements that reflect the ‘truth’ about ourselves, others and the world (e.g. “I’m a failure”, “they hate me”, “the world is a dangerous place”). Assumptions and beliefs are purported to be specific to anxiety disorders and are rigid and invariably maladaptive (Wells, 1997).

The above theory emphasises the important role of cognitive processes for the experience of anxiety. Indeed, cognitive psychologists have debated whether cognitions are crucial in
order to experience anxiety (or any other emotion). For example, Lazarus (1982) argued that intellectualism influenced the perception of stress as measured by psychophysiological reactions. Moreover, that the cognitive appraisal of a situation precedes the affective response. This theory has implications for very young children's experience of anxiety whose ability to appraise a situation may be developmentally immature (discussed below). However, Lazarus (1982) further argued that cognitive appraisals might not be within consciousness, a premise primarily proposed by Zajonc (1980).

The paper now turns its attention to the specific features of panic disorder and social phobia from the cognitive perspective and a discussion of the existence of fundamental differences.

3. **Clinical features of panic disorder in adulthood**

A panic attack is characterised by an intense feeling of apprehension or impending doom. According to the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994), the onset tends to be sudden, reaches a peak within 10 minutes and is concomitant with at least four of 13 possible somatic (bodily sensations) and cognitive symptoms, such as breathlessness, palpitations, fear of dying and nausea/abdominal distress.

For an individual to receive a DSM-IV diagnosis of panic disorder, they must have experienced at least two unanticipated panic attacks, and be concerned for at least one month that they will have another (Sanderson & Rego, 2000). The peak age of onset for panic disorder in adults is within the late twenties to early thirties (Crowe, Pauls, Slymen & Noyes, 1980).

Panic attacks may occur in certain situations that cause anxiety (cued), or can occur spontaneously and unexpectedly (e.g. out of the blue, uncued). Norton, Cox and Malan (1992) proposed that individuals with panic disorder who seek treatment are more likely to experience spontaneous panic attacks which are accompanied by catastrophic thoughts.
3.1 Cognitive conceptualisation of panic disorder

Drawing upon Beck et al. (1985) cognitive theory, the cognitive model of panic disorder (Clark, 1986) conceptualises the sequence of events that lead to a panic attack. According to the model (figure 1), the central characteristic is the "catastrophic misinterpretation" of either somatic or cognitive symptoms. These symptoms are interpreted as evidence that some imminent danger or disaster will occur. For example, palpitations are interpreted as evidence of an impending heart attack (Clark, 1986). The model proposes that the misinterpretation of sensations is largely due to heightened stress and/or anxiety. However, other non-anxiety factors, such as low blood sugar can cause similar complaints (e.g. dizziness). The catastrophic misinterpretation inevitably leads to the development of a vicious circle. The perceived threat leads to experiences of apprehension and anxiety, which trigger further somatic and cognitive symptoms. These are misinterpreted as impending catastrophe, which causes more anxiety. This process continues until a full-blown panic attack is experienced.

![Diagram of the cognitive model of panic disorder]

Figure 1: cognitive model of panic disorder (Clark, 1986) depicting the sequence of events leading to a panic attack.
The catastrophic misinterpretations are maintained by three processes, which prevent disconfirmation of the catastrophic and highly distorted belief about impending disaster, and contribute to an increase in bodily sensations (Wells, 1997; Salkovskis, 1991). Firstly, there is a marked shift towards an internal focus of attention (or hypervigilance) on bodily sensations for signs of danger. However, hypervigilance increases the subjective intensity of the bodily sensations that increases the likelihood of a catastrophic misinterpretation being activated. Secondly, situational safety behaviours are used to prevent the feared catastrophe from happening. For example, misinterpretation of shakiness in the legs as evidence for imminent collapse may result in the individual sitting down, leaning on something, or lying on the floor. Finally, because individuals tend to avoid situations that provoke anxiety (Wells, 1997) they do not learn that anxiety rarely leads to catastrophe.

4. Panic disorder in childhood - are there fundamental differences?

Not only does there appear to be some paucity in the literature on the theory and treatment of panic disorder in children and adolescents (Kearney, Albano, Eisen, Allan & Barlow, 1997), but also some debate regarding the existence of such a childhood disorder (Nelles & Barlow, 1988). However, of the available literature, panic disorder and panic attacks have been found to occur in adolescents (King, Ollendick, Mattis, Yang & Tonge, 1997; Ollendick, Mattis & King, 1994) and young children (Moreau, Weissman & Warner, 1989).

Retrospective accounts of panic disorder from adult sufferers suggest the onset to be during childhood or adolescence (e.g. Dummit & Klein, 1994; Moreau et al., 1989) and experiences of separation anxiety and separation from an attachment figure. Although not discussed in this paper, the concept of insecure attachment has been formulated into a developmental model as a causal factor of childhood panic disorder (Mattis & Ollendick, 1997).

Studies suggest that around 35.9% to 63.3% of adolescents have experienced a panic attack in their lifetime (e.g. Hayward, Killen & Taylor, 1989). King et al. (1997) found that of 649, 12 to 17 years olds, 16% reported at least one full-blown panic attack. Furthermore, that their experiences of panic were characterised by somatic symptomology, such as feelings of
dizziness, trembling, sweating and a racing heart and cognitive symptoms, such as a fear of dying, losing control and a fear of going crazy.

King et al (1997) study demonstrated the similarities in adolescent and adult expression and experiences of panic. However, a difference found was that adolescents experienced more situational panic attacks, (e.g. when separated from someone important or walking alone at night), as opposed to spontaneous ones. This may suggest differences in their interpretation of the symptoms, such as attributing panic to external rather than internal factors.

This difference is more profound and will be discussed further in an examination of younger children. The cognitive model of panic (Clark, 1986) if applied to young children assumes that they are able to make catastrophic misinterpretations of somatic and cognitive symptoms. Based on the work of the developmental progression of children’s conceptions of illness by Bibace and Walsh (1981), Nelles and Barlow (1988) argue that the majority of children and preadolescents are unable to make internal attributions of their panic symptoms due to their level of cognitive development. Moreover, children lack the experience of spontaneous attacks and the cognitive capacity to catastrophise, because their responses are dominated by attributions to external causal factors.

The argument that children are unable to make such misinterpretations indicates fundamental developmental differences. According to Piagetian principles of cognitive development, the cognitions of toddlers (e.g. 2 to 4 years) through to early childhood (e.g. 5 to 7 years) are dominated by the here and now and are concrete and absolute. They lack the ability to differentiate between self and the world. Therefore, their experience of panic (e.g. heart beating faster) would be attributed to some external and unrelated cause (e.g. the rain).

During early childhood, the ability to differentiate between self and other, or internal and external events become more evident. For example, the child may recognise that each time they run their heart beats faster. Maturation increases the cognitive ability to reflect on somatic symptoms, so by adolescence, cognitions become more sophisticated and
increasingly resembles adult cognitions. Therefore, adolescence can interpret panic symptoms in a catastrophic way (e.g. "my heart is beating faster, I can't breathe, I'm going to die").

Understanding the limitations of cognitive ability in young children has implications for understanding and formulating panic experience in children. The cognitive model centres on catastrophic misinterpretation. Children may well experience panic symptoms, but whether they are aware of accompanying cognitions as playing a role (e.g. Lazarus, 1982) is currently debatable. Nelles and Barlow (1988) argue that the lack of accompanying cognitions may account for the rarity of spontaneous panic in children. Furthermore, inability to understand the concept of internal verses external causality means it is very unlikely their experience of panic resembles panic disorder in adulthood. Therefore, if hinging on cognitive factors, it can be assumed that the quality of a panic attack experience changes with development and maturation (Ollendick et al., 1994).

5. Clinical features of social phobia in adulthood

Social phobia is characterised by extreme social inhibition and fearfulness (Beidel & Turner, 1998) and defined by DSM-IV (APA, 1994) as "a marked and persistent fear of social or performance situations in which the person is exposed to the possible scrutiny by others. The fear that he or she will act in a way that will be humiliating or embarrassing" (p. 416). Situations that elicit anxiety include public speaking, using public toilets, eating or writing in front of others, attending meetings and talking to people in authority (Nutt, Baldwin, Beaumont, Bell, Denny, Knapp, Maxwell, McNicholas & Wells, 1999). Although social phobics often "recognise that their fear is excessive and unreasonable" (DSM-IV, APA, 1994, p. 417), they often suffer panic attacks when in or anticipating a social event (Beidel & Turner, 1998).

Risk factors for social phobia in adulthood are; if as a child their temperament is characterised by high emotionality and if parents emphasise the importance of the opinions of others, foster sensitivity to social evaluation through social isolation, reduce the opportunity to gain experience from social situations and are overprotective (Buss, 1980; Bruch, 1989). Biological risk factors are children who are vulnerable to anxious apprehension and experience high arousal during social interactions (Barlow, 1988).
The impact of social phobia in adulthood can be detrimental. Studies demonstrate associations between social phobia and significant distress and impairment, avoidance behaviour (Nutt et al., 1999; Merluzzi, 1996), increased physiological arousal, increased suicidal ideation and attempts, increased substance misuse, significantly lower levels of educational attainment, inability to work, lack of career attainment and poor outcome with romantic relationships (e.g. Turner, Beidel, Dancu & Keys, 1986; Davidson, Hughes, George & Blazer, 1993; Lepine & Lellouch, 1995).

5.1 Cognitive conceptualisation of social phobia

The cognitive model proposed by Clark and Wells (1995) has been strongly influenced by Beck et al. (1985) and Heimberg and Barlow (1988). The model (figure 2) emphasises the role of negative self-appraisals and considers the role of cognitive behavioural mechanisms in the maintenance of the disorder.

![Diagram of cognitive model of social phobia](image)

Figure 2: cognitive model of social phobia (Clark & Wells, 1995).
Because people with social phobia have a "strong desire to convey a particular favourable impression to others and marked insecurity about one's ability to do so" (Clark & Wells, 1995, p. 69), on entering a social situation, the individual's dysfunctional assumptions and beliefs about themselves and about social situations are activated. This causes them to become hypersensitive to negative social evaluation and perceived social danger. This attentional bias leads to the production of NATs about how they present themselves and what others will think of them. As a consequence, they shift their attentional focus to detailed monitoring of their somatic and cognitive symptoms and observation of themselves as a social object.

The processing of self narrows attention. Therefore, salient information in the environment is lost and poor encoding of cues occur (Sarason, Sarason & Pierce, 1990). As a consequence, social performance becomes awkward and difficult (Wells, 1997). Although self-presentation is important to social phobics (Schlenker & Leary, 1982), the impression they attempt to construct of themselves tends to be from an 'observer perspective'. Thus, they incorrectly assume their performance reflects the way others perceive them (Clark & Wells, 1995; Wells, Clark & Ahmad, 1995).

To reduce the likelihood of negative evaluation or some social catastrophe, the social phobic engages in safety behaviours. For example, an individual who thinks no one would be interested in what they have to say may opt out of conversations and therefore present as less friendly. Consequently, people may be less likely to engage with them. The social phobic's belief: "I must be boring" is therefore confirmed. Safety behaviours prevent disconfirmation of the feared outcome, increase attentional focus to the self, and contribute towards complete avoidance of social situations.

The social phobic may also ruminate in great detail about what might happen prior to a social event. This may lead to complete avoidance of the social situation if the conversations and behaviours rehearsed activate the negative self-beliefs. In addition, the social phobic may ruminate after an event. Post-event processing involves a thorough post-mortem of an event, characterised by an overemphasis and selection of only 'negative' aspects. Both cognitive mechanisms play a role in maintaining the disorder.
6. Social phobia in childhood - are there fundamental differences?

Childhood social phobia was rarely diagnosed prior to DSM-IV (APA, 1994) because it was either subsumed by other childhood anxiety disorders (e.g. avoidant disorder) or overlooked as a childhood disorder by diagnosticians (Velting & Albano, 2001). Revisions to DSM-IV mean that children with social-evaluation fears can be specifically diagnosed as having social phobia. Indeed, prevalence rates suggest that 3% to 4% of children may have social phobia (Beidel, Turner & Morris, 1999).

Although Buss (1980) and Barlow (1988) cite the average age of onset for social phobia as mid-adolescence, Beidel and Turner (1988), Last, Perrin, Hersen and Kazdin (1992) and Strauss and Last (1993) have not only found this disorder in 8 to 12 year olds (e.g. middle childhood), but that it is the most common anxiety disorder among this age group (Spence, 1997).

If left untreated, childhood social phobia may persist into adulthood with detrimental effects. For children, the disorder is associated with school refusal, depression, alcohol abuse in adolescents, conduct disorders, poor social skills, poor social competence and relationship difficulties (e.g. Spence, Donovan & Brechman-Toussaint, 2000; Spence, Donovan & Brechman-Toussaint, 1999; Beidel & Morris, 1995).

Literature suggests that the clinical presentation of childhood social phobia (particularly in adolescence) is both similar and different to adults. Beidel et al. (1999) found that the types of situations that provoke anxiety are similar to adults, such as public performances and routine social interaction. For example, more than 50% of children reported a fear of reading aloud in front of their peers, starting a conversation or speaking to adults. In fact, adults actually have a choice about what they do day to day. Children and some adolescents however are bound by compulsory education and its social milieu and therefore do not have such flexibility. Hence, their distressing events occur mostly in the school setting. As a result, school refusal may manifest which is often accompanied by somatic symptoms, such as stomach upset or headaches (Kashdan & Herbert, 2001; Beidel & Turner, 1998).
The difficulty with recognising social phobia in childhood is that children with this disorder are usually quiet in school and rarely exhibit behavioural problems. Therefore, teachers and parents tend to regard them as just shy and compliant. However, the diagnostic nomenclature not only facilitates a better understanding of risk factors so diagnosis can be made with more confidence, it also highlights the more pronounced differences in expression and experiences of social phobia within the childhood spectrum and compared to adults.

DSM-IV stipulates that "the anxiety may be expressed by crying, tantrums, freezing or withdrawing from the social situation" (APA, 1994, p. 417). Beidel, Christ and Long (1991) found that children aged between 8 and 12 years old reported similar symptoms of panic when in a social situation as adults (e.g. palpitations and feeling like dying). However, panic attack symptoms were less commonly reported in younger children with social phobia. In terms of cognitive capabilities, younger children often have more difficulty describing catastrophic misinterpretations of somatic symptoms. Instead, they are more likely to report having a sick tummy or feeling unwell. However, their reporting may reflect actual differences in their somatic experiences to those in adults, although gaining this information from children is difficult due to their underdeveloped ability for internal focus and verbal expression of somatic symptoms (Beidel & Turner, 1998).

Fundamentally, the child’s developmental stage will determine how they express social anxiety. There is uncertainty that dysfunctional assumptions are activated in a young child when they enter a social situation. In accordance with Beck’s (1967) schema theory dysfunctional assumptions develop in young children. However, whether they perceive social danger and threat or have negative automatic thoughts is difficult to determine. Thus, young children may demonstrate their distress through the above behaviours. Therefore, clinicians, parents or significant others have to attribute the cause of distress to external factors (e.g. unfamiliar people).
Adults usually recognise that their "fear is excessive and unreasonable" (DSM-IV, APA, 1994). This ability, which requires reflection and quiet sophisticated cognitive processes, may be "absent" in children. Indeed, the function and nature of fear appears to change, becoming more specific and reality-based with the development and maturity of children (e.g. Morris & Kratochwill, 1983).

The fear of negative evaluation emphasised in the adult model results in embarrassment or humiliation. If the model can be applied to children, then it assumes that children recognise that thoughts exist, possess a concept of self and have the cognitive capacity to take on board another person's perspective and to anticipate concern over negative evaluation from others (Beidel & Turner, 1998). Spence et al. (1999) provides support for the cognitive model in a sample of 7 to 14 year olds who demonstrated similar patterns of cognitive negativity regarding social evaluation situations and negative self-appraisal. Bogels and Zigterman (2000) support the notion that anxious children aged between 9 and 18 have a cognitive bias for threat and dysfunctional cognitions that are congruent with their fear (e.g. "they won't like me" and "I will appear awkward"). These children also overestimated danger and underestimated their ability to cope with the danger.

Empirical studies on information processing in anxious children assert that intense fear and anxiety is caused by increased activation of schemas for threat and danger. A number of studies (see Muris, Merckelbach & Damsma, 2000) have provided evidence for attentional bias and interpretation bias, which influences the way in which situations are interpreted. However, one assumes that information about the two cognitive processes were drawn from children aged 8 years and older because of their developing ability for reflection of negative cognitions.

Some studies have proposed that children as young as 5 can anticipate and elaborate upon possible negative outcomes (Vasey, Crnic & Carter, 1994) and have anxious thoughts. Darby and Schlenker (1986) found that second graders could recognise signs of worry, uneasiness and lack of confidence in others, and could identify particular characteristics of less socially competent children, such as avoidance of eye contact or smiling and avoidance
of communication. However, the content of thought and the association between social anxiety and the need to impress others was more prevalent and complex amongst children age 8 years and older.

7. **Treatment of panic disorder and social phobia in adulthood**

Support for the cognitive model of panic disorder and social phobia can be drawn from the numerous studies indicating an alleviation of anxiety symptoms following cognitive behavioural therapy (CBT) (e.g. Telch, Lucas, Schmidt, Hanna, LaNae Jaimez & Lucas, 1993; Arntz & van den Hout, 1996; Bouchard, Gauthier, Laberge, French, Pelletier & Godbout, 1996; Petterson & Cesare, 1996; Heimberg & Barlow, 1988; Heimberg, Salzman, Holt, & Blendall, 1993).

CBT is a multi-modal treatment package that draws on various techniques to target the maintaining factors stipulated in the cognitive models for both panic disorder and social phobia. Differences in the application of CBT tend to be mediated by characteristics salient to the disorder (e.g. hyperventilation in panic disorder; processing of self as a social object in social phobia). CBT techniques include psychoeducation that provides information about anxiety symptoms, behaviour and cognitions. The cognitive model pertaining to the anxiety disorder is often explained to the individual to facilitate their understanding of the relationship between components.

Cognitive restructuring (Beck & Emery, 1985) involves identifying faulty (distorted) cognitions and then restructuring them through a series of behavioural testing experiments. Identifying cognitive distortions makes them explicit and therefore amenable to change. In terms of panic disorder, cognitive restructuring helps the individual to reframe their catastrophic way of thinking (Sanderson & Rego, 2000). For the social phobic, they are encouraged to reappraise their thoughts and expectations about social situations (Merluzzi, 1996).

Respiratory control and progressive muscular relaxation are taught to enable the individual to gain a sense of control over their somatic symptoms and body, thus preventing
hyperventilation. This skill is particularly important for remaining calm when required to undertake exposure programmes. The role of avoidance and safety behaviours are targeted primarily through behavioural or imaginal exposure programmes. Exposure requires the individual to confront their anxiety-provoking situation whilst dropping all safety behaviours. This procedure, although not cognitively based still appears to facilitate the shift in beliefs from negative to more realistic ones. Essentially, their negative beliefs are disconfirmed because they learn that catastrophe does not occur. Structured homework assignments are also incorporated into the package.

7.1 Outcome studies on CBT panic disorder and social phobia in adulthood

A number of studies have tested particular components of the CBT package to ascertain which components are most effective. In the treatment of both panic disorder and social phobia, although cognitive distortions are considered the most salient feature, treatment rarely involves cognitive restructuring alone. Exposure techniques are equally fundamental to treatment and indeed; a degree of exposure is necessary for the individual to disconfirm their erroneous beliefs and misinterpretation of bodily sensations (Bouchard et al. 1996). Bouchard et al. (1996) and Overholser (2000) found the two techniques to be equally effective when used as a discrete treatment package or in combination for treating panic disorder. Arntz and van den Hout (1996) found that cognitive therapy was superior in the treatment of panic disorder over applied relaxation.

Telch et al. (1993) demonstrated the effectiveness of group CBT (CBGT) for panic disorder. Small groups of 4-6 individuals received 12, 90-minute sessions over an 8-week period. At post treatment, marked improvement on all the major indices of treatment outcome was demonstrated. Similarly, CBGT for social phobia has been cited to be highly effective both at post treatment and follow-up (e.g. Heimberg et al., 1993). In some cases, social skills training has been incorporated into the treatment package to improve deficient social skills, as well as to learn more appropriate behaviour for social situations (Turner, Beidel, Cooley, Woody & Messer, 1994).
Despite the proposed effectiveness of CBT, Ballenger (1999) found that CBT was comparable in effectiveness with pharmacotherapy. However, CBT appeared to have longer lasting effects and a lower risk of relapse.

8. Are there fundamental differences in the treatment of childhood anxiety disorders?

The available literature suggests that for children aged 8 years and over, CBT procedures used with adults can be as effective, as long as the techniques used are adapted and modified to meet the child's developmental level (e.g. Barrett, Dadds, Rapee & Ryan, 1996; Beidel & Turner, 1998; Albano, Marten, Holt, Heimberg & Barlow, 1995).

Should cognitive procedures be used with children, then the child's age, cognitive and language abilities should be taken into account. Studies cited in this paper have acknowledged that adolescent thinking resembles adults. Therefore, the cognitive procedures would be appropriate techniques to use with this age group.

In terms of much younger children, utilising cognitive procedures would be more difficult. Treatment with adults often involves socialising them to the cognitive model that conceptualises their anxiety disorder. This is probably pointless to do with a young child because they do not have the ability to pay attention to all the features of the model, let alone understand what the concepts mean. Hence, it cannot be assumed that young children think as adults. Moreover, asking a young child to identify their thoughts and change them is far too complex and complicated for them to understand.

Children under 8 years old are bound by concrete thinking and so lack the ability to think in an abstract way. Thus, the capacity for children to reflect on their feelings and cognitive processes is limited. As a consequence, the question to ask is how useful will cognitive therapy be if used with young children and how reliable will their responses be in determining their negative internal dialogue.
The adult literature has demonstrated that although CBT involves restructuring cognitions, cognitive procedures per se do not appear to be fundamental for reducing anxiety experiences in young children. Instead, more traditional behavioural procedures, such as exposure can be used (Beidel, Turner & Morris, 2000).

Unlike treatment with adults, much of treatment with children involves working with the child, the child’s carers, etc. If behavioural exposure work is to be undertaken, it is more effective in the context that their anxiety occurs and with the involvement of the child’s family, school or significant others. Crawford and Manassis (2001) found that parents and school factors play a powerful role on the direction of treatment outcome. In a study of 8 to 12 year olds, those children who perceived more problems in the family were less likely to improve following treatment. Conversely, parental involvement that was positive and supporting was correlated with significant improvements (Spence et al., 2000; King, Murphy & Heyne, 1997). Thus, family involvement is crucial for ensuring compliance and tolerance of treatment, particularly when confronting their fear stimulus through exposure.

9. Conclusion and clinical implications

It appears that cognitive development is fundamentally different, when conceptualising and treating anxiety disorders in childhood from anxiety disorders in adulthood. The role of cognitive processes over other mediating factors is considered essential to the experience of anxiety disorders in adulthood and indeed in older children (adolescents). The development of comprehensive cognitive models has provided clinicians with a framework for conceptualises the salient features of the presenting disorder that are targeted for treatment.

Although, the lack of models for childhood anxiety disorders means that those developed for adults are applied to children. The advantage of this is that there is a breadth of literature pertaining to the efficacy of the models. However, the models do not consider cognitive developmental factors of children, and may assume that children think as adults.

This paper has attempted to demonstrate that although anxiety disorders appear to affect children of any age, it is the stage of cognitive development of the child that appears to
influence both their perception and expression of anxiety. In addition, the recognition that anxiety disorders do exist in preadolescents is important for the prevention of anxiety disorders persisting into adulthood.
10. References


OLDER ADULTS ESSAY

“Dementia cannot be cured. It takes its course”.
Critically evaluate with a discussion of known theories of causes and treatment approaches.

JULY 2002
YEAR 2
1. Introduction

Traditionally, dementia was defined within a biomedical model framework that focussed on the neurological changes in the cerebral cortex (responsible for complex mental processes). This framework assumed a causal relationship between neuropathology and dementia and so failed to account for environmental factors and the complexity of the human experience in dementia (Stokes, 2000). However more recently, when using the term dementia, the person as a whole is regarded rather than just their brain (Kitwood, 1999).

To address the above statement, “Dementia cannot be cured. It takes its course” the theories of known causes and treatment approaches for Alzheimer’s disease (AD) are considered as opposed to dementia per se, because AD is the most widely studied cause of dementia.

The impact of AD is indicated through a brief account of the prevalence, neuropathology and course of AD. This is followed by a discussion of known theories of causes. However, there are numerous theories which cannot be given justification in this essay due to word constraints. Therefore, only a selection of more recent theories (biological and environmental) has been considered. A discussion of known treatment approaches that link with some of the theories will follow. The essay will conclude by reflecting on the findings in relation to the statement.

2. What is Alzheimer’s disease?

There are many forms of dementia (some of which are presented in Table 1), but AD is the most prevalent and major cause of degenerative dementia and the fourth leading cause of death in the elderly following heart disease, cancer and strokes (Tortora & Anagnostakos, 1990). Alzheimer’s disease is characterised by an insidious onset that progresses towards irreversible neurodegeneration and deterioration in intellectual and cognitive capacities (e.g. memory, orientation, attention, reasoning, learning etc.), widespread neuropsychological destruction characterised by changes in personality and sociability (e.g. in patterns of relationships and interaction, communication impairment, behavioural changes, etc.) and eventual loss of self awareness (Kitwood, 1999; Lezak, 1995). According to Kitwood (1999),
the dementing process is a consequence of both the neurological and social-psychological changes.

**Table 1: Other forms of dementia**

<table>
<thead>
<tr>
<th>Type of Dementia</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Infarct Dementia</td>
<td>Widespread cognitive impairment resulting from repeated small infarctions usually at many different brain sites. Prevalence: 15%-25% of dementias</td>
</tr>
<tr>
<td>Picks Disease</td>
<td>Rare degenerative disease</td>
</tr>
<tr>
<td>Huntington's Disease</td>
<td>Inherited brain disease due to a dominant gene, associated with cognitive decline Prevalence: 4%-7% per 100 000 in UK</td>
</tr>
<tr>
<td>Lewy Body Disease</td>
<td>Lewy body comprise of abnormal accumulation of protein ubiquitin. Tends to accumulate in cerebral cortex Prevalence: 7%-26% of dementias</td>
</tr>
<tr>
<td>Frontal Lobe Dementia</td>
<td>Tendency to present with behavioural and personality disturbances Prevalence: 10%-20% of dementias</td>
</tr>
<tr>
<td>Creutzfeldt-Jakob Disease</td>
<td>Rare, transmittable dementia Prevalence 3-5 per million</td>
</tr>
</tbody>
</table>

The risk of developing AD increases with age (Whitehouse, Lerner & Hedera, 1993), affecting approximately five to ten per cent of the population who reach age 65 and up to 20-50% of the elderly who reach their mid 80s (Cummings & Cole, 2002; Bradshaw & Mattingley, 1995). As a consequence of living longer as opposed to sex-specific risk factors, higher incidences of AD are found among women than in men (Hebert, Scherr, McCann, Beckett & Evans, 2001). In the United States, the prevalence of AD doubles every 5 years after the age of 60, with an estimated 40 new cases of AD occurring every hour (equating to 360 000 per year) (Cummings & Cole, 2002). With the proportion of the elderly in the general population increasing steadily, AD poses to be a major national health and economic problem (Francis, Palmer, Snape & Wilcock, 1998).
3. **Alzheimer disease neuropathology**

Neuropathological investigations have suggested that the brains of Alzheimer individuals have undergone certain changes. The hallmarks of AD are the presence of neurofibrillary tangles and senile plaques (described below) although other neurological changes appear to be neurotransmitter deficits, atrophy of the cerebral cortex and the hippocampus, and enlargement of the ventricles (Lezak, 1995; Bradshaw & Mattingley, 1995).

3.1 **Neurofibrillary tangles**

In healthy neurons, microtubules form structures like train tracks, which course symmetrically through nerve cells throughout the brain, thus providing structural support and transportation of nutrients. The main component of these tangles is a form of protein called tau, which helps to stabilise the microtubules. In AD, tau is altered chemically and twists into paired microfilaments to form a helical structure. These filaments combine to form neurofibrillary tangles. Consequently, the tau can no longer hold the structure together and the microtubules fall apart. The structural network becomes widely disorganised and often leads to a breakdown in communication between nerve cells and eventually, neuronal death. Neurofibrillary tangles are often found in the hippocampal and amygdaloid areas, which are associated with memory and expression of emotion (Lezak, 1995; Bradshaw & Mattingley, 1995).

3.2 **Senile plaques**

Senile plaques are numerous in the terminals of the cholinergic neurons of the hippocampus, cortex and amygdala, and occur in the vicinity of axons and dendrites. They are extracellular products characterised by surrounding debris of neuronal degeneration, which consists of $\beta$-(beta)-amyloid, a waxy protein deposit from a larger protein called amyloid precursor protein (APP). Senile plaques are found in spaces between brain nerve cells and appear to contribute to extensive neuronal loss which serves to disconnect various brain regions from communicating with one another. For example, detachment from the temporal lobe to the cerebral cortex accounts for the prominent feature of acquired memory loss in AD individuals (Damasio, Van Hoesen, & Hyman, 1990), whilst disconnection of pre-frontal structures from the parietal structures, result in attentional deficits (Parasuraman & Haxby,
Jobst (1994) proposed that the rate or neuronal loss is up to ten times faster in individuals who have AD compared with their counterparts. Exactly why remains inconclusive although psychological factors such as stress or depressive reactions to loss have been implicated (O'Dwyer & Orrell, 1994).

To assume that the above neuropathology is present only in symptomatic cases of AD is far from reality. Evidence confirms that all common forms of neuropathology that are associated with mild AD and indeed more severe AD have also been found in the brains of individuals who have no cognitive impairment. Furthermore, although considered to be contributory factors to the disruption of neurological functioning, whether neurofibrillary tangles and senile plaques are actually a cause of AD continues to be debated (Kitwood, 1999).

4. Course of Alzheimer's disease

Attempts have been made to define the course of AD in terms of stages. Based on a medical model approach, Lishman (1998) proposed three stages of AD. The first stage lasts between two to three years and is characterised by failing memory, muddled inefficiency over daily tasks and spatial disorientation. The second stage is characterised by a more rapid and noticeable decline in intellect and cognitive abilities, and personality deterioration. Deficits in language become more apparent, whereby conversation appears devoid of meaning or relevance to the topic being discussed (Hamilton, 1994).

Individuals may develop impaired judgement and visuospatial dysfunctions and have difficulty performing purposeful movements. Behaviour may be characteristic of outbursts of violence and aimless wandering, apathy, poor self care, increased agitation and restlessness, and an inability to perform basic activities of daily living (Small, 1998). The third stage is characterised by a general lack of awareness of others and profound apathy. The individual may become bedridden and doubly incontinent and their language becomes severely impaired or may diminish altogether (Emery, 1988).
Throughout the course of AD, the rate of progression and changes vary between individuals as different brain regions are affected at different times. However, the duration of AD typically lasts between six and twelve years (from the time of onset to death) (Cummings & Benson, 1992; Rogan & Lippa, 2002).

5. **Theories of causes for Alzheimer's disease**

Of interest is what factors cause AD or contribute to its development? The search for a cause is not merely academic. Although there is currently no cure for AD, identifying causes may contribute towards the development of disease modifying treatments that might delay the onset of AD, slow its progress, change its course, or prevent it altogether. Specific treatment directed at a known cause might help to reduce the number of individuals with AD, as well as the personal and financial cost associated with their care (Francis et al., 1998).

Current investigations into the causes and pathogenesis of AD are inconclusive (Small, 1998). Research literature suggests that there are various possible causes and predisposing factors to AD, for example genetic mutations (e.g. Small, 1998; Breitner, 1999), environmental factors such as traumatic head injury (e.g. Gedye, Beattie, Tuokko, Horton & Korsarek, 1987; Nemetz, Leibson & Naessens, 1999) and social factors such as depression (e.g. Devanand, Sano, Tang, Taylor, Gurland, Wilder, Stern, & Mayeux, 1996; Carpenter & Strauss, 1995) and educational level (e.g. Cobb, Wolf, Au, & White, 1995). Although the only unequivocal risk factor in AD is increasing age (Small, 1998), AD is not an inevitable part of ageing (Bradshaw & Mattingley, 1995).

5.1 **Genetic factors**

Two types of AD are recognised: Familial AD which is inherited and sporadic AD, which occurs without an obvious family history. The analysis of families with AD according to whether the onset of AD was early (e.g. before age 65) or late (e.g. after age 65) has provided researchers with important information about possible AD pathogenesis.
5.1.1 Early-onset AD

Early-onset AD is rare but can run in families and progress faster than late-onset AD (Small, 1998). Approximately five to ten per cent of early-onset AD cases are attributable to an identifiable genetic mutation at three separate genetic loci (Brietner, 1999; Lippa, 1999). If one of the following mutations is present in only one of the two copies of an inherited gene, early-onset familial AD (known as autosomal dominant inheritance) is inevitable.

Geneticists initially focussed on mutations in the APP gene on chromosome 21 because of its link with AD in individuals with Down’s syndrome. Although this gene is associated with dementia onset in the fifth decade of life in individuals without Down’s syndrome, mutations in APP have been found to rarely cause AD and have only been found in approximately 20 families worldwide (Lannfelt, 1997).

The presenilin 1 gene on chromosome 14 has been associated with AD onset in the fourth decade of life and is responsible for most cases of early-onset familial AD (Lovestone & Gauthier, 2001). The presenilin 2 gene on chromosome 1 more variably provokes AD onset between the ages 45 and 65 (Rogan & Lippa, 2002; Brietner, 1999). The presenilin mutations can initiate the formation of β-amyloid plaques (particularly Aβ1-42 peptide) thus initiating the disease process. Overproduction of Aβ1-42 or failure to clear this peptide leads to cell death and consequently AD (Mulder, Scheltens, Visser, van Kamp & Schutgens, 2000). The ‘amyloid cascade hypothesis’ (Hardy & Higgins, 1992) proposed that amyloid deposition was the core to AD pathology, and that both familial and sporadic AD was the result of altered APP and increased amyloid production. However, whether the presence of β-amyloid plaques determines causality or is a by-product corresponding to neurodegenerative disease progression remains uncertain (Cummings & Cotman, 1995).

5.1.2 Late-onset AD

There is little evidence to suggest that autosomal dominant inheritance of mutated genes cause late-onset AD, although genetics is implicated in its development. The epsilon-4 (ε4) allele of the gene encoding apolipoprotein E (ApoE) on chromosome 19 has been strongly associated with more prevalent late-onset AD (Selkoe, 1997). Apolipoprotein E is a plasma
protein involved in the transport of cholesterol, is synthesized in the brain by astrocytes and is implicated in the growth and repair of the nervous system during development or after injury (Mulder et al., 2000). Although the ApoE gene has three allelic variants (ε2, ε3 and ε4), researchers have found that 50% of risk for AD is linked with inheritance of the ApoE-ε4 allele and the lower risk for AD is linked with the ApoE-ε2 allele (Strittmatter, Saunders, Schmechel, Pericak-Vance, Enghild, Salvesen & Roses, 1993).

Research evidence implicates ApoE as influencing the rate of dementia across diverse populations and has been confirmed as the most important genetic influence on late-onset AD. However, ApoE-ε4 is not an invariant cause of AD, and it is suspected that other unidentified genes also contribute to risk either independently or in interaction with ApoE (Lovestone & Gauthier, 2001).

5.2 Neurotransmitter factors

Cholinergic deficits, particularly in the levels of the neurotransmitter acetylcholine (a chemical that helps transmit messages between neurons), are a key component in the AD dementing process (Small, 1998). The ‘cholinergic hypothesis’ states that many of the cognitive, functional and behavioural symptoms of AD correspond to the reduction in brain acetylcholine activity secondary to the loss of cholinergic neurons in the nucleus basalis of Meynert and other nuclei projecting to the hippocampus and mesial temporal region (Cummings, Vinters, Cole & Khachaturian, 1998; Geula, 1998).

At post-mortem, the enzyme choline acetyltransferase (ChAT) which manufactures acetylcholine is studied rather than acetylcholine itself, due to the rapid chemical changes that occur in the brain upon death. Thus, reductions in ChAT indicate a reduction in acetylcholine and the greater reductions in levels of ChAT, the more severe the dementia before death (Perry, Tomlinson, Blessed, Bergmann, Gibson, & Perry, 1978). However, recent research proposes that although the loss of cholinergic function is correlated with cognitive impairment in AD, an association between the two does not necessarily indicate a causal relationship. Additional factors are likely to play a part (Francis et al., 1998).
The noradrenergic system in the nucleus locus coeruleus and the serotonergic systems in the raphe nucleus are also affected by AD (Lezak, 1995). Individuals with AD and depression prior to death have been found with significantly greater neuronal loss in the nucleus locus coeruleus than non-depressed individuals with AD, and reduced serotonin and 5-hydroxyindoleacetic acid in various brain regions (Zubenko, Moossy & Kopp, 1990). The neurochemical somatostatin (used by certain neurons in the cerebral cortex) has also been found in reduced quantities in AD brains and is associated with impairments in specific cognitive functions (Swihart, Baskin & Pirozzolo, 1989).

5.3 Environmental and Psychosocial factors

Much less is known about the role of environmental factors in the development of AD, although various hypotheses have been put forward, some of which are discussed below:

5.3.1 Age

Because age is the major risk factor for AD, cellular and molecular mechanisms of normal ageing have been considered in the pathogenesis of AD (Small, 1998). During the normal course of ageing neurons die in some brain regions and tangles and plaques form. However other changes occur such as increases in oxidative stress and inflammation (e.g. arthritis). Research evidence concerning the link between oxidative stress and AD is emerging (Markesbery, 1999; Markesbery & Carney, 1999).

Oxidative stress can injure cells resulting in cell damage and eventual death, and believed to be a contributor to the aging process. The ‘free-radicals hypothesis’ states that free-radicals are generated in most metabolic processes and oxidation accumulates in tissues and damage major cellular components (e.g. proteins, nucleic acids etc). In addition, \( \beta \)-amyloid is linked with initiating oxidative damage to neurons, although it remains unclear whether this is actually the case or whether neurons under oxidative stress are vulnerable to \( \beta \)-amyloid neurotoxicity (Markesbery, 1999; Small, 1998).
5.3.2 Head injury
The neuronal damage caused by head trauma, especially in persons with other risk factors, may trigger the neuropathological changes seen in AD. There is modest, but significant evidence for an association between AD and earlier head trauma with loss of consciousness (Gedye et al., 1987; Nemetz et al., 1999). Furthermore, one study found that the risk for AD increased for individuals who had experienced previous head trauma and who possessed the ApoE-e4 allele (Mayeux, Ottman, Maestre, Ngai, Tang, Ginsberg, Chun, Tycko, & Shelanski, 1995), although other studies have found no compelling evidence that this may be the case (Lippa, 1999).

5.3.3 Education
Some studies have associated education levels with risk of developing AD (see Small, 1998). However, findings from the Framingham Study (Cobb et al., 1995) suggested that low educational attainment was not a significant risk factor for the development of AD per se, but was associated with increased risk of non-Alzheimer’s disease dementia. Other studies have proposed the “Use it or lose it!” hypothesis, whereby frequent participation in cognitively stimulating activities is associated with a reduced risk of developing AD (Wilson, Mendes de Leon, Barnes, Schneider, Bienias, Evans & Bennett, 2002).

5.3.4 Depression
Depression occurs in approximately 30%-50% of the population with AD, making it the most common psychological problem in dementia (Midence & Cunliffe, 1996). Major symptoms of depression (e.g. difficulty with concentration or deficits in memory, slowed speech, lacking energy and interest in activities) may also be indicative of cognitive decline and therefore often confused as dementia (Insel & Badger, 2002).

Although depression has been implicated as a risk for AD, the relationship between the two is a complex one (Kitwood, 1999). Devanand et al. (1996) concluded that the risk of developing AD increased if the individual was moderately depressed. Speck, Kukull, Brenner, Bowen, McCormick, Teri, Pfanschmidt, Thompson, and Larson (1995) found that individuals, who had experienced depressive episodes beginning years before the actual onset
of AD, had increased the risk of developing AD. Carpenter and Strauss (1995) argued that a depressive reaction may be a direct precursor for AD onset. Whether depression is a very early indication of AD or a complication of AD, or whether depressed mood increases susceptibility for AD through another mechanism currently remains uncertain (Small, 1999; Kitwood, 1999).

6. Treatment approaches for Alzheimer’s disease

Given the incomplete stage of our understanding of AD, treatments for AD are arguably in their infancy. Treatment strategies are largely based on the different hypotheses concerning the biological pathogenesis of AD (Leber, 1996) and on the behavioural and psychosocial aspects associated with AD. The current treatments also appear to ‘manage’ rather than ‘treat’ the symptoms of AD. This may be because the word ‘treatment’ often implies ‘cure’ and a cure has yet to be developed. Whatever treatment is chosen (e.g. pharmacological or psychological), the values and wishes of the individual with AD and their family must be considered (Cummings and Cole, 2002).

6.1 Genetic testing

Although not a treatment per se, genetic testing can help detect early-onset mutations in genes for presenilin 1, presenilin 2 and APP, and determining whether an individual carries copies of ApoE-e4 or ApoE-e2 allele. For an individual with dementia symptoms, ApoE testing may offer additional evidence that the dementia is due to Alzheimer’s, which can have treatment implications, such as appropriate drugs or developing strategies for managing and coping.

However, not everyone with AD has or carries the ApoE-e4 allele, which brings into question the ApoE-e4 allele predictive status. Furthermore, the presence of the ApoE-e2 allele does not necessarily protect against AD, and so testing for this gene can lead to false hopes (Small, 1998). Gene identification may increase anxiety so genetic counselling to explore emotional and legal implications is recommended (Lovestone & Gauthier, 2001). Furthermore, despite the obvious advantages of genetic testing, relying on the presence or
absence of particular genes fails to account for social and environmental factors, or the role of other unidentified genes (Small, 1998).

6.2 Pharmacotherapy

One of key underlying pathogenesis of AD is the systematic failure of neurotransmission, particularly of the cholinergic system within the cerebral cortex and basal forebrain (Doody, 1999). A number of drugs (e.g. tacrine (Cognex®), donepezil hydrochloride (Aricept®), and rivastigmine (Exelon®) have been developed and approved by the Food and Drug Administration that are time limited and treat the cognitive decline experienced by individuals with AD. These drugs (or Cholinomimetics), act as cholinergic replacements that temporarily enhance or maintain central concentrations of acetylcholine in the brain. This procedure may alleviate the typical cognitive and non-cognitive symptoms of AD (Lovestone and Gauthier, 2001; Doody, 1999).

6.2.1 Cholinomimetics

Tacrine (Cognex®) was first approved in 1993, although used less now due to its association with raised liver toxicity. Glennie (1997) reported modest efficacy overall and minor improvement in cognitive function. However, in a retrospective analysis of tacrine users, Poirier, Delisle, Quirion, Aubert, Farlow, Lahiri, Hui, Bertrand, Nalbantoglu, Gilfix and Gauthier (1995) found that individuals with AD and carriers of ApoE-ε4 were less likely to improve on the drug as ApoE-ε4 is associated with marked reductions in cholinergic activity.

Donepezil hydrochloride (Aricept®) was approved in 1996 and commonly used to treat mild to moderate symptoms of AD. Randomised clinical trails have shown that 3mg, 5mg and 10mg doses daily are effective in improving cognitive and global functioning measured by the Alzheimer’s Disease Assessment Scale (Rosen, Mohs & Davis, 1984) compared with placebo (e.g. Rogers, Farlow, Doody, Mohs, Friedhoff and the Donepezil study group, 1998). However, donepezil appears to help only some individuals with AD and does not stop or reverse the progression of AD.
Rivastigmine (Exelon®) was approved in 2000 for the treatment of mild to moderate AD symptoms. Clinical trials involving more than 3,900 individuals with AD have found improvements in their ability to carry out activities of daily living (e.g. eating and dressing), fewer or less severe behavioural symptoms (e.g. delusions and agitation) and improvement in cognitive functions (e.g. thinking, memory and speaking) (e.g. Corey-Bloom, Anand & Veach, 1998). However, like the other two drugs, rivastigmine will not stop or reverse AD.

6.3 Antioxidants
Antioxidants (e.g. vitamins C, E, betacarotene-related to vitamin A) selegeline (Eldepryl®) and melatonin help to protect the body against free radicals and proposed as a means of possibly slowing down the progression of AD, particularly Vitamin E (e.g. Morris, Evans, Bienias, Tangney, Bennett, Aggarwal, Wilson & Scherr, 2002). However, the protective effect of vitamin E from food was more significant among individuals who did not have the ApoE-ε4 allele (Morris et al., 2002).

6.4 Anti-inflammatory drugs
Epidemiologists recently discovered that individuals using non-steroidal anti-inflammatory drugs for rheumatoid arthritis had a lower than expected prevalence of AD (e.g. Delanty & Vaughan, 1998). However, a recent study that compared the effects of prednisone (a steroid) and placebo on the progression of AD found no difference in cognitive decline and that low-dose regime of prednisone was not useful in treating AD (Aisen, Marin, Altstiel, Davis, Weiner, Grundman, Klauber, Sano & Thal, 2000).

6.5 Psychological approaches to treatment
Kitwood (1999) argued that negative attitudes about AD are widely held by society and facilitated by the medical view. For example, individuals with AD have been thought unsuitable for psychological intervention because their cognitive impairment is believed to impede their understanding of or engagement with the therapeutic process (Husband, 1999). Moreover, that until there is a medical cure for AD or any other dementia, there really is no hope at all.
Kitwood (1999) describes how these views can develop into a ‘malignant social psychology’ around the person with AD. Attitudes, values and principles that are ‘malignant’ can lead others to detract from the individuality of the person with AD, thus leading to reduced function and increases in the rate of decline and neurological impairment. Malignancy can also distort and corrupt the therapies applied. Woods (1999) and Pulsford (1997) argue that dementing individuals are worthy of respect, continue to experience emotions and will appreciate activity and interaction. Any activity or approach used with individuals with AD should aim to be therapeutic, enhance quality of life, slow down cognitive decline, generate and maintain self-esteem, create pleasure, be meaningful, enable friendships and re-establish dignity (Marshall & Hutchinson, 2001).

Before deciding on an appropriate psychological intervention, individuals with AD should be involved in the decision-making, where possible (Woods, 1999). A comprehensive assessment of their strengths and needs and detailed descriptions of their behaviour can lead to specific goals or targets which the individual with AD can achieve and address by one or a variety of psychological approaches. As with pharmacotherapy, psychological treatment approaches are more about managing rather than treating the individual with AD, and thus imply a continuing intervention rather than one that is time-limited (Woods, 1999).

6.5.1 Reality Orientation

There are two main forms of RO which aim to adjust behavioural contingencies and increase mental stimulation and social interaction (Williams, 1994). The 24-hour RO restructures the environment to improve the individual’s orientation through direct communication with a carer or staff member. The individual is orientated to time, place, date, their name and current events in their surroundings (Midence & Cunliffe, 1996). Classroom RO consists of structured group sessions that comprise around three to five individuals with dementia. Sessions are regular, often several times a week for half and hour or so, and consist of a variety of activities and materials that are used to engage the individuals with their surroundings and to provide cognitive stimulation (Woods, 1999; Midence & Cunliffe, 1996).
Those who use RO tend to support it on pragmatic reasons that it improves the quality of life for individuals with AD, and that it stimulates unused neurological pathways and compensates for damage to the brain (Morris & Millar, 1994). However, how relevant the aims of RO are to the needs of the individual with AD is currently debated. Some RO evaluation studies report increased verbal orientation scores compared with no-treatment controls (e.g. Baines, Saxby & Ehlert, 1987), whilst other studies have reported adverse effects (Dietch, Hewett & Jones, 1989) and questioned the effectiveness of this approach (Powell-Proctor & Miller, 1982).

6.5.2 Reminiscence therapy
The primary goals of reminiscence therapy are to facilitate recall of past experiences to promote a sense of well-being and increase self-esteem, and to encourage socialisation and interaction with the group members. Individuals are encouraged to share their memories, stimulated by a number of props such as music, paper clippings, sweets (e.g. liquorice, humbugs) and photographs.

Evaluation studies of reminiscence are inconclusive. Long term effects outside the sessions are questionable, although there appears to be clear benefits within the sessions (Woods, 1999). Baines et al. (1987) compared RO with reminiscence therapy and reported that the group that received RO followed by reminiscence compared to the group that only received RO, showed a significant improvement on a range of behavioural and cognitive measures. Furthermore reminiscence therapy also encouraged staff-patient interaction, increased staff knowledge of the individual and provided an activity perceived as enjoyable with a personal focus (Thornton & Brotchie, 1987).

6.5.3 Memory training
Memory training programmes aim to enhance cognitive functioning by adapting the environment, using external memory aids, such as signposting directions and signs on drawers and cupboards indicating where items are located and rehearsal and repeated practice. Bourgeois (1990, 1992) evaluated the effects of prosthetic memory aids (e.g. photographs and pictures of past and recent events, important people in the individual’s life)
on conversational ability. The quality of conversation was assessed as being significantly improved, with the memory aid helping to improve the quality of interaction between pairs of people with dementia. Quayhagen, Quayhagen, Corbeil, Roth and Rodgers (1995) evaluated cognitive skills remediation programs that focused on exercising remaining abilities or relearning of skills. They reported improved emotional state and maintained levels of cognitive and behavioural functioning in the carer-AD individual treatment dyad compared to the comparison group.

6.5.4 Behavioural approaches

It is often the behaviours perceived as difficult or problematic that has the most impact on carers and on decisions regarding placement and pattern of care (Woods, 1999). Behavioural approaches that reflect the principles of learning theory, although typically implemented in institutional settings, can be applied in the community or private home (e.g. Pinkston, Linsk & Young, 1988). Behavioural techniques such as manipulating the environment, stimulus cueing and modification of behaviour-reinforcement contingencies have been reported as effective (e.g. Bird, Alexopoulos & Adamowicz, 1995; Hinchliffe, Hyman, Blizard & Livingston, 1995). Individuals with mild AD appear to respond positively to most principles of learning, whereas those with more moderate AD appear to be less sensitive to variations in schedules of reinforcement.

6.5.5 Carer support

Interventions such as support groups, educational programs and individual and family therapy have been developed to reduce caregiver stress and to prevent or delay the institutionalisation of the individual with AD (Woods, 1999). The psychological well-being of carers can have a significant and dramatic influence on the course of AD, particularly on the frequency and severity of behavioural problems and agitation. Research suggests that many experiences of carer burden appear to be mediated by social support, financial resources, coping abilities, feelings of self-efficacy and cultural factors. For example, carers receiving strong social support have been associated with fewer negative experiences than carers reporting little social support (Dunkin & Anderson-Hanley, 1998).
Although the effect of caregiver stress on the course of AD has had little research attention, studies have shown that carers with high expressed emotion (EE) were associated with more negative experiences than carers with low EE (e.g. Gilhooly & Whittick, 1989). High EE in carers was predictive of increasing behavioural problems in the AD individual, but did not predict cognitive decline.

Carers also experience elevated levels of anxiety and depression and rate their physical health as significantly poorer than controls (Dunkin & Anderson-Hanley, 1998). Treating caregiver depression directly has been shown to lead to improvements in the individual with AD behaviours previously viewed as intolerable. Carers are likely to be much more effective when they are able to emerge from the negative thought patterns and reduced problem solving ability associated with depressed mood (Woods, 1999).

7. Conclusion
The statement: “dementia cannot be cured. It takes it course” appears to be supported by the evidence presented. The competing theories about what causes AD highlight the heterogeneity of the syndrome. Each theory is informative and contributes to the understanding of possible underlying pathogenic mechanisms and so useful for formulating potential hypotheses (Small, 1998). Although it is clear that many of the theories are underpinned with uncertainty, understanding specific causes can be useful for informing appropriate treatment interventions.

However, the course of AD will continue regardless of the treatment used. Cholinomimetics are typically given to individuals who are in the early to middle stages of AD, are time limited, have had little impact on the prevalence of AD and do not alter the underlying course of AD. However, they do have clinical importance. Improvement in the non-cognitive features and activities of daily living can influence the subjective experience of AD (for the individual with AD and their carer).

Psychological therapies used either alongside pharmacotherapy or own their own can target different aspects of difficulties associated with the progression on AD. For example,
maintaining interpersonal connections can be facilitated through reminiscence, whereas the behavioural and cognitive approaches can help to optimise remaining abilities or help develop new skills.

An integration of the theories and treatments for all aspects of AD may lead to increased knowledge about how the interactions between these factors can affect the overall progression and experience of AD. Hence, whilst dementia cannot be cured, and whilst it takes its course, a more holistic approach may lead to an experience and perception of AD that may be less distressing and negative to all concerned.
8. References


Morris, R., & Millar, E. (1994). *The psychology of dementia.* Chichester: John Wiley & Sons Ltd.


The clinical dossier contains an overview of the clinical experience gained during the course and brief summaries of the five clinical case reports submitted. Full details of the case reports, as well as placement contracts, logbooks of clinical experience and placement evaluation forms can be found in Volume II of the portfolio. This is held within the Psychology Department of the University of Surrey due to the confidential nature of the information it contains.

Please note that all client names and identifying information in this section have been altered to preserve anonymity.
Adult Mental Health Summary of Placement Experience

Placement details

Placement location: Abraham Cowley Unit, St Peter’s Hospital, Chertsey
NHS Trust: Bournewood Community & Mental Health NHS Trust
Supervisor(s): Dr Louise Harriss & Dr Christopher Hall
Dates: 11th October 2000 - 23rd March 2001

Summary of experience

This placement provided valuable experience of working within a cognitive-behavioural perspective with a broad range of adult mental health problems in the context of an outpatient psychology department. The opportunity for observing family therapy was available and also to observe inpatient and day-hospital patient work. Fifteen clients were seen on this placement (men and women). Their ages ranged from 19 to 56 years.

Clinical skills and experience gained

Clinical work comprised assessment for treatment interviews, psychometric assessment, using standardised questionnaires such as the BDI and BAI and undertaking neuropsychological assessment using the WAIS-III and WMS-III. Short-term and medium-term interventions for specific mental health problems were undertaken within a cognitive-behavioural framework, although some cases were also formulated within a Cognitive-Analytic Therapy (CAT) perspective. A one-day anxiety management workshop was provided to outpatients on the waiting list. Clinical experience was gained in assessment and intervention with a cognitive-behavioural framework, and also formulation within a CAT framework of a range of mental health problems including social anxiety, obsessive-compulsive disorder, phobias and post-traumatic disorder; relationship difficulties and morbid jealousy; and depression. The placement provided insight into the dynamics of an outpatient psychology department within a larger multi-disciplinary team environment.
Meetings, seminars, visits and research

A three week induction programme was arranged which enabled various departments and professional colleagues to be visited and observed (see organisational logbook). Two seminars ("psychosis" and "culture, psychosis and Islam") organised by Psychiatry was attended. A two-day conference in London on "Transforming Personality" by Christine Padesky was attended. The Service-Related Research Project was undertaken on this placement and the findings were presented to the psychology department. Departmental meetings were regularly attended and participation in discussions regarding organisational issues was available.
Adult Mental Health Case Report Summary

A cognitive-behavioural approach towards assessment and early intervention with a 32 year old woman presenting with obsessive-compulsive disorder

Main presenting problem
Ms. Lowell was a 32 year old Caucasian woman referred by her Senior Clinical Medical Officer for psychological assessment and management of an obsessive and compulsive need to clean. Ms. Lowell's compulsive cleaning had become problematic and interfered significantly with her home and social life. Prior to being seen by the Trainee Clinical Psychologist, Ms. Lowell was given a routine psychological screening using the Brief Symptom Inventory (BSI) (Derogatis, 1993); Beck Anxiety Inventory (Beck, 1990) and Beck Depression Inventory-II (BDI-II) (Beck, 1996) by an Assistant Psychologist to ascertain the urgency of the referral. Ms. Lowell's scores placed her on the routine outpatient waiting list.

Assessment procedure
The assessment for treatment interview was undertaken over three sessions and considered Salkvoskis (1985) model of obsessive-compulsive disorder (OCD) and the DSM-IV diagnostic criteria for OCD. The interview was supplemented by a psychometric assessment using the BDI-II, BAI and a self-monitoring form. Ms. Lowell was highly motivated towards understanding and managing her OCD.

Formulation
Ms. Lowell's experiences were formulated within a cognitive-behavioural framework, using Salkvoskis (1985) model of obsessive-compulsive disorder as the primary theoretical model. Ms. Lowell managed her early experiences of anxiety in response to her mother's OCD through avoidance strategies. She perceived herself as being responsible for keeping her siblings safe from 'harm' (i.e. from their mother's rigid and extreme behaviours). Precipitating factors included Ms. Lowell having observed her daughter Faith exhibiting signs of OCD, resulting in the activation of assumptions and negative beliefs about responsibility and worth. These negative appraisals lead to discomfort and increased anxiety. To lessen
her responsibility beliefs and anxiety, Ms. Lowell engaged in a number of behaviours such as avoidance, cleaning and reassurance seeking. Ms. Lowell was angry and distressed by her belief that she had little control over her compulsive behaviour and obsessive thoughts about passing her disorder onto her children.

**Intervention**

The cognitive-behavioural formulation was shared with Ms. Lowell and the therapeutic goals discussed and agreed. The intervention comprised an exposure and response prevention programme which required her to expose herself to mess, experience anxiety and learn strategies to relax and reduce her anxiety without cleaning. Cognitive techniques were employed that aimed to reappraise her negative cognitions, challenging her responsibility beliefs and to discuss normalising her behaviour. Relapse prevention was considered to developing more adaptive coping strategies on the event of possible setbacks.

**Outcome**

A total of nine intervention sessions were offered of which Ms. Lowell attended five. The BDI-II and BAI at post treatment suggested a reduction in her experiences of anxiety and depression. Ms. Lowell had developed control over her compulsive behaviour and was continuing work on her obsessive and negative thoughts. She reported a reduction in her need to clean and an overall improvement in her quality of life.
People with Learning Disabilities Summary of Placement Experience

Placement details

*Placement location:* Kingsfield Centre, Redhill, Surrey  
*NHS Trust:* Surrey Oaklands NHS Trust  
*Supervisor(s):* Gina Ward (Consultant Clinical Psychologist)  
*Dates:* 4th April 2001 - 21st September 2001

Summary of experience

This placement provided valuable experience of working within a behavioural, developmental and neuropsychological perspective in the context of a psychology service that provided input to a multidisciplinary and community team for people with learning disabilities. The opportunity for involvement in the weekly physiotherapy group was available. A total of 10 clients were seen on this placement, both male and female. Their ages ranged from 20 to 60 years.

Clinical skills and experience gained

Clinical experience involved working with people with mild, moderate and severe learning disabilities. Working within the community provided experience of working across various settings such as residential accommodation, community day services and the clients own home. The community ethos and working closely with the multidisciplinary team and other staff groups facilitated the development of consultative skills. The placement experiences facilitated the development of basic counselling skills, observational skills, behavioural assessment and intervention skills and increased confidence in using non-verbal cues/communication. The placement highlighted the importance of being adaptive and flexible. Clinical work comprised assessment and intervention for specific phobia, attachment issues, sexually inappropriate behaviours and autism. Requests from Social Services to determine ‘learning disability’ status required using neuropsychological tests such as the WAIS-III. An extended cognitive assessment using a range of tests, such as the Leiter and the Cognitive Ability Test was undertaken.
Meetings, seminars, visits and research

Monthly multidisciplinary meetings were regularly attended and I was able to observe specialised teams, such as the 'challenging behaviour' team and visit work placements for clients and daycentres. A two-week induction programme was arranged which enabled members of the community team to discuss their role and how they liaise with psychology.
People with Learning Disabilities Case Report Summary

An extended assessment of a 46 year old man with Down’s syndrome
presenting with challenging behaviour

Main presenting problem
Mr White was a 42 year old Caucasian man with Down’s syndrome and limited vocabulary. He was referred by the Clinical Assistant from a specialist ‘challenging behaviour’ team following reported incidents that Mr White had been stealing from other residents at his home and at the daycentre he attended.

Assessment procedure
Information for the initial assessment was gathered through case-notes, conversations with Mr White and through liaison with Mr White’s home managers, key worker at the day centre and daycentre managers and the referrer. An extended assessment was considered necessary because the information gained from the initial assessment was lacking important detail about Mr White’s cognitive and adaptive functioning, social and moral reasoning abilities and regarding his ‘alleged’ stealing behaviour. The extended assessment was undertaken over a period of eleven weeks.

The extended assessment comprised the following:

1. Behavioural assessment through behavioural record keeping
2. Observations at the daycentre
3. A comprehensive cognitive assessment using the Leiter International Performance Scale (Leiter, 1979), British Picture Vocabulary Scale (Dunn, Dunn, Whetton & Pintille, 1982)
4. A dementia assessment comprising three parts (i.e. cognitive, behaviour and functional)
5. An assessment of moral and social reasoning abilities adapted by the Trainee
Formulation

The initial assessment information was formulated within a behavioural framework to facilitate understanding about the probable processes involved with Mr White’s behaviour. Because no-one had actually observed Mr White stealing, antecedents to his behaviour were difficult to identify. A number of hypotheses were considered leading to the rationale for the extended assessment. Firstly, that Mr White enjoyed the attention he received and the interaction with others he gained from his alleged behaviour. Secondly, that his behaviour was a feature of cognitive decline caused by dementia. Thirdly, despite Mr White being in the service for a number of years, his level of learning disability had not been determined. Thus, his capacity to understand the moral and social implications of his actions was unknown. Finally, Mr White’s limited verbal communication made him vulnerable to exploitation by others. He was unable to defend himself, and because he was distrusted by staff and service users, he was less likely to be listened to.

Outcome

The extended assessment had a significant and positive impact on Mr White and the way he was perceived by staff and residents. The assessment revealed that another resident was responsible for a number of the thefts at the daycentre and at Mr White’s home, and had been observed ‘planting’ the items on Mr White. Although the assessment did not rule out the possibility that Mr White had stolen in the past, during the eleven-week period he had not been responsible for any of the thefts reported. Consequently, Mr White was not immediately blamed for incidents that occurred and appeared more relaxed. He was included in more social activities, interacted with others and received positive attention from staff and other service users. He appeared brighter, more confident and was reported to be speaking more fluently. A number of recommendations were made and were being adhered to by staff and service users.
Children, Adolescents and Families Summary of Placement Experience

Placement details

Placement location: Child & Family Psychological Medicine, Chertsey
NHS Trust: Ashford and St Peters Hospital NHS Trust
Supervisor(s): Bruce Holroyd (Consultant Clinical Psychologist)
Dates: 10th October 2001 - 22nd March 2002

Summary of experience

This placement provided excellent experience of working within cognitive-behavioural, behavioural and systemic frameworks with children, adolescents and their families in the context of a multidisciplinary community mental health team. Joint professional work, neuropsychological assessment and liaison with a range of services, such as schools and Social Services were undertaken. Child protection issues were addressed on this placement. Eighteen clients were seen (boys and girls) and their ages ranged from 2 to 16 years.

Clinical skills and experience gained

Experience was gained of working with children and adolescents presenting with a range of mental health problems including specific phobia, anger and deliberate self harm, depression, enuresis, anxiety disorders (e.g. separation anxiety) and temper tantrums. The placement provided experience of working with children under child protection following their experiences of witnessing domestic violence. This enabled experience to be gained regarding the role of the Clinical Psychologist and the involvement of other professionals when dealing with such cases. Neuropsychological assessment was undertaken using the WISC-III, WORD, WOND and WIPPSI for children presenting with ADHD, attentional difficulties and autism. The placement provided excellent experience of working systemically with families and outside agencies such as schools. Skills in assessment and interventions such as parent management, behaviour modification, graded exposure and relaxation were further developed. Supervision provided a forum for formulating cases within a Systemic framework, as well as within a cognitive-behavioural and behavioural framework and for considering developmental issues.
Meetings, seminars, visits and research

A team-training day was attended which considered the service structure and service provision and attended a Special Interest Group "Research with Children and Families". Regular contact and liaison with the head teacher of a junior school was necessary for intervention with a client. Observation of children at a nursery and liaison with nursery staff to inform intervention was undertaken. A fortnightly psychodynamic supervision group was attended which enabled multidisciplinary team members to discuss cases, reflect and brainstorm ideas.
Children, Adolescents and Families Case Report Summary

A behavioural approach for assessment and early intervention for a three year old presenting with non-compliant behaviour and temper tantrums

Main presenting problem
Elliot Chase was a 3 year old Caucasian boy who was referred to the Child and Family team by his Health Visitor following concerns that his mother was having difficulty managing his behaviour. Ms Chase was a single parent who was being treated for depression.

Assessment procedure
Ms Chase and Elliot were seen together for the initial interview, however maintaining a fluent conversation was difficult as Elliot persisted in running out of the room prompting Ms Chase to follow. Therefore her father attended subsequent sessions to offer support and occupy Elliot. Ms Chase questioned her parenting skills and commented on her irregular disciplinary actions with Elliot. The interview was supplemented by the following psychometric tests and assessment procedures:

1. Parenting Stress Index (short-form)
2. Beck depression Inventory-II
3. Revised Rutter Parent Scale for Preschool children
4. Assessment of behaviour
5. Observations

Formulation
Elliot's behaviour was formulated within a behavioural and social learning framework. Predisposing factors included a hyperactive father, Elliot's difficulty with formation of words leading to frustration, and that Ms Chase post-natal depression may have impacted on her responses towards Elliot. Elliot and Ms Chase's behaviours and responses were negatively reinforcing each other. They appeared stuck in a loop whereby Elliot was able to terminate his mother's demands by having a temper tantrum, which led Ms Chase to withdraw the demand. Elliot was not contained within clear boundaries. Ms Chase disciplinary stance was
punitive and physical punishment which was unpredictable and inconsistent. Elliot received little positive reinforcement when he was quiet or when he was behaving well.

**Intervention**

The assessment information was shared with Ms Chase and consolidated within a behavioural framework. The intervention chosen was Parent Management Training (PMT) to facilitate Ms Chase's parental competence to improve Elliot's behavioural and emotional adjustment. Intervention was undertaken over four sessions each lasting an hour and a half. Ms Chase was made aware of the maintaining factors so she was in an informed position to modify her behaviour. The strategies used in PMT were explained and handouts provided to help consolidate the information. Ms Chase tried the strategies over the weeks and completed charts to examine changes in her and Elliot's behaviour. Any difficulties were discussed and reflected upon through problem-solving.

**Outcome**

The pre and post intervention measures suggested a decrease in Ms Chase's negative parenting experiences, her perceptions of Elliot as a difficult child, Elliot's difficult behaviours and an increase in his pro-social behaviours. The parent-child interaction was more positive insofar as Elliot was openly affectionate towards his mother, and she openly praised his efforts. The BDI-II score at post assessment suggested a reduction in Ms Chase's experience of depression.
Older Adults Summary of Placement Experience

Placement details

Placement location: Farnham Hospital, Farnham, Surrey
NHS Trust: Guildford and Waverley NHS Trust
Supervisor(s): Ian Kneebone (Consultant Clinical Psychologist)
Dates: 3rd April 2002 - 20th September 2002

Summary of experience

This placement provided experience of working with older adults in a range of contexts including a hospital environment on an inpatient stroke rehabilitation ward, an outpatient day hospital for people with various forms of dementia, an outpatient day hospital for people with functional problems such as depression, Parkinson’s disease etc, residential homes and the client’s home. The placement involved multidisciplinary team working. There were opportunities for group work (e.g. reminiscence group and Parkinson’s group). Eleven clients were seen (men and women), whose ages ranged from 69 years to 87 years.

Clinical skills and experience gained

Experience was gained in understanding stroke rehabilitation and the devastating effect stroke can have on families and the individual’s future. The placement highlighted life-span issues, the impact of loss through diminishing health and death and also the difficulties encountered following stroke in terms of lifestyle adjustment. The development of clinical experience and skills was enabled through working with older adults presenting with problems such as specific anxieties (e.g. fear of falling), depression, stroke, attentional problems, memory difficulties, Parkinson’s disease, Alzheimer’s disease and other dementias. Clinical work extended to working closely with families and staff groups. Clinical skills were developed in assessment procedures using various psychometric tests such as CAMDEX-R, Mini-Mental State Examination, Hospital and Anxiety Depression Scale, Geriatric Depression Scale and MEAMS. Neuropsychological assessment following stroke to determine extent of stroke damage and existing functional skills were undertaken using the WAIS-III, RBANS, VOSP, RBMT and Hayling and Brixton.
Meetings, seminars, visits and research
The monthly meeting group comprising psychologists and family therapists from the Trust were regularly attended and I attended a one-day workshop on goal setting and planning. I presented the neuropsychological assessment case-report to the monthly meeting group.
Older Adult Case Report Summary

Neuropsychological assessment of a 69 year old woman who had suffered
a right-hemisphere stroke

Main presenting problem
Mrs Price was a 69 year old Caucasian woman and an inpatient on a stroke rehabilitation
unit. She was referred by her Consultant Geriatrician for psychological assessment following
concern that she was becoming depressed. The ward staff had noticed that Mrs Price was
easily distracted, appeared low in mood and lacked motivation in her rehabilitation. The
referral led to an investigation of whether Mrs Price’s presentation and difficulty in
rehabilitation was a consequence of depression or post-stroke cognitive deficits.

Assessment procedure
The assessment was essentially to develop an understanding of Mrs Price’s lifestyle prior to
her stroke and the impact of the stroke on her current abilities, self-perception and mental
health. The assessment information revealed that Mrs Price was an active and social woman.
She participated in walks (rambling), organised social events and had a wide social circle. She
reported missing her husband who had died a year earlier and that she felt cut off from her
old way of life. Mrs Price had an extensive medical history and had suffered depression in
the past. The assessment interview was extended to a neuropsychological assessment in
order to ascertain existing skills and functional abilities, the extent of cognitive abilities and
whether her low mood was related to cognitive deficits or depression onset. The following
tests were administered:

1. Wechsler Test of Adult Reading
2. Wechsler Adult Intelligence Scale – 3rd edition
3. Verbal Fluency
4. The Hayling and Brixton Tests
5. Visual Object and Spatial Perception Battery
6. Rivermead Behavioural Memory Test
7. Brief Assessment Schedule Depression Cards
**Hypotheses**

Research suggested that depression was the most common psychiatric disorder following stroke and given Mrs Price's psychiatric history her risk for depression was high. Furthermore, post-stroke depression can lead to impairment in a number of domains, such as cognition, psychomotor speed, concentration and rehabilitation. Mrs Price's presentation was not unusual for someone who had suffered a right-hemisphere stroke, e.g., spatial problems and impaired non-verbal communication. However, other subtle behaviours may have been the consequence of acquired damage to the frontal region of the brain, responsible for executive functioning (e.g. attention, self-monitoring, impulsivity etc.).

**Results of neuropsychological assessment**

The information gathered during the initial assessment suggested that Mrs Price was depressed, although the high score on the BASDEC may have been confounded by possible neurologic symptoms. Mrs Price’s scores on the WAIS-III supported research evidence regarding right-hemisphere stroke sequelae. The assessment identified Mrs Price as having had acquired significant impairment to her executive functioning.

**Outcome**

A number of recommendations were made and discussed with the multidisciplinary team, Mrs Price and her daughters regarding Mrs Price’s current and future rehabilitation.
Specialist: Ministry of Defence Summary of Placement Experience

Placement details

Placement location: Duchess of Kent Barracks, Aldershot, Hants
Organisation: Ministry of Defence
Supervisor(s): Dr Nashater Deu (Consultant Clinical and Forensic Psychologist)

Summary of experience

This specialist placement provided excellent experience of the role of the Clinical Psychologist in the Military, and for working within a purely cognitive-behavioural framework in the context of a Military Community Psychiatry Department (DCP). Nashater Deu was the Clinical Psychologist for three sites (Aldershot, Tidworth and RAF Brize Norton) which enabled experience to be gained in working with different DCPs and client groups (e.g. Army and RAF). There was opportunity for neuropsychological assessment and liaison with other services such as Headley Court (neuropsychology). A two half-day anger management workshop was planned and implemented with the help of a Community Psychiatric Nurse. The impact of military commitments (e.g. preparing deployment for the Gulf war) and Government requirements (e.g. provided fire-fighting cover during the national fire-fighters strike) on clinical work (e.g. constraints on movement between sites, seeing clients) were considered. Nine clients were seen (all male). Their ages ranged from 19 to 41 years.

Clinical skills and experience gained

Skills in assessment, formulation and intervention using the cognitive-behavioural model were developed. Clinical experience was gained through observation of other professionals and through direct work with adults presenting with mental health problems such as adjustment disorder, phobia, anger difficulties, and post-traumatic stress disorder. Assessment included administering and interpreting psychometric tests such as the Million Clinical Multiaxial Inventory-III, STAXI-2 and the Irritability, Depression and Anxiety scale. Neuropsychological assessment was undertaken using standardised tests including the WAIS-
III, WMS-III, Graded Naming Test, Test of Everyday Attention and the Behavioural Assessment of Dysexecutive Syndrome. Supervision provided an excellent forum for formulating cases within a CBT framework, for developing existing skills and for learning new skills.

Meetings, seminars, visits and research
Due to unavoidable organisational constraints only two psychology department meeting were attended (London and Catterick). I attended some referral meetings at Aldershot, Colchester and Tidworth. The Major Research Project (MRP) was undertaken on this placement which enabled me to visit various sites around the country and liaising with the clinical teams. I presented the MRP to the psychology department and DCP at Haslar Hospital (Gosport) using PowerPoint.
Specialist: Ministry of Defence Case Report Summary

A cognitive-behavioural assessment of anger difficulties
with a 26 year old male active-duty soldier

Main presenting problem
Private Doyle was a 26 year old Caucasian man who had requested help because he felt unable to control his anger. He reported frequently behaving violently towards other males and that he was frightened by his level of violence and his lack of control. Private Doyle's anger was characterised by him being both verbally (e.g. swearing, shouting, being insulting) and physically (e.g. using weapons such as an ashtray or beer bottle; putting a knife to someone's throat, head-butting; bite people) threatening and abusive. Private Doyle's behaviour was often accompanied by him being intoxicated with alcohol and drugs.

Assessment procedure
The assessment interview was undertaken over four sessions. Given the complexity of the referral, each session was audio-recorded and discussed in supervision. The interview was supplemented by a psychometric assessment using the STAXI-2, IDA, PDS and MCMI-III. However, a few issues arose during assessment such as Private Doyle having to provide cover during the nationwide fire-fighters strike, a pending court date with the possibility of a jail sentence and Private Doyle frequently responding with "don't know" or "I was too drunk to remember".

Formulation
Privates Doyle's experiences were formulated within a cognitive-behavioural framework. He 'learned' how to be aggressive and show anger through early childhood experiences of observation of a male violent role-model, being a victim of physical and emotional abuse and witnessing abuse. Early cognitions may have included "being in control, I must be aggressive". He lacked a protective attachment figure and had difficulty modulating his feelings. He also developed maladaptive coping strategies to manage his emotional pain and to control situations as a child. The breakdown of his marriage and increasing dissatisfaction
with the Army precipitated feelings of being trapped, needing to escape and having no control. To ameliorate his overwhelming emotions, he engaged in excessive use of alcohol and/or drugs and placed himself in high risk situations (e.g. pubs, clubs) which increased his risk for aggression and violence. Private Doyle believed he had no control over events and his low self-efficacy reinforced this belief. He appeared to use alcohol to absolve responsibility or to excuse his behaviour and to minimise the seriousness of his violent conduct.

**Outcome**

Although relapse prevention and anger management was considered for treatment, Private Doyle was sentenced to four years in prison and immediately discharged from the Army.

**Process issues**

The dynamics between the Trainee and Private Doyle impacted on the assessment process. Private Doyle's defensiveness towards specific questions about his anger and associated behaviour was inadvertently reinforced by the Trainee who changed the focus of questioning to less emotive subjects. His limited responses led to uncomfortable silences which resulted in the Trainee 'filling the silence' to tolerate feeling uncomfortable and to 'save' Private Doyle from experiencing any further distress. Private Doyle asserted some control on the session content by behaviours including controlling the direction of questions by not answering directly, and absolving responsibility by not engaging in dialogues relating to solution generation. The process issues were explored in supervision through discussion and role-play. The Trainee changed aspects of her approach which had a positive impact on Private Doyle's responding.
Specialist: Forensic Setting Summary of Placement Experience

Placement details

Placement location: Broadmoor Hospital, Crowthorne, Berkshire
NHS Trust: West London Mental Health NHS Trust
Supervisor(s): Dr Pat Short (Consultant Clinical Psychologist)
Dates: 9th April 2003 - 26th September 2003

Summary of experience

This specialist placement provided experience of working within a systemic and cognitive-behavioural framework with a range of mentally disordered offenders in the context of a maximum secure inpatient forensic setting. The placement involved multidisciplinary team working. Seven clients were seen on this placement (men and women). Their ages ranged from 21 to 53 years.

Clinical skills gained

Clinical work comprised assessment for treatment interviews, admission assessment, and risk assessment, psychometric assessment, using standardised questionnaires such as the STAXI-2 and IDA, and undertaking neuropsychological assessment using the WAIS-III, WMS-III and NART. Short-term and medium-term interventions for specific mental health problems were undertaken within a cognitive-behavioural framework and also within a systemic framework. Formulation of cases was taken from a systemic orientation. Clinical experience of mental health and associated problems included relationship difficulties, anger, exploring index offence, anxiety about leaving the hospital and depression. The opportunity to observe other clinical psychologists was an invaluable learning experience. I co-facilitated the relapse prevention module of a fire-setting group with a Forensic Psychologist and Consultant Clinical Psychologist. Other areas of clinical experience gained included forensic issues, the Mental Health Act, risk and care programme approach within a forensic setting.
Meetings, seminars, visits and research

Regularly attended the monthly psychology department meetings and continuing professional development meetings. I visited some regional secure units around the country to ascertain similarities and differences between a maximum and medium secure environment.
RESEARCH DOSSIER

OVERVIEW

The research dossier contains the service-related research project completed in Year 1, a piece of qualitative research completed in Year 2 and the major research project completed in Year 3.
SERVICE-RELATED RESEARCH PROJECT

Clients' perception of a one day Anxiety Management workshop
provided by a Clinical Psychology outpatient service

JULY 2001
YEAR 1
ACKNOWLEDGEMENTS

I would like to express my thanks to a number of people who have been involved with this study. Firstly, I would like to thank Dr Christopher Hall, Clinical Psychologist, Bournewood Community Mental Health NHS Trust, for his supervision, reflective nature and support. Secondly, to Dr Mick Finlay, University of Surrey, research supervisor for his constructive and very helpful comments. Thirdly, to Dr Elspeth Bawtree, Head of Adult Psychology, Bournewood Community Mental Health NHS Trust and the members of the Adult Psychology Department at Bournewood Community Mental Health NHS Trust for allowing me to pilot the questionnaire on them and for their useful comments and endless encouragement. I would also like to thank Ms. Gillian Ford for explaining statistics in a coherent nature. Finally, I thank all those clients who found the time to complete and return the questionnaire, without which I could not have completed this study.
1. Abstract

This pilot study evaluated three, one day anxiety management workshops from the clients' perspective. Qualified and assistant psychologists ran the workshops in March, July and September 2000 from an outpatient clinical psychology department. The clients were required to answer a number of questions about the workshop in a questionnaire devised by the author. Twenty-two clients responded to the questionnaire. There was a significant reduction in perceptions of anxiety severity and the effect of anxiety on daily life, and an increase in the clients' ability to cope with their anxiety related problem. Thematic qualitative analysis suggested that the workshop was a valuable resource. Furthermore, the clients perceived the most useful aspect of the workshop to be meeting others with similar problems. Implications for the service were considered.
2. Introduction

Approximately 6-27% of the psychiatric population and 2-5% of the general population have an anxiety disorder (Lader & Marks, 1971). Barlow, Cohen, Waddel, Vermilyea, Klosko, Blanchard and Nardo (1984) claim that General Practitioners (GPs) diagnose anxiety disorders more often than any other psychiatric disorder, and commonly prescribe Benzodiazepines (tranquillisers) for pharmacological intervention (Prior, 1998). Although Benzodiazepines are effective in reducing anxiety symptoms, they are renowned for being addictive, less effective with prolonged use and may cause severe anxiety symptoms during the withdrawal from the drug (Bond & Lader, 1996).

An alternative to pharmacological intervention is Anxiety Management Groups (AMGs). Current literature suggests that AMGs comprising of cognitive-behavioural principles is an effective strategy for recognising and reducing symptoms of anxiety (e.g. Ormrod, 1995; Prior, 1998; Rosier, Williams & Ryrie, 1998). Although the number of sessions may differ between services, from six or seven (Ormrod & Budd, 1991; Rosier et al, 1998) to twenty (Eayrs, Rowan & Harvey, 1984), most AMGs take into account Langs' model (1968).

Lang (1968) had suggested that anxiety comprised of three interrelated components: cognition, behaviour and physiology. Therefore, most AMGs focus on the relationships between the three components through education and learning practical self-help skills and strategies, such as relaxation, recognising and challenging negative thoughts and exposure techniques. Thus, AMGs aim to empower individuals in managing their anxiety (Jupp & Dudley, 1984; Powell, 1987).

In addition, AMGs may also create a forum for therapeutic factors such as observational learning, social reinforcement and moral support, so considered an integral part of treatment (Ormrod, 1995; Rosier, et al. 1998). In addition, some mental health settings are offering AMGs in an attempt to manage their increasing waiting lists (e.g. Murray & Walker, 1996). Hence, AMGs are fast becoming an interim treatment package for anxious individuals who are on the waiting list for individual psychological intervention.
Published evaluations for short-term effectiveness of AMGs reported a reduction in anxiety symptoms (e.g. palpitations, negative thoughts) and an increase in anxiety management abilities. This followed a six week anxiety management group, and a two month follow up (e.g. Prior, 1998).

The few available evaluation studies that suggested long-term benefits indicated some differences in methodology and measures used. Ormrod (1995) suggested that at a two to five year follow up, therapeutic gains continued to be maintained. This was measured using the Beck Depression Inventory (BDI) (Beck, Ward, Mendelson, Mock & Erbaugh, 1961), the Trait scale from the Spielberger State-Trait Anxiety Inventory (STAI) (Spielberger, Gorsuch, Lushene, Vagg & Jacobs, 1983) and an Anxiety Management Group Rating Scale constructed by Ormrod (1995). Cadbury, Childs-Clark and Sandhu (1990) reported similar results at an 11 month follow up, using the Trait scale from the STAI (Spielberger, Gorsuch & Lushene, 1970), a semi-structured interview and the Problem Rating Questionnaire (Watson & Marks, 1971).

This study was undertaken because the psychology department were interested in whether clients, who attended a one day anxiety management workshop six to twelve months ago, perceived it has having any continued therapeutic benefits. For approximately three years, two qualified clinical psychologists and two assistant psychologists have provided clients with the workshop. The workshops are run every four months and last for approximately 5½ hours. The components cognition, behaviour and physiology are covered through education and practical exercises. All attendees are given information handouts on each component at the end of the workshop (appendices I to V).

The workshops have the following structure: the completion of a Beck Anxiety Inventory (BAI) (Beck, 1990); discussion about what anxiety is (appendix I); discussion on relaxation (appendix II); a practical session on relaxation; discussion on behavioural techniques (appendix III); a practical session on record keeping; discussion on the cognitive aspects of anxiety (appendices IV and V); a practical session on cognitive strategies; and the completion of an evaluation form before leaving (appendix VI).
Each client is invited to a follow up session six weeks post workshop. A further BAI is completed and the scores are compared. The client is asked for their views regarding the workshop and how they perceive themselves to be managing their anxiety. This can determine any short-term benefits.

This study considered the clients' overall perception of the workshop. Further, their responses may determine whether a one day workshop is sufficient enough to learn how to manage their anxiety, particularly whilst on the waiting list. Thus, of interest were what skills or strategies they currently used, what factors they perceived as being the most helpful for managing their anxiety, and whether they perceived the need for further psychological input.

The findings of this study could be used for structuring and evaluating future groups, auditing service delivery and monitoring waiting lists.
3. Method

3.1 Design

The study employed a retrospective single group design.

3.2 Clients

Thirty-seven clients (12 men and 25 women) participated in one of three, one day anxiety management workshops, run in March, July and September 2000. The clients were referred to the service for anxiety related problems. Referrals came from their General Practitioner (28 clients), Psychiatrist (four clients) and the Community Mental Health Team (5 clients).

Of the 37 clients, 17 had general anxiety disorder (GAD) (e.g. persistent anxiety across most situations), three had obsessive compulsive disorder (OCD) (e.g. persistent and recurrent thoughts and behaviour), 14 had a specific phobia (e.g. fear of something specific), one suffered panic attacks (e.g. intense anxiety leading people to believe something dreadful will happen to them), and two had anxiety and depression.

Twenty-two clients (eight men and 14 women) completed and returned the questionnaire sent in March and April 2001. Their ages ranged from 16 to over 66 years (see Table 1).

Table 1: Age-range of clients

<table>
<thead>
<tr>
<th>Age-Range</th>
<th>Men (n=8)</th>
<th>Women (n=14)</th>
<th>Total number of clients (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-25</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>26-35</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>36-45</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>46-55</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>56-65</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>66+</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Of this group, six had GAD, one had OCD, seven had a specific phobia, five suffered panic attacks, two had depression and one did not complete this question. The duration of anxiety ranged from 12 to 720 months (mean duration 169.15 months). Six clients were still on the
waiting list, five were in individual therapy with a psychologist, nine had been discharged and two were in therapy with another mental health professional. Fifteen clients did not respond to either letters.

3.3 Procedure
The author devised the questionnaire (appendix VII). The questions were generated through discussion with members of the psychology department. Three questions that considered anxiety severity, ability to cope and the effect of anxiety on daily life had to be rated on a five-point scale. This scale determines perceptions of anxiety before the workshop and at the time of completing the questionnaire. These responses could be measured quantitatively. The client was also required to explain their rating. This could then be analysed qualitatively. The majority of questions were open-ended and included what was most and least useful about the workshop, what could be changed, the skills remembered and currently used and whether their anxiety was better understood as a result of attending the workshop.

The questionnaire was piloted on five members of the psychology department and following recommended amendments, was sent to all 37 clients. Each client was contacted by letter (appendix VIII) and asked to complete and return the questionnaire within 14 days of receipt. A reminder letter (appendix IX) and the same questionnaire were sent out approximately one month later to all clients, but requesting return within seven days of receipt. All the questionnaires were anonymous and all clients were assured that treatment would not be effected by the responses they made or if they decided not to respond.

Thematic qualitative analysis was undertaken on all open questions. Processing and analysis of the quantitative data was carried out using the statistical package SPSS for Windows.
4. Results

The Wilcoxon Signed Ranks Test was carried out to evaluate changes in pre and post-workshop scores. A statistically significant difference was found for severity of anxiety ($z = -3.573, p = .000$ (two-tailed); coping with anxiety ($z = -3.115, p = .002$ (two-tailed) and the effect of anxiety on daily life ($z = -3.466, p = .001$ (two-tailed). The mean scores and standard deviations are presented in Table 2.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean (pre-workshop)</th>
<th>Std Deviation (pre-workshop)</th>
<th>Mean (post-workshop)</th>
<th>Std Deviation (post-workshop)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severity of anxiety</td>
<td>3.45</td>
<td>.912</td>
<td>2.41</td>
<td>1.054</td>
</tr>
<tr>
<td>Coping with anxiety</td>
<td>3.64</td>
<td>.953</td>
<td>2.73</td>
<td>1.120</td>
</tr>
<tr>
<td>Effect of anxiety on daily life</td>
<td>3.27</td>
<td>.767</td>
<td>2.36</td>
<td>.953</td>
</tr>
</tbody>
</table>

Thematic qualitative analysis was carried out on each response and recurrent ideas were organised into themes. Some of the responses are presented under headings that relate to questions on the questionnaire. The remaining questions and comments can be found in appendix X.

4.1 Severity of anxiety

Before attending the workshop, factors such as a fluctuation in symptoms and emotions, a feeling of hopelessness and helplessness and a disruption to lifestyle, were described. In terms of current perceptions of anxiety severity, 16 (72.7%) clients reported a positive from negative shift, largely because “I have learnt to control it”.

4.2 Coping with anxiety

Before the workshop, ten (45.5%) clients reported being unable to cope with their anxiety, due to a lack of understanding (e.g. “...it was something I didn’t understand too well...could not begin to do something about it”) and four (18.2%) reported being able to cope because they already used relevant anxiety management strategies. In terms of current coping abilities, 17 (77.3%) clients reported being more able to cope. Also learning about anxiety and specific techniques was perceived to be helpful in reducing symptoms and negative perceptions (e.g. “Use some of
the skill shown to control symptoms"). However, two (9.1%) clients with specific phobias (e.g. afraid of thunder and height phobia) reported because they do not experience their phobia everyday, the skills learned are easily forgotten. In addition, two (9.1%) clients continued to experience depression, and it was this disorder that appeared to be affecting their lives rather than anxiety.

4.3 The effect of anxiety on daily life
Pre-workshop responses suggested a negative impact on relationships, e.g. “caused my relationship with girlfriend to end”, and “my relationship with my wife has suffered”. Daily activities, such as looking after children, going to work, or engaging in social and recreational pleasures proved difficult. There was also a general inability to control symptoms. Currently, seven (32%) clients reported that anxiety continued to disrupt their daily lives. However, 15 (68.2%) clients reported a reduction in the effect of anxiety on their daily lives.

4.4 Improve understanding of anxiety
Eighteen (82%) clients reported that receiving information about anxiety and how to manage it was helpful. Responses included: “I suppose with the symptoms I was experiencing I thought I was physically ill. The workshop explained how the symptoms of stress related to my problems and the feelings they caused”.

4.5 The most useful aspect of the workshop
Ten (45.5%) clients considered meeting people with similar problems as the most useful aspect of the workshop. Seven (32%) clients valued learning specific techniques and five (22.7%) stated that receiving information about anxiety was helpful.

4.6 Changes in levels of anxiety
Two (9.1%) clients stated that their anxiety levels had changed because they already knew what techniques to use, as opposed to attending the workshop. Sixteen (73%) clients acknowledged the usefulness of the information and practical exercises provided. They perceived their current anxiety levels as having lowered, but only partly due to the workshop.
4.7 Skills currently used

Table 3 shows the skills continued to be used by the clients. Other strategies reported were recreational activities and medication.

Table 3: Skills currently used (in descending order).

<table>
<thead>
<tr>
<th>Skills continued to be used</th>
<th>Clients</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n=22)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relaxation exercises</td>
<td>14</td>
<td>63.6</td>
</tr>
<tr>
<td>Challenging automatic thoughts</td>
<td>12</td>
<td>54.5</td>
</tr>
<tr>
<td>Distraction techniques</td>
<td>10</td>
<td>45.5</td>
</tr>
<tr>
<td>Graded exposure</td>
<td>9</td>
<td>40.9</td>
</tr>
<tr>
<td>Identifying automatic thoughts</td>
<td>9</td>
<td>40.9</td>
</tr>
<tr>
<td>Recognising thinking errors</td>
<td>9</td>
<td>40.9</td>
</tr>
<tr>
<td>Thought stopping</td>
<td>7</td>
<td>32</td>
</tr>
<tr>
<td>Relaxation tape</td>
<td>5</td>
<td>22.7</td>
</tr>
<tr>
<td>Relaxation hand-out</td>
<td>3</td>
<td>13.6</td>
</tr>
<tr>
<td>Behavioural steps hand-out</td>
<td>2</td>
<td>9.1</td>
</tr>
<tr>
<td>Diary/Record keeping</td>
<td>2</td>
<td>9.1</td>
</tr>
<tr>
<td>Cognitive hand-out</td>
<td>1</td>
<td>4.5</td>
</tr>
</tbody>
</table>
5. Discussion

The aim of this pilot study was to ascertain the clients’ perspective of a one day anxiety management workshop run by the psychology department. From the clients’ evaluation, tentative inferences regarding the clinical efficacy of the workshop are considered, such as therapeutic gains and the continued use of skills, as well as the importance of non-therapeutic factors. However, due to the design of the study, the results should be regarded as preliminary findings rather than formal conclusions.

Consistent with previous studies (e.g. Powell, 1987; Ormrod, 1995; Murray & Walker, 1996), the significant results suggested a reduction in the clients’ perception of anxiety severity and its effect on daily life, and indicated an increase in the ability to cope. These results support studies (e.g. Jupp & Dudley, 1984; Powell, 1987) that emphasise the educational importance of anxiety management. Powell (1987) argued that education helped to alter perceptions away from the idea of being physically unwell and beyond help, to more positive ones. In this study, receiving relevant information about anxiety appeared to reduce clients’ catastrophic beliefs initially held towards their problem.

By learning appropriate skills for managing anxiety, clients were encouraged to help themselves whilst on the waiting list. Two clients reported that they no longer required individual treatment. Others were more informed about the psychological approach the psychology service would provide. This study in part supports Murray and Walker’s (1996) suggestion that the resources provided could be considered a foundation for psychological treatment. Although not investigated in this study, the acquired psychological ‘know-how’ may impact on the number of sessions spent with a clinical psychologist in individual therapy.

Eayrs et al. (1984), Powell (1987) and Ormrod’s (1995) finding that receiving information about anxiety and meeting others with similar problems as the most helpful and therapeutic factor, was only in part supported by this study. In this study, clients reported that sharing their experiences and not feeling alone with their problem was the most useful aspect of the workshop. Moreover, that meeting others with similar problems was perceived helpful for
reducing feelings of helplessness and hopelessness. Although this highlights the importance of non-therapeutic factors it does not suggest that learning about anxiety and developing practical skills is unimportant. Indeed, psychologically driven factors of the workshop were also highlighted as being useful.

There are a number of methodological problems that need to be acknowledged. Firstly, the study was constrained by the small sample size, the lack of pre-measures and a control group. The data was highly subjective and the clients were required to rely on their memory of events. There was no certainty that what the clients reported (e.g. continue to use specific skills) actually accorded with their behaviour. Moreover, the sample may have been biased, whereby those who felt less positive may not have responded.

Objective measures could not be used to support the significant results for anxiety severity, coping abilities and effect on daily life. Although BAIs were taken at pre-workshop and at follow-up, a further BAI could not be completed with the questionnaire due to the requirement of anonymity. Therefore, no comparisons could be made between pre-workshop scores, comments at the six-week follow-up interview and those on the completed questionnaire.

Of the 22 clients, nine had been discharged from the service. However, the issue of whether they had received individual therapy before discharge, or if they no longer required further psychological work because of the workshop was not explored. This information would have been invaluable for exploring the effect of workshop, which in turn, may have implications for waiting list numbers and time spent with a psychologist (discussed below).

The results were presented to the psychology department (appendix XI), and clinical implications were discussed. Firstly, the workshop could be viewed as an interim treatment package. Clients are provided with adequate resources that enabled them to engage in self-help strategies. If the clients can help themselves, they may feel that individual therapy is not required, which in turn would impact on the service waiting list. However, should the clients still wish to engage in therapy with a psychologist, the psychological knowledge that they
bring may impact on the number of sessions required (i.e. decrease in number). The service may be able to set up a database which monitors who attended the workshop, pre and post BAI scores, and the number of sessions required. This information would be invaluable for auditing service delivery and monitoring the waiting lists.

Secondly, although the workshops were for one day, they appeared to be a valuable treatment package offered by the service. Therefore, it may be useful to increase the frequency of such groups, for example, one workshop every two months. This would ensure people on the waiting list do not feel as though they have been forgotten. In addition, this would provide self-help resources while they wait. However, this would impact on the time individual therapy offered by qualified psychologists. This could be overcome by training assistant psychologists and developing their role as anxiety management educators. As above, this may impact on the waiting list and the demands on the qualified psychologists.

Thirdly, rather than the qualified psychologists undertaking individualised follow-ups, six weeks post workshop, a group follow-up may be more helpful. This would impact on time spent (e.g. each follow-up is approximately \( \frac{1}{2} \) hour per person) and also would provide the group to meet up again and reinstate contact. This may encourage the group to form a self-help group and continued support.

Fourthly, the selection of clients is crucial. This study indicated that the clients with depression and specific phobias reported that although the information provided by the workshop was interesting, it did not adequately address their problem. As a consequence, reductions in their symptoms of anxiety and depression remained largely unchanged. This could be addressed through more consideration of who is offered the workshop and the material presented.

Finally, some clients suggested the workshop could be more than one day. Therefore, it may be useful to ascertain what aspects of the workshop require more time or what the clients find more difficult. Time can then be spent developing these areas with the clients.
6. References


APPENDIX I

HAND-OUT

WHAT IS ANXIETY
WHAT IS ANXIETY?

Introduction - a few general points about anxiety

- When we are anxious we feel wound up, nervous, worried and tense.
- Everyone at some point has experienced anxiety - for example, at an exam, a visit to the dentist or a dangerous moment on the road. This is perfectly normal. No-one’s life is ever completely free of anxiety.
- In fact, a certain amount of anxiety is adaptive and helpful as it can speed up your reactions, helping you to function at a high level. It is a protective reaction, helping you to move quicker to fend off danger. It would not be desirable to eliminate it altogether.
- Anxiety feelings can range from being a bit uneasy to a continuing sense of dread and sometimes it can be so bad that you feel panicky. People also differ in the way that they feel anxious, and in how often it occurs. Everyone has their own "personal pattern" in the way that they feel anxious.
- Anxiety has become a problem if you are tense and anxious a lot of the time or if there seems to be no reason for it or if it significantly interferes with life as you would like to lead it.
- When we are anxious, there are changes we can notice in three different (but closely related) areas of functioning....physically, mentally and in our behaviour.

How might anxiety show itself physically?

- Dizziness or light-headedness
- Headache
- Feel faint
- Ringing in the ears
- Blurred vision
- Extra sensitivity to noise
- Unreal feelings
- Tightening of the throat,
- "lump in throat"
- Choking sensation
- Dry mouth
• Tight band around the chest
• Heart pounding
• Accelerated heart rate / palpitations
• Rapid breathing
• Breathlessness
• Sinking stomach
• Churning stomach
• Nausea
• Indigestion
• Flatulence
• Increased desire to go to the toilet / diarrhoea
• Sweating
• Tingling sensations
• Hot flushes & cold sweats
• Cold, clammy palms
• Legs feel weak - like jelly or rubber
• Trembling
• Twitching
• Pain in various sets of muscles - muscle tension
• Feeling of tiredness or exhaustion

There is a wide range of physical symptoms. You may not experience all of them and of those you do experience, some will be stronger than others. The symptoms are uncomfortable and unpleasant, but they are not dangerous.

Why do these physical symptoms occur?

These physical changes are automatic reactions, which have evolved to help human beings cope with frightening situations. You do not “consciously” switch them on. It is an in-built mechanism called the FIGHT/FLIGHT RESPONSE, as all the changes help you to physically fight if necessary or to flee the situation.

The reason that the mechanism evolved was because many thousands of years ago, people experienced frequent physical dangers such as threats from wild animals, where it was useful to respond by running away or fighting. Those who could respond to danger most quickly, were most likely to survive
and so would pass on this natural tendency to their children. In the course of evolution, this meant that eventually everyone would possess this ability. And essentially, we are physically the same today.

In the fight/flight response, the functioning of almost every part of the body is altered in preparation for flight or fight. The whole body is in an aroused and excited state. The changes are down to two hormones called ADRENALIN AND NORADRENALIN.

<table>
<thead>
<tr>
<th>BODILY CHANGES MADE BY ADRENALIN &amp; NORADRENALIN</th>
<th>WHAT THIS ENABLES YOUR BODY TO DO WHEN FACED WITH DANGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>The heart beats faster so it can pump blood more effectively to the brain and the muscles of the arms &amp; legs</td>
<td>Run away or fight</td>
</tr>
<tr>
<td>As the heart pumps blood more quickly, there is an increase in blood pressure (which can lead to a feeling of light-headedness or dizziness)</td>
<td>Run away or fight</td>
</tr>
<tr>
<td>Breathing is faster and deeper, providing more oxygen, which enables the heart to breathe at the faster rate</td>
<td>Run away or fight</td>
</tr>
<tr>
<td>Many muscles tense and tighten</td>
<td>More ready to spring into vigorous action</td>
</tr>
<tr>
<td>Much of the blood is redirected away from the stomach and is sent to the arms and legs (which leads to the churning feeling or &quot;butterflies&quot;)</td>
<td>Blood goes where it is needed</td>
</tr>
<tr>
<td>Increased perspiration</td>
<td>To cool down the body as muscle work produces heat</td>
</tr>
<tr>
<td>Low priority functions, such as eating, digestion of food and sex drive are suspended</td>
<td>To conserve energy</td>
</tr>
</tbody>
</table>

However, in today's complex society, with its sophisticated codes of behaviour, many situations are not now resolved by fighting or fleeing. When your boss tells you that there may be a need for redundancies, or the baby is still crying at 3:00 am, physical assault and running away from the situation are
usually considered inappropriate reactions. Nevertheless, we still often respond as though these situations were threatening us with actual physical harm. In a way, our physical evolution has not yet caught up with our social evolution.

How might anxiety show itself in the way we think?

Although you may not at first realise it, when you feel anxious you also begin to think in a certain way. The following thoughts are common when you are anxious:

- "what is happening to me..."
- "what will happen when I faint..."
- "everyone's looking at me"
- "I must look a complete fool..."
- "I must get out of here..."
- "I'm going mad..."
- "I can't cope..."

If you do not know that the physical reactions are automatic responses of the body to a frightening situation (even if it is frightening only to you), then it is natural to think that perhaps you have a terrible illness, or that you are going to have a heart attack, or that you are losing your mind.

If you are a person who worries excessively about what people think of you, then you will be thinking about what a fool you are making of yourself.

Similarly, if you are a person who likes things to be in order and under your control, you are bound to be preoccupied with going out of control.

All these thoughts make you feel worse and maintain your uncomfortable bodily reactions.

How does anxiety show itself in our behaviour?

This is what you do - or don't do.

- Anxiety can make us accident prone, clumsy, absentminded or indecisive
- Anxiety can make us irritable or "emotional" and this might also show itself in the way we behave.
- Anxiety can make us overactive, restless, rushing around trying to do too many things, feeling unable to sit still and relax.
- Anxiety can make us underactive, because we do not know where to start and the tasks seem too difficult.
- When faced with a situation that makes you feel anxious, you might run away. Similarly, you might ensure that it is always possible to run away if
necessary, by for example, always sitting near the door, at the end of the row, or near an exit.

- You might make excuses to avoid going out or doing things.
- You might use props before going out, e.g., a drink before going out, or taking a tablet.
- You might rely on props in order to avoid facing the stressful situation alone e.g., only going out with the dog, or with other people.
- Often, stressful situations are avoided altogether, e.g., crossing the road to avoid people, rushing out of places or situations when feeling anxious, not saying anything to other people, or only shopping when it's quiet. Such avoidance can have disastrous consequences, as it may make it increasingly difficult to lead a normal life and you lose more and more confidence in yourself which only adds to your problems.

You may be able to think of other, different things that you do. However, you will probably find that whatever it is that you do, often much of it comes down to either AVOIDING situations or ESCAPING from them.

**********

As mentioned before, anxiety varies in severity from mild to overwhelming. You may experience mainly bodily sensations or panicky thoughts. You may escape or avoid routinely at the first sign of anxiety, or only when anxiety is severe.

What is a phobia?

A phobia is anxiety that is persistently experienced in response to a specific object or situation, which is generally not regarded as dangerous.

e.g., one may be phobic of spiders, snakes, heights, public speaking, eating out etc. Fear of going out is referred to as "agoraphobia".

What is generalised anxiety or anxiety state?

This is where it is difficult to specify what is making you anxious and it seems to occur in various places at any time.

What is a panic attack?

At times, anxiety can reach such a peak that the person has a panic attack. This can be a very frightening experience. The physical symptoms become very uncomfortable. Panic, like fear, is a combination of physical symptoms and frightening thoughts.

The important thing to know about anxiety and especially about the terrible panic feelings is that they are not actually dangerous: they are not signs of going crazy or of being very ill. They will not lead to serious illness, mental or physical.
Causes of anxiety

There are very many causes of anxiety and these vary from person to person.

- Through copying or "modelling"
  Our first learning is based upon close observation and copying of our parents and other regularly present adults and children. From their example, we can learn to be frightened.

- Through instruction
  As well as learning to copy adult behaviour, we receive instructions and warnings from them. To emphasise potential hazards to children, adults will frequently encourage fear of the consequences. Children’s stories, television and vivid imagination often serve to "instruct" us in fearful thoughts.

- Lack of skill or lack of feedback
  Inadequate instruction or guidance is likely to lead to a lack of skill and not knowing how to cope successfully in the situation, is likely to produce anxiety. Furthermore, if feedback is then inadequate or wrong, we may continue to perform unsuccesssfully or to perceive ourselves as performing unsuccessfully. In either case, the anxiety is likely to persist and may even worsen.

- Many stressful LIFE EVENTS (one-off experiences) or LIFE STRAINS (continuous pressures) can leave you vulnerable to experiencing intense anxiety, particularly if several events or strains occur quite closely together. Examples include.....
  - over-work
  - financial difficulties
  - relationship problems
  - recovery from long illness
  - a shock such as sudden bereavement
  - changes such moving house, getting married etc.

- The important point with life strains is that the process may go on for a very long period of time, perhaps years, with gradual increases in tension. You may not be particularly aware of this apart from vague signs such as feeling tense or gradually not enjoying life to the full. However, this gradual increase in tension may mean that the fight/flight response is far more easily triggered off, perhaps if a life event then occurs or in other anxiety provoking circumstances.

Why it can be difficult to get rid off anxiety

Once you have become anxious for whatever reason, the anxiety tends to remain, even though there may seem to be no cause for it at the present time.
This is because it has become a habit. It means that you get into the habit of worrying and of expecting difficulties, it also becomes a habit to avoid those things you know will be difficult. Your body also gets into the habit of being tense and of reacting in an anxious way to all kinds of situations.

**How anxiety develops into a problem**

- **By becoming overly sensitised**

  After suffering unpleasant and panicky feelings, you become more aware than before of the physical signs of anxiety. You become very sensitive to the slightest change in your breathing or in your heartbeat and because these feelings have troubled you so much in the past, you become alarmed by them and this makes you worse. You may begin to fear and dread the physical symptoms of anxiety even more than the situation that triggers them. This is called “fear of fear”.

- **By association**

  If you have felt very anxious in one setting, for example in a crowded shop or when away from home, you may find yourself reacting in the same way to other similar settings, such as all shops or every time you leave the house. In other words, anxiety spreads easily. First you may be just afraid of tube trains and then it can spread to other enclosed spaces.

  One single event, if traumatic, may be sufficient to make you anxious whenever confronted with a similar situation again. e.g., being attacked by a large dog as a small child can lead to a fear of all dogs.

  This association effect is particularly likely however, if anxious feelings and a particular setting happen to coincide on more than one occasion.

- **By anticipation**

  If you have experienced anxiety in some situations, you may expect to feel anxious and worry about what might happen, before going into that situation again. You begin to feel anxious, even before you are in the situation. For example, thinking how awful it would be to encounter a spider keeps you feeling uncomfortable, even when you’re not in the actual situation. This is called “anticipatory anxiety”. In effect, this “primes” you to experience anxiety when in the situation and tends to make it worse.

**point to note**

Certain conditions and substances can affect your physical state and make you more prone to anxiety feelings. These include a lot of coffee, tea, alcohol. Even a slight hangover can make you feel on edge. Going for too long without eating should be avoided and poor sleeping habits are also unhelpful.
What to do about anxiety?

- You can learn to reduce the physical reactions of anxiety by practising relaxation and acquiring the skill of reaching a deep state of relaxation.
- You can change your behaviour in response to the situation you fear
- You can change how you think about the situation you fear.
APPENDIX II

HAND-OUT
RELAXATION TECHNIQUES
Relaxation is a valuable skill which sometimes has to be learned. Daily life can produce many tensions and we often pick up habits which maintain tension in our mind and body. We are sometimes unaware of the differences between tension and relaxation of our muscles. The ability to relax is not always something that comes naturally or easily, it does not happen overnight. Relaxation can allow you to think more clearly, act more calmly, cope with frustration and anger and sleep more restfully.

WHY IT IS HELPFUL?

1. When we are stressed, the muscles in our bodies tense up and this muscular tension causes uncomfortable bodily feelings, such as a headache, backache, tight chest and so on.

2. These aches and pains of tension can cause mental worry, making us even more anxious and tense.

3. People who are tense often feel tired.

4. Relaxing slows down the systems in the body that speed up when we get anxious.

5. If we can learn to turn on the bodily symptoms of relaxation, we can turn off the symptoms of tension. They are two sides of the same coin: you can’t experience feelings of relaxation and tension at the same time.

   (T. Powell. 1992)

THE SIGNS OF RELAXATION ARE:-

A feeling of heaviness or lightness.
An unwillingness to move at the end of the exercises.
A slight tingling feeling in the fingers and toes.
A loss of the sense of which position your arms and legs are in.
Falling asleep is also a sign that you are relaxing well but is to be avoided if possible, since it will slow down the learning of a new skill.

GENERAL GUIDELINES

1. Choose a warm, dark, comfortable room, where you will not be interrupted.
2. Ensure that your whole body is well supported, a bed is preferable or a chair with a high back and arms.
3. You may use pillows to give even support to head/neck and shoulders.
4. Clothing should be loose and comfortable i.e. loosen ties and belts and remove glasses and footwear.
5. Don’t attempt your relaxation exercise if you are hungry or just eaten.
6. Develop a routine of practice and stick to it.
7. Try and adopt a "passive" attitude i.e. avoid worrying about your performance
   or whether you are relaxing, just have a go.
8. Try and breathe through your nose slowly and regularly.

POSSIBLE PROBLEMS AND HOW TO AVOID THEM

- To avoid falling asleep try the exercises earlier in the day when are not so tired,
  and aim to feel relaxed but refreshed and alert at the end.

- Getting cold will make relaxing difficult so ensure the room is warm. In the
  early stages of training, a hot bath before doing the exercises often helps.

- You may find it difficult to clear your mind and concentrate on the exercises.
  If this happens you may find it helpful to write down your main
  concerns/thoughts on a piece of paper and in this manner calm your mind until
  the end of the session. At times it may be best to stop the exercises and come
  back to them later when you are feeling calmer.

- Practical measures to avoid interruptions - take the phone off the hook etc.
APPENDIX III

HAND-OUT
BEHAVIOURAL STEPS
BEHAVIOURAL STEPS:

THINGS YOU CAN DO TO HELP WITH ANXIETY

Part of the treatment for anxiety is to change the things you do when or because you are anxious.

As described earlier, some of the main things that people do when they have an anxiety problem are:

- Become OVERACTIVE
- Become UNDERACHIEVE ACTIVE
- AVOID situations in which they fear they will become anxious

How to tackle the problem of overactivity

This means rushing around trying to do too many things, feeling as if there is still so much to do, feeling unable to sit still and relax. Sometimes it may be as if you dare not relax in case things get on top of you completely. You may feel that racing about is the only way to keep things or yourself under control. The result is that you feel very keyed up and tense most of the time and end up quite exhausted.

How to tackle this problem

If overactivity is your problem, ask yourself these questions:

- Do you have to be doing something every minute of the day?
- Who is forcing you to keep on the go all the time?
- What do you expect will happen if you do not get everything done?

Take a moment to consider your answer to these questions.

Think about what other people do. Normal working days, whether at home or in a job, are not filled with activity every second of the day. There are regular breaks - for lunch, or coffee, or just because there is nothing to do for a time.

What to do

- Be reasonable about what can be done. Do not expect yourself to be the perfect housewife or worker or whatever - there is no such thing.
- Think of a reasonable daily routine. You cannot do everything today, so leave things until tomorrow or next week or even next year.
- Include proper breaks in your day e.g., an hour for lunch, ten minutes for a coffee break or times just to sit down and do nothing.
- Use your relaxation training to help you slow down and make the most of non-work periods.
• Do something restful in the evening.
• Take time to do things just for yourself - Have a leisurely bath, visit a friend, or read a magazine etc.
• Be pleased with the things you do get through rather than thinking of the things you feel you still have to do - they can wait.

2. Underactivity

This means doing very little because you do not know where to start. The tasks in front of you seem too difficult or too many to tackle. The jobs seem to pile up and you have less and less energy to take them on.

How to tackle this problem

If underactivity is your problem, ask yourself these questions:

- Do you have to tackle everything today?
- Will everything really fall apart if nothing gets done just now?

Take a moment to consider your answers to these questions.

What to do

- think of some small thing to do first, e.g., wash the dishes or make a phone call. Leave everything else in the meantime.
- Make a list of things to be done. Score out all those things which can wait till next week or even next year.
- Pick out those things which could be done quite quickly. Do one or two of these: then leave the rest.
- Check things of your list as you do them.
- Divide the day into a few short working periods, e.g., half an hour at first. Do what you can in that time, leave the rest.
- Do one unpleasant or boring thing. Then do something you would enjoy more as a reward.
- Do not expect too much of yourself at first. It will take time to get back into your routine.
- Sometimes it may even be profitable to leave everything in the meantime and do something completely different. Visit a friend, take a walk or go for a drive etc.

Keeping records or diaries

This can be a very useful technique, serving several purposes.

- Helping you become more objective about your problems.
• Making the problems clearer and therefore easier to tackle.
• Informing you about what progress you are making.

It is very easy to form mistaken ideas about your difficulties and the tendency is to assume they are much greater than they really are.

It is also very easy to ignore or dismiss the good points or successes along the way.

The more you know exactly what the problems are, the better able you will be to deal with them.

There are many different forms of record-keeping, but usually two points are recorded:
• When and where your anxiety occurs.
• How severe it is.

To record how bad your symptoms or anxiety feels, you could use a scale of 0-10 (with 0 = no symptoms or anxiety and 10 = severe anxiety or panic). Therefore, the higher the number you give, the worse you were feeling.

A typical diary could look like this:

<table>
<thead>
<tr>
<th>DAY</th>
<th>A.M.</th>
<th>P.M.</th>
<th>EVENING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>At home alone 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td>Eating out with a friend 6</td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>Car broke down 8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Avoiding difficult situations

By escaping and avoiding, you are not getting the chance to learn:
• How to cope with difficult situations
• That the anxious feelings do not increase to the point where you lose control or where something dreadful happens
If you suffer from panic, remember the following information:

A. As your arousal level goes up, you feel more anxious and the physical symptoms become more uncomfortable.

B. Sometimes, you may become so anxious that you feel panicky (panic is a combination of frightening thoughts and physical symptoms).

C. When in a state of panic, you may believe that it will become worse and worse and that you will lose control of yourself.

D. Most people try to "escape" from the situation when in a state of panic, usually by leaving the situation as quickly as possible. This has the effect of lowering the arousal level and so brings instant relief.

   BUT:

E. What will in fact happen if you stay in the situation and do not escape is:
   - Your arousal level will not continue to rise and you will not lose control.
   - Your arousal level will gradually come down. It may take some time, but it will come down. The body cannot remain so highly aroused for very long. Your arousal level may come down and rise again in waves but it will not go beyond a certain level and will always come down in time, often in a very short time.

As avoiding things makes anxiety worse in the long run, then as you might guess, part of the treatment involves stopping avoiding things and confronting the anxiety whilst using relaxation techniques and cognitive strategies.

**Gradual Exposure**

The best way to overcome anxiety is to confront the feared situation in a gradual way and gradually learn to master it. This is called **GRADUAL EXPOSURE**.
To help yourself start to face up to situations, it is a good idea to set yourself some BEHAVIOURAL TARGETS and try to achieve them.

For example, if you are afraid to go to the shops alone, then you might begin to tackle this fear by initially mastering a walk to the front gate. This is the first behavioural target. The second target might be reaching the nearest corner 100 yards away and so on.

By setting yourself these targets regularly and consistently, and pursuing them, you will find that you gradually learn to control anxiety and that the temptation to avoid situations gets steadily weaker and weaker.

To carry out behavioural targets once you have set them, is a difficult part. There are a few things you can do to make it easier.

First of all, find out what is making you feel anxious - The more precisely you know what is making you feel anxious, the easier it is to master the anxiety because you know what to confront. Keep a notebook and write down any situation that makes you feel anxious. (see previous notes on anxiety records). Notice what they have in common.

Then, make a list of all the situations you tend to avoid because of anxiety, from the ones which aren't too difficult, to the very hardest. For example, the top or hardest item in someone’s list might be “shopping in a crowded supermarket”. The next one down might be “shopping by myself in a half-empty supermarket”. The third one might be “sitting inside a crowded bus” and so on, perhaps ending with something they find quite easy but still something they would rather avoid.

Be specific. E.g., “plan to spend 20 minutes in Marks & Spencers” rather than “spend some time in the shops”

Once you have written out a list for yourself, you can start to work your way through the list. Each day, set yourself one of the easier situations as your behavioural target for that day.

When practising the targets, expect to feel anxious - No one is expecting you to do this without feeling anxious.

Let the anxiety come without fighting it - just accept it and let it pass or reduce it by relaxing (and by changing your thinking, which is covered later).

It is particularly important not to run away at the first sign of anxiety. Stay in the situation until the anxiety fades.

Remember that the feelings are nothing more than an exaggeration of quite normal bodily reaction to stress - they are not harmful - just unpleasant. Nothing worse will happen.

Once you can accomplish this target without any anxiety or with minimal anxiety, you can proceed to the next more difficult target.

As this is not easy, be sure to congratulate yourself for each step that you achieve.
• Doing this once is not enough - repeat the exercise several times over - keep practising.

• At each step, more confidence is gained. It might take some time to work your way up to the top of the list but the important thing is that you are practising coping in situations and therefore becoming better and better at controlling anxiety.

• Set-backs are not uncommon, give yourself time to settle down after a bad turn and keep practising.

• Another thing you can do is to keep a record of all the situations you have tried, along with how you coped with them. By keeping a log of your successes in this way, you can see how you are progressing using the behavioural targets you set yourself.

Anticipate the potential advantages and disadvantages

It can be helpful to anticipate the advantages as well as the less obvious disadvantages.

For example, you may learn to walk to the shops and travel freely and find that your family now expects you to go out to work. The satisfaction gained from reaching the shop may be overshadowed by the demands for more responsibility and you may want to consider how you will respond to this.
APPENDIX IV

HAND-OUT
COGNITIVE APPROACH: INTRODUCING AUTOMATIC THOUGHTS
The Cognitive Approach: Introducing Automatic Thoughts

Introduction

Anxious thoughts are quite normal and everyone has them from time to time. If however, these thoughts pre-occupy you, they can keep the experience of anxiety going, i.e., a vicious cycle is set up.

The build up of anxious thoughts can be controlled by using one of two key techniques -

1. DISTRACTION, or
2. REAPPRAISAL

Distraction techniques

Distraction techniques basically involve finding something else to occupy your mind. The technique is based on the fact that you can only concentrate on one thing at a time. Therefore, if you focus on something neutral or pleasant, you cannot simultaneously be thinking anxious thoughts - so the vicious cycle is broken.

Firstly, DECIDE to not think about or dwell on your experience of anxiety.

The next step is to FILL YOUR MIND WITH SOMETHING ELSE.

- Concentrate and focus upon something specific around you
  e.g.,
  Hairstyles of people around you,
  Their clothing,
  The gardens of the houses you pass,
  Shop windows,
  The furniture in the room, etc.,

- Pick a mental activity to absorb you
  e.g.,
  Plan your weekend,
  Do a crossword,
  Recite a poem,
  Compose a letter to a friend,
  Plan a menu for a special dinner,
  Recall a pleasant scene or holiday,
  Count backwards in 3’s from 100, etc.,

Make sure it is an activity that is positive or neutral in content. Make sure also that it is something specific and which you can easily give a lot of attention to.
Choose one and write it down on a small card. Keep it with you for when you are next feeling very anxious.

Try out different distraction ideas to discover what works best for you.

Be innovative; think of your own variations.

**Reappraisal**

The initial step is to become more aware of anxious thoughts (in contrast with distraction which is a technique of turning attention away from anxious thoughts).

The rationale for this approach is basically to assess whether anxious thoughts are accurate and if not, to replace them with more accurate thinking.

The content of anxious thoughts is usually about

- the danger of the situation, as you see it
- your assumed capacity to cope
- what the physical sensations and symptoms might mean

The characteristics of these thoughts are

- They are AUTOMATIC - the thoughts seem to come out of nowhere and flash through your mind without you really being fully aware of them.

- They seem very believable and PLAUSIBLE to you at the time you are experiencing them. In fact, you tend to accept them as a perfectly reasonable way of thinking.

- These automatic thoughts are the kind of thoughts that most people would find anxiety provoking if they believed them; in other words, they increase anxiety and are thus UNHELPFUL.

- They are often DISTORTED in that they do not fit the facts.

- They are involuntary.

The first step is to recognise your own anxious automatic thoughts whenever you feel anxious.

Instead of being daunted by the feeling of anxiety, learn to use the feeling of anxiety as a CUE FOR ACTION. Notice when your mood becomes more anxious and look back to what was running through your mind immediately beforehand.
The best way to become aware of anxious thoughts is to write them down as SOON as they occur. Using your Daily Record of Automatic Thoughts, write down

- The date

- What situation you were in when you started to feel anxious (or whatever other feeling you have noted down). What were you doing? Where were you? Who with? Include in this column in general terms only, what you were thinking about - what memories or worries were you thinking about, what were you "brooding upon"? Keep specific thoughts for the last column.

- What emotion you feel. There may be more than one emotion of course, if you experience "mixed feelings". Emotions can be captured in one descriptive word, e.g., anxious, angry, inadequate, sad, delighted etc. Judge how strong the feeling is, on a scale of 1 to 100. (0 would be no emotion, 100 would be an extremely strong emotion, 50 would be moderate and so on. You could score anywhere between 0 and 100).

- What automatic thoughts were running through your mind at the time you started to feel anxious? Try to record as precisely as you can, word for word. If some of your thoughts take the form of images, write down what you saw in your mind's eye. There may be several automatic thoughts, and they may be linked, perhaps "snowballing" one after another, as if gaining momentum.

If you are stuck at this point, try asking yourself what the MEANING of the situation is - what does it tell you about yourself, your situation or your future? This might provide a clue as to why the situation makes you anxious or is distressing. An argument for example, might mean to you that you never manage to get on with anybody and will never have proper relationships.

Write down how far you believe each of your automatic thoughts on a scale of 1 100%? (100% means you believe it completely, 0% that you do not believe it at all. You can score anywhere between 0 and 100).

It may not be possible to always record your thoughts and feelings immediately as they occur. E.g., you may be busy, driving your car for example, or in a public place such as a supermarket when you experience the anxiety and the associated thoughts.

If this is the case, make a mental note of events and experiences which distress you during the day and set aside a brief period (say 20 minutes in the evening to make a written record. Then in the evening, run through an "action replay", trying to recall in as much detail as possible what happened, how you felt and what your thoughts were.
Beware of excuses!

which might keep you from focussing on your thoughts and emotions. You may say "I'll do it later.", "I may as well forget about this." You may find that you feel very unwilling to look at your thoughts in the face. It is quite natural to want to avoid thinking through unpleasant experiences, but doing so is the best way to combat your anxious feelings. If you find yourself making excuses, this is probably because you have hit upon something important, so make yourself write it down. You can then divert your attention by using one of the distraction techniques if you want to.

Beware of blame!

Don't blame yourself for having many negative automatic thoughts. They are a sign of distress, not of weakness or inadequacy. Remember they are INVOLUNTARY. Instead of blaming yourself for the thoughts, see them as an opportunity to learn the skill of catching and re-appraising the thoughts.

Why it can be difficult to catch automatic thoughts

• Like any other skill, it takes time and frequent practice to do it with ease, so don't be discouraged if you have difficulties to start with - be patient with yourself.
• The images and thoughts can be very brief and fleeting, so it is difficult to be aware of them
• Because the thoughts and images are associated with anxiety, we tend to avoid focussing on them, which makes it hard to remember clearly what the thought or image was
• The thoughts are often so habitual and familiar, they don't attract our attention. Like wallpaper we've become used to, we tend not to notice. Sometimes people believe that they don't have thoughts, or that their anxiety is not associated with automatic thoughts, but this is very unlikely. It is more probable that the thoughts have become very automatic. The best way of eventually catching them is to persevere with your thought diary.
APPENDIX V

HAND-OUT
COGNITIVE APPROACH: REAPPRAISAL
COGNITIVE APPROACH: REAPPRAISAL

- To modify negative automatic beliefs, you can use:
- Verbal challenging of automatic thoughts
- Verbal challenging helps you to evaluate automatic thoughts
- Verbal challenging helps you to substitute more realistic thoughts

USEFUL QUESTIONS TO HELP YOU CHALLENGE

1. What EVIDENCE do I have for this thought?
   Try to identify evidence for and against your thought

2. Is there any ALTERNATIVE way of looking at the situation?
   Is there any different explanation?

3. How would someone else think about the situation?

4. What is the WORST thing that could happen?
   What would be so bad about that?

5. What difference will it make in X yrs/mths/days if this happens?
   How will things be different in X mths/yrs time?

ERRORS OF THINKING

- Black and white thinking
  Are you thinking in all-or-nothing terms?

- Over-generalising
  Are you taking a particular event and turning it into a general rule?

- Mental filtering
  Are you forgetting all the relevant facts or over-focusing on irrelevant facts?

- Personalising
  Are you taking responsibility for things that have little or nothing to do with you?
- **Discounting positives**
  Do you reject the positive experiences by insisting they do not count?

- **Jumping to conclusions**
  Are you jumping to conclusions on the basis of inadequate evidence?

- **Labelling**
  Do you make general judgements about yourself/others based upon specific qualities?

- **Catastrophising**
  Do you blow things out of proportion?

- **Emotional reasoning**
  Do you assume your feelings reflect reality?

- **“Should” statements**
  Or “musts”, “oughts”
  “I should go and see .......”

- **Perfectionism**
  Are you setting yourself an unrealistic or unobtainable standard?
APPENDIX VI

ANXIETY MANAGEMENT WORKSHOP EVALUATION FORM
## ANXIETY WORKSHOP: EVALUATION

For each of the questions below, please circle the statement that best expresses your opinion.

<table>
<thead>
<tr>
<th>Question</th>
<th>not at all</th>
<th>a little</th>
<th>a great deal</th>
<th>a very great deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the workshop improve your understanding of anxiety?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did the workshop help you to learn skills to deal with anxiety?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How do you rate the standard of presentation of the material?</td>
<td>very poor</td>
<td>poor</td>
<td>acceptable</td>
<td>very good</td>
</tr>
<tr>
<td>How would you rate the venue, eg., comfort, access, refreshments?</td>
<td>very poor</td>
<td>poor</td>
<td>acceptable</td>
<td>very good</td>
</tr>
<tr>
<td>In an overall sense, how satisfied are you with the workshop?</td>
<td>very dissatisfied</td>
<td>a little dissatisfied</td>
<td>satisfied</td>
<td>very satisfied</td>
</tr>
<tr>
<td>Would you recommend the workshop to a friend?</td>
<td>definitely not</td>
<td>probably not</td>
<td>probably would</td>
<td>yes, definitely</td>
</tr>
<tr>
<td>As you feel now, do you think it likely that you will make changes as a result of coming on the workshop?</td>
<td>very unlikely</td>
<td>probably not</td>
<td>possibly</td>
<td>yes, definitely</td>
</tr>
</tbody>
</table>

### What were the one or two best parts of the workshop

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

### What were the least satisfactory parts of the workshop

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
Please make any other comments, in particular, any ways in which you think the workshop might be improved

THANK-YOU for your feedback.
APPENDIX VII

ANXIETY MANAGEMENT EVALUATION QUESTIONNAIRE
**ANXIETY MANAGEMENT WORKSHOP QUESTIONNAIRE**

This questionnaire concerns your personal view of the one-day Anxiety Management workshop that you attended in the year 2000. The questionnaire presents a number of statements, which represents general questions about your anxiety and the workshop.

Please read each question carefully and we ask that you be honest in your responses. Most of the questions will require you to briefly describe your answers, whilst others require you to tick the box which applies to you.

*Please be assured that your anonymity will be guaranteed and your responses held in the strictest confidence.*

---

**SECTION ONE: PERSONAL DETAILS**

1. Gender (please tick):
   - Male □
   - Female □

2. Age-range (please tick one box):
   - 16 - 25 years □
   - 26 - 35 years □
   - 36 - 45 years □
   - 46 - 55 years □
   - 56 - 65 years □
   - 66+ years □

3. Marital Status (please tick one box):
   - Single □
   - Co-habiting □
   - Married □
   - Widowed □
   - Divorced □
   - Separated □

4. Are you...?
   a) On the waiting list to see a psychologist? Yes □  No □
   b) Currently in individual therapy? Yes □  No □
   c) Discharged from the service? Yes □  No □
   d) Other (please specify) ________________________________

5. How long have you had anxiety? ________ years ________ months

6. Please briefly describe your anxiety problem. (e.g. situation it occurs, feelings etc.)

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
**SECTION TWO: ANXIETY MANAGEMENT WORKSHOP**

This section considers your view of the anxiety management workshop that you attended. Please tick the box that best applies to you.

7. Before attending the workshop, how severe was your anxiety?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Slightly</th>
<th>Significantly</th>
<th>Severe</th>
<th>Very severe</th>
</tr>
</thead>
</table>

8. Please briefly explain your answer.

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
</table>

9. Currently, how severe is your anxiety?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Slightly</th>
<th>Significantly</th>
<th>Severe</th>
<th>Very severe</th>
</tr>
</thead>
</table>

10. Please briefly explain your answer.

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
</table>

11. Before attending the workshop, how well did you feel you coped with your anxiety?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Slightly</th>
<th>Moderately</th>
<th>Very well</th>
<th>Extremely well</th>
</tr>
</thead>
</table>

12. Please briefly explain your answer.

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
</table>

13. How well do you feel you are now coping with your anxiety?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Slightly</th>
<th>Moderately</th>
<th>Very well</th>
<th>Extremely well</th>
</tr>
</thead>
</table>

14. Please briefly explain your answer.

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
</table>

15. Before attending the workshop, how much did your anxiety affect you in your daily life? (e.g. relationships, work, etc.)

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Slightly</th>
<th>Significantly</th>
<th>Severely</th>
<th>Very severely</th>
</tr>
</thead>
</table>

16. Please briefly explain your answer.

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
</table>
16. Please briefly explain your answer.

17. Currently, how much is your daily life affected by anxiety?

- Not at all □
- Slightly □
- Significantly □
- Severely □
- Very severely □

18. Please briefly explain your answer.

19. How did the anxiety management workshop improve your understanding of anxiety?

20. Have your anxiety levels changed since attending the workshop? My anxiety is...

- Much worse □
- Somewhat worse □
- No change □
- Somewhat better □
- Much better □

21. If your anxiety levels have changed, was this a direct result of the anxiety management workshop?

- Yes □
- No □
- Partly □

22. Please explain your answer to question 21.

23. What was the MOST useful aspect of the workshop?

24. What was the LEAST useful aspect of the workshop?

25. What would you change about the workshop if you were to attend it again?

26. What skills do you remember from the workshop?
27. Which of the following aspects of the workshop do you continue to use?

<table>
<thead>
<tr>
<th>a) Relaxation</th>
<th>b) Behavioural Steps</th>
<th>c) Cognitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relaxation tape</td>
<td>Diary/Record keeping</td>
<td>Distraction techniques</td>
</tr>
<tr>
<td>Relaxation exercises</td>
<td>Gradual exposure</td>
<td>Thought stopping</td>
</tr>
<tr>
<td>Handout</td>
<td>Handout</td>
<td>Recognising thinking errors</td>
</tr>
<tr>
<td>Handout</td>
<td>Handout</td>
<td></td>
</tr>
<tr>
<td>Handout</td>
<td>Handout</td>
<td></td>
</tr>
</tbody>
</table>

28. Please list any other strategies that you are using or have used that are not listed above?

29. Please list difficulties experienced with implementing the above strategies and skills.

30. Would you recommend the workshop to a friend? Yes □ No □

31. Has attending the workshop influenced your attitude toward individual treatment? Yes □ No □

32. If yes, how?

33. Any other comments?

*We thank you for your time in completing this Questionnaire.
Your responses will be held in the strictest confidence.*
APPENDIX VIII

INITIAL LETTER TO CLIENT
Psychology Department

14th March 2001

Our Ref: /AMQ

Dear

As part of our service delivery, members of the Clinical Psychology department offer a one-day anxiety management workshop for clients with anxiety related problems. We offer a six week follow-up appointment following attendance to the workshop to ascertain whether you found it helpful. However we are unaware whether the workshop has long-term benefits.

As someone who attended one of our workshops last year, we are very interested in your personal view regarding this matter. The information you provide will help us determine whether we can improve the workshop for future clients, whilst continuing to provide the relevant information related to anxiety management.

We have enclosed a questionnaire for your completion, which will help us to evaluate the workshop. The questionnaire is brief, and should take no longer than 20 minutes to complete. If space is limited, please add your responses to an attached piece of paper, indicating which question you are referring to.

Please note that your name will not be used at any time, and will not be placed on the questionnaire. Furthermore, your responses will be completely confidential and anonymous. Please also be assured that your future treatment will not be effected either by your responses or if you decide not to complete the questionnaire.

If you do wish to complete the questionnaire, please return it in the pre-paid envelope provided. We ask that this be returned within 14 days of receipt.

A summary of the results will be available from July 2001. If you would like a copy, please contact the secretary on the above telephone number.

We thank you in advance for your participation in this survey. Should you have any questions, please do not hesitate to contact either Miss or 

Yours Sincerely

Trainee Clinical Psychologist

Clinical Psychologist
APPENDIX IX

REMINDER LETTER TO CLIENT
Psychology Department

16th April 2001

Our Ref: /R-AMQ

Dear

Re: Reminder letter - evaluation of the one-day anxiety management workshop

Further to our letter dated 14th March 2001 concerning an evaluation of the one-day anxiety management workshop offered by members of the Clinical Psychology department.

We are writing to ask if you would be kind enough to complete and return the enclosed questionnaire if you have not already done so and may wish to participate in our survey. If this is the case, please return the completed questionnaire in the pre-paid envelope provided within 7 days of receipt. Your responses are important because not only will they provide us with your perception of the workshop, but also how future workshops can be improved.

As mentioned in our previous letter, your name will not be used at any time, and will not be placed on the questionnaire. Also, your responses will be completely confidential and anonymous, and your future treatment will not be effected either by your responses or if you decide not to complete the questionnaire.

If you have already returned the completed questionnaire, please disregard this letter and accept our apologies for troubling you.

We thank you for your participation in this survey. Should you have any questions, please do not hesitate to contact either Miss or on the above number.

Yours Sincerely

Trainee Clinical Psychologist

Clinical Psychologist
APPENDIX X

REMAINING THEMES GENERATED FROM CLIENTS' EVALUATION OF THE ANXIETY MANAGEMENT WORKSHOP
1. Please briefly describe your anxiety problem.
The theme the ‘Affect of anxiety’ was based upon the clients’ account of how they perceived their anxiety problem. Most clients’ were able to clearly described their symptoms: “feelings of sweaty, getting hot and feeling sick....”, their behaviour: “...wanting to hide”, and the situations in which their anxiety was likely to occur: “feel panicky when I feel sick. Bad in unfamiliar situations and people, and when away from home”.

2. Severity of anxiety
Fluctuations of symptoms and emotions appeared to be governed by factors such as feeling hopeful: “it had been severe...! had some degree of hope so the levels fluctuated” , time of day: “my feelings used to last 2 to 3 hours in a morning, generally OK in the afternoon and evening” or more specific cues: “...due to work pressures....”. The clients’ reported their emotions as: “at times very low..”. Hopelessness and helplessness encompassed the general feeling of dread, foreboding and complete sense of lack of control. The following quotes typified feelings of hopelessness: “imagine that your days are numbered....”, “...awake all night waiting for something to happen....”, helplessness: “...no-one can help you”; “this and one to one with my psychologist could not control attacks...”, and a sense of being stuck with the problem: “...I have come to a standstill”.

‘Disruption to lifestyle’ considered anxiety’s impact on lifestyle. This included being unable to work, avoiding anxiety provoking situations and a general reduction in daily activities or pleasures. For example: “I was not living my life to the full”, “it effected me in a way of not wanting to do things” and “it affected social occasions, became more of a recluse”.

Five were able to identify cues and triggers: “anxiety creeps back at times of stress and when tired”. four clients’ were “still not doing things that I really want to do”, and stated that despite the workshop, anxiety “continues to spoil my lifestyle” and that “it still haunts me”.

3. Coping with anxiety
‘Anxiety as an enigma’ represented the majority of clients’ who felt they had difficulty coping because they did not understand what ‘anxiety’ was about, or how it was being maintained: “...it was something I didn’t understand too well...could not begin to do something about it”, “...no ability to manage it”. The coping strategies used included avoidance: I avoided stress situations where possible” and medication.

‘Understanding anxiety’ considered the four clients’ who had prior knowledge of anxiety and relevant strategies for the management of symptoms. They felt able to cope whilst on the waiting list because they could apply specific techniques: “...learnt relaxation techniques and deep breathing..” and benefited from “...previous experience of relaxation...”. Others coped because they had “already attended group sessions”.

174
4. Currently coping with anxiety?
'Empowerment' suggested how people felt more able to cope since acquiring information on anxiety and the techniques for its management. Being empowered was efficacious in reducing symptoms and negative perceptions. Responses included: "able to rationalise better. Use some of the skill shown to control symptoms" and "...have a much better understanding".

5. What was the LEAST useful aspect of the workshop?
Only ten clients' submitted an explanation for this question. Being 'Only one day', encompassed comments that suggested the content and information was overwhelming, that one day was not long enough and that the day ended just as everyone was feeling relaxed with each other. In addition, the 'Group size' was thought to be too large, and the problems too varied, and the information as 'Not applicable' to their problem (e.g. depression).

6. What would you change about the workshop?
The above three themes were the targets for change. Firstly, that less people attended the workshop. Secondly, that the large group be split into sub-groups or focus groups comprising of people with similar problems, such as specific phobias and secondary problems such as depression. If the workshop was more than one day, there would be the opportunity for group members to offer continued support and monitor each other's progress.

7. Any difficulties implementing strategies?
The two main difficulties were 'Time' (e.g. "finding the time to relax") and that the 'Techniques were too difficult or impractical' (e.g. "thought stopping is impossible, as is distraction techniques" and "...handouts not practical to pick up and read, tape too long").

8. Had attending the workshop influenced your attitude toward individual treatment?
The theme 'Optimism' encompassed the general feeling from attending the workshop. The workshop allayed fears regarding psychological treatment and seeing a psychologist. It also encouraged people to help themselves whilst waiting for an appointment because "it explained how I could be helped". Moreover, some felt that individual treatment was no longer necessary or should symptoms continue, then individual treatment would be pursued.

9. Changes in levels of anxiety
Comments included: "I went away from the workshop with an attitude to change" and "it helps ..to talk with others about a condition that affects oneself".
APPENDIX XI

CONFIRMATION LETTER OF PRESENTATION
3rd August 2001

Dear Sir/Madam

This is to confirm that, on 6th June 2001, Trainee Clinical
Psychologist, presented the results of the Service Related Research Project to the Adult Psychology Department at Community and Mental Health NHS Trust.

Consultant Clinical Psychologist
Head of Adult Psychology Department
QUALITATIVE RESEARCH PROJECT

Social representations of schizophrenia:
First year undergraduate students' perspectives

MAY 2002
YEAR 2
1. Introduction

Social representations refer to the ideas, statements and images that 'represent' something (e.g. person, event, object, etc.) that have been socially constructed through the process of interaction and communication between individuals. It is through our representations that we make sense of the world in which with live and orient our behaviour and interactions with others (Fraser, Burchell, Hay & Duveen, 2001). Furthermore, social representations distinguish between groups. Hence, social identities are established through shared representations and groups are established in that they hold different social representations. Thus, social representations enable us to position ourselves and others within our mental, social and cultural world.

Social representations are generated through the processes 'anchoring' and 'objectification' (Moscovici, 1984) and purposeful for making the unfamiliar seem familiar (Billig, 1993). Anchoring reduces the threat of unfamiliar ideas by providing more meaningful or familiar classifications and names. Thus, by integrating the unfamiliar idea (e.g. schizophrenia) into a familiar category (e.g. abnormal) it becomes part of our world and non-threatening. Through the process objectification, strange or unfamiliar ideas (e.g. schizophrenia) are converted into concrete and familiar ones (e.g. unpredictable) which can then be referred to in our conversations with others. For example, Morant (1995) found that some representations of mental illness were anchored in the 'expert' model and historically rooted cultural beliefs systems, and the image of the 'madman' objectified as socially deviant, monstrous and magical-fantastical (De Rosa, 1987).

Social Representation Theory has been used in previous research that has considered public and mental health professionals' representation of mental illness (e.g. Jodelet, 1991; Zani, 1993; Morant, 1995; Foster, 2001). Representations of mental illness were found to be strongly associated with stigma, danger, general negativity and 'differentness'. For example, Jodelet (1991) described how a community in rural France maintained a psychic and social distance in their interactions with mentally ill lodgers who were socially represented as threatening and unpredictable. As a consequence, the community feared the mentally ill lodgers and enacted exclusionary practices towards them. Morant (1995) reported that
mental health professionals represented the mentally ill as 'different' because of an inability to imagine what having a mental illness could be like.

Attitudinal studies that report the commonalities between people's attitudes towards mental illness lend support to social representational research. Link, Phelan, Bresnahan, Stueve and Pescosolido (1999) and Levey and Howells (1995) found an association between the general publics' belief that people with schizophrenia were likely to be dangerous or violent, and the desire for social distance. Lawrie (1991) found that people who knew someone with schizophrenia were likely to be less sympathetic towards them, and Angermeyer, Matschinger and Holzinger (1998) found that in general, people experienced a range of emotions about schizophrenia, such as fear and unease, disgust, concern and a desire to help.
2. **Aim**

This small-scale qualitative research project sought to explore the social representations of schizophrenia in first year undergraduate students. Of particular interest were the thoughts and images held by the undergraduates when they heard the word 'schizophrenia'.

Social representation theory was used for this study because it provided a framework for thinking about the undergraduates’ shared representations about schizophrenia. It was hoped that through the process of communication within a social situation, shared meanings and ideas would become more accessible which, from an interpretive perspective, would allow for closer consideration of the topic (Foster, 2001).
3. Data collection
The research was undertaken by four second year Trainee Clinical Psychologists and three first year Trainee Counselling Psychologists as a practical element on the module ‘qualitative research methods’. All the researchers were interested in the topic of mental illness, but for practical reasons and restrictions on time, decided to research only one mental illness (i.e. schizophrenia). Once the topic had been decided, a literature review was undertaken by each member of the group. Relevant research papers helped to focus and generate a list of flexible questions (appendix I). The questions moved from the general to the more specific, and were grounded in previous research using social representation theory (e.g. Foster, 2001).

3.1 Focus Group
Given that social representations are created through communication and interaction with others (Millward, 1995), the focus group method was considered appropriate for attaining the participants’ perspectives and understanding of schizophrenia whilst in a ‘social situation’ (Farr, 1993). This method was considered advantageous over individual interviews because it enabled participants to reply to and scrutinise their own and one another’s contributions (Willig, 2001). However, due to time constraints, only one focus group could be run (which lasted approximately 70 minutes). Three trainees facilitated the focus group and the remaining four observed the group through a one-way mirror in an adjoining room.

3.2 Participants
The initial selection criterion was that all participants be first year psychology undergraduates aged between 18 and 20. The researchers assumed that some psychology undergraduates would continue their career path towards a Mental Health profession and therefore have an interest in the topic. However, due to a poor response, the restriction on age was lifted and other professions were considered. Participants were randomly approached by the researchers around the University campus. A total of seven participants were recruited and formed a convenience sample. Basic demographic information was obtained for each participant and summarised in Table 1.
<table>
<thead>
<tr>
<th>Group Member</th>
<th>Sex</th>
<th>Age</th>
<th>Country of Birth</th>
<th>Ethnic Background</th>
<th>Highest Educational Qualification</th>
<th>Course</th>
<th>Marital Status</th>
<th>No. of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wesley</td>
<td>M</td>
<td>19</td>
<td>England</td>
<td>White British</td>
<td>‘A’ levels</td>
<td>Computing &amp; IT</td>
<td>Single</td>
<td>0</td>
</tr>
<tr>
<td>Charles</td>
<td>M</td>
<td>18</td>
<td>England</td>
<td>White British</td>
<td>‘A’ levels</td>
<td>Computer Modelling &amp; Simulation</td>
<td>Single</td>
<td>0</td>
</tr>
<tr>
<td>Cordelia</td>
<td>F</td>
<td>19</td>
<td>England</td>
<td>White British</td>
<td>‘A’ levels</td>
<td>Psychology</td>
<td>Single</td>
<td>0</td>
</tr>
<tr>
<td>Darla</td>
<td>F</td>
<td>53</td>
<td>England</td>
<td>White British</td>
<td>Diploma (SRN)</td>
<td>Psychology</td>
<td>Married</td>
<td>2</td>
</tr>
<tr>
<td>Lindsey</td>
<td>M</td>
<td>28</td>
<td>Mauritius</td>
<td>Other</td>
<td>‘A’ levels</td>
<td>Mental Health Nursing Diploma</td>
<td>Single</td>
<td>0</td>
</tr>
<tr>
<td>Kate</td>
<td>F</td>
<td>36</td>
<td>Mauritius</td>
<td>Asian</td>
<td>‘A’ levels</td>
<td>Mental Health Nursing Diploma</td>
<td>Single</td>
<td>0</td>
</tr>
<tr>
<td>Conor</td>
<td>M</td>
<td>19</td>
<td>England</td>
<td>White British</td>
<td>‘A’ levels</td>
<td>Computing &amp; IT</td>
<td>Single</td>
<td>0</td>
</tr>
<tr>
<td>Tara</td>
<td>F</td>
<td>20</td>
<td>England</td>
<td>White British</td>
<td>‘A’ levels</td>
<td>Psychology</td>
<td>Single</td>
<td>0</td>
</tr>
</tbody>
</table>
It was made explicit that for ethical and pragmatic reasons, anyone who had familial or personal experience of schizophrenia would not be recruited. Furthermore, that the focus group would be audio and video recorded for the purpose of analysis only. In the presence of one of the researchers, each participant was required to read an information sheet which summarised the research project and provided information about confidentiality (appendix II). Each participant was also required to sign two consent forms, one for participating (appendix III) and one to consent to being video and audio recorded (appendix IV).
4. Analysis

Interpretative Phenomenological Analysis (IPA) was used to analyse the focus group transcript (Smith, Jarman & Osborn, 1999) in order to access the participants’ internal world and obtain an “insider's perspective” (Conrad, 1987). However, because one cannot directly access the participant's internal world, one's own conceptions were drawn upon to make sense of the participants' social representations of schizophrenia. Analysis was therefore achieved through the process of interpretation.

The IPA analytic procedure was as follows: An audio recording of the focus group was transcribed, and the completed transcript was taken by one researcher who watched the video recording and amended any parts that had been highlighted as inaudible or uncertain. This process ensured that the participants and their comments corresponded accordingly. Once the focus group had been thoroughly transcribed, amended and anonymised (appendix V), each member of the research group read through the transcript a number of times and used the left hand margin to note striking or significant comments from the participants. The transcript was read through again and in the right hand margin, salient themes that captured the essence of the text were recorded.

The research group reformed and discussed what themes they had identified. Naturally, such a subjective process raises the question of reliability. However, because each researcher had generated the same or familiar themes, the data was considered as having good reliability and credibility (Elliott, Fischer & Rennie, 1999). Although the group agreed on four main themes; ‘The Schizophrenic’, ‘Emotional Responses’, ‘Social Distance’ and ‘Information’, there was considerable discussion concerning where to place some of the sub-themes before a consensus was finally achieved.

Although the researchers decided on some quotations to accompany each theme, this process was continued on an individual basis. This was in part due to time constraints, but also because different themes and quotations interested different researchers.
4.1 Findings
The four main themes and sub-themes that emerged through analysis and a quotation for each are presented in Table 2. Below is a brief account of the themes ‘The Schizophrenic’ and ‘Emotional Responses’. The themes ‘Social Distance’ and ‘Information’ have been elaborated because the author felt that they resonated throughout the transcript, tightly interrelated with the other two themes and captured the essence of the focus group.

4.1.1 The Schizophrenic
This theme referred to the participants’ understanding of schizophrenia in terms of presentation and causes. The data suggested that the participants represented schizophrenia as largely unpredictable, changeable and uncontrollable (Levey & Howells, 1995; Lawrie, 1999; Link et al., 1999). However, the data also suggested that the participants understood schizophrenia as being caused by factors such as stress, family difficulties, substance misuse and chemical imbalances in the brain.

4.1.2 Emotional Responses
Emotional responses referred to the range of emotions that were expressed in relation to schizophrenia. For example, fear and unease were associated with the unpredictable nature of the illness as found in the studies mentioned earlier. As a consequence of these emotional responses, the participants reflected on how they might respond towards schizophrenic individuals as well as considering how schizophrenic individuals might experience their world. The participants acknowledged the negative impact of the illness, and discussed idealistic views regarding a need for more support from society and family.
Table 2: Main themes, accompanying sub-themes and illustrative quotations

<table>
<thead>
<tr>
<th>The Schizophrenic</th>
<th>Quotation</th>
<th>Page &amp; line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpredictability</td>
<td>&quot;You tend to sit there perhaps and think 'I've got to be very careful what I say in case I trigger anything off'&quot;</td>
<td>(28.755-756)</td>
</tr>
<tr>
<td>Controllability</td>
<td>&quot;...they switch from one to the other and possibly without them realising that they show the other side&quot;</td>
<td>(3.84-4.85)</td>
</tr>
<tr>
<td>Changeable Personality/Mood</td>
<td>&quot;...sometimes there's something happening and they start changing their personality ...&quot;</td>
<td>(4.88-89)</td>
</tr>
<tr>
<td>Causal Factors</td>
<td>&quot;...when it develops from alcohol or drugs, maybe, the chemicals do something to the connections in the brain...&quot;</td>
<td>(31.842-844)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emotional Responses</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sympathy/Helplessness</td>
<td>&quot;A lot of sympathy, a lot of sadness and you can't do anything about them really&quot;</td>
<td>(5.136-137)</td>
</tr>
<tr>
<td>Fearfulness/Uncase</td>
<td>&quot;feel a bit afraid to if you don't understand much about it&quot;</td>
<td>(5.130)</td>
</tr>
<tr>
<td>Impact on Life</td>
<td>&quot;...every aspect of their life I think is going to be effected&quot;</td>
<td>(7.192)</td>
</tr>
<tr>
<td>Support</td>
<td>&quot;...they need a great deal of help and support...&quot;</td>
<td>(4.106)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Distance</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Other/Difference</td>
<td>&quot;...you hear people talking to themselves and then you say, 'he's not normal'&quot;</td>
<td>(15.403-404)</td>
</tr>
<tr>
<td>Isolation</td>
<td>&quot;...I think they might just feel isolated, and they're worried about what people will think of them as well, if they hear the term schizophrenic — how are they going to be treated?&quot;</td>
<td>(7.182-184)</td>
</tr>
<tr>
<td>Discrimination/Stigma</td>
<td>&quot;...I suppose there would be some people who try and deny it in some way because they don't want to be classed as schizophrenic for all the reasons we've just gone through, because they don't want to be paranoid, and constantly looking over their shoulder&quot;</td>
<td>(10.251-254)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Misinformation</td>
<td>&quot;...people think that they go of and do all these sort of crimes which I think the media blow up sort of out of all proportion&quot;</td>
<td>(5.115-117)</td>
</tr>
<tr>
<td>Lack of Knowledge</td>
<td>&quot;...people confuse serial killers and schizophrenics&quot;</td>
<td>(29.794)</td>
</tr>
<tr>
<td>Need for Education</td>
<td>&quot;Perhaps if we did know a bit more about it then everyone would be more integrated and society would be more supportive&quot;</td>
<td>(15.383-384)</td>
</tr>
</tbody>
</table>
4.1.3 Social Distance

Found in the participants descriptions of schizophrenia in this study, and a consistent finding across both social representation research and attitudinal research (e.g. Morant, 1995; Foster, 2001; Levey & Howells, 1995) was the sub-theme ‘Other’/‘Difference’. The participants’ representations of ‘Other’ and ‘Difference’ revealed where the focus group positioned themselves against individuals with schizophrenia. For example, the sense of schizophrenia as ‘other’ was expressed in terms of schizophrenic individuals living in a world and reality not experienced by the participants:

They sometime imagine different, different things, they can see people or they can hear people, but they don’t know that’s it’s not there, it’s just an imagination. (Tara)

Although the participants were able to describe their ideas about the symptoms of schizophrenia, there was a sense that they represented the illness as being outside ‘normality’. This distinction may have provided further evidence for them that they were indeed ‘different’. Although the participants did not explicitly say the word abnormal, they often made reference to the concept of a ‘switch’ between schizophrenia (abnormal) and being normal (no symptoms):

Because from my understanding they are completely normal people, which just have little, I don’t know if attacks the right word, but little, like sections where the schizophrenia shows, but then the rest of time they’re normal. (Tara)

I should think that they are quite normal people but at sometimes there’s something happening and they start changing their personality and they hear voices in their heads, and they’re always having a conversation which is not part of the reality, and then they may switch back to normal again. (Kate)

The majority of participants acknowledged that they would enact discriminative and avoidant practices towards schizophrenic individuals:

I know it sounds really horrible but if I was sitting next to...who, like I knew was schizophrenic, I’d probably...because I’ve never been in contact with them...treat them the same as if I was sitting next to...let’s just say, a criminal or murderer or something, that’s a really horrible thing to say,...you wouldn’t know how to react. (Conor)
If you told me that this person I was sitting next to was schizophrenic I would...I would sit there but I’d try and kind of ignore them completely. (Charles)

I think my immediate reaction would...it sounds horrible but my immediate reaction would be try and get away and sit somewhere else. (Cordelia)

As a consequence of these exclusionary practices, schizophrenic individuals are likely to experience discrimination and isolation (Jodelet, 1991; Levey & Howells, 1995). However, the participants appeared comfortable enough to express these thoughts and emotions openly and without fear of judgement or criticism by the other group members. In fact, the participant’s appeared to both validate and support each others views and comments.

Despite the representations appearing rather negative and anti-schizophrenia, the sense of the group was less about prejudice and intolerance, but about the participants wanting to keep themselves ‘safe’ from schizophrenia as a result of their lack of knowledge and understanding. As found in previous studies, the emotion evoked and expressed was one of fear and unease about schizophrenia. These emotions would serve to strengthen the desire to maintain a social distance. Indeed, the participants expressed being wary, uneasy and afraid of what they did not understand:

I suppose perhaps that discrimination in the sense that ... you may feel you can’t predict how a schizophrenic person may react... so you may feel a bit afraid to if you don’t understand much about it. (Tara)

I distance myself from it at the moment until I know more and how to react to it. (Charles)

4.1.4 Information

The sub-theme ‘Lack of Information’ resonated throughout the focus group. Each participant expressed that they lacked sufficient knowledge and information about schizophrenia. Moreover, that they were likely to have been misinformed through negative media portrayal:

You saw a lot more negative aspect in the media as well, like on the TV and the radio, you always hear like news bulletins of a schizophrenic perhaps committed crime or a murder etc, but it doesn’t do much for schizophrenics. (Charles)
However, the lack of knowledge encouraged discussion whereby the participants appeared as trying to be more empathic and establish a deeper understanding about schizophrenia:

But only perhaps if they're allowed to live in their experience of the world without us trying to force them to be along our route. ...they don’t know which parts are real and which parts aren’t, and um so perhaps for them everything is real – if they were allowed to believe that then things might...they might carry on and it might be okay. (Tara)

I think society sometimes push them to react in an aggressive way...like when they are not being understood ..... they become violent. (Kate)

So is it...is it society’s reaction to them that makes them do the bad stuff? Or if they were left by themselves would they...would they just be normal? Would they not do any of these bad things like...I don’t know...stealing or murdering or something like that 'cause I’m not clear where the...the crimes come from...is it society’s reaction or not that causes these things. (Cordelia)

The ‘Need for Education’ sub-theme was the participants’ attempts at readdressing the balance. Many of the participant’s believed that education would bring about a more positive and accurate portrayal of schizophrenia. In addition, that education would generate more accepting representations and eventually eradicate the old-fashioned stigmatising beliefs that have anchored the current representations:

...and education should start very young...you know maybe this generation already have their preconceived ideas but if you start at school slowly...it will be a long process I’m sure but...we can try to make the young children now understand and when they will grow up they will be teaching other things to their children I hope. (Kate)

In an educational sense issues that concern society as a whole could be integrated into a program like that...um...and it would help a lot and then children would find that they would be able to speak about it and as they got older people would be a lot more comfortable with things like that (Cordelia)

However, despite some idealistic views, the data suggested that the participants largely accepted that although information about the illness is very important, it is unlikely to shift the very strongly held beliefs and stigmatising label:

You know this whole schizophrenia label has stigmatised people for so long that even if you inform them...give them all the facts...that doesn’t mean to say...it cannot guarantee that people are going to change their mind. (Darla)
There was also the sense that the participants believed that the negative representations about schizophrenia would reduce if people had contact with these individuals, although Levey and Howells (1995) found that in some instances contact simply served to reinforce stereotypes and prejudices.
5. Discussion

The aim of this study was to explore the social representations of schizophrenia from undergraduate students. The social representation framework was useful for thinking about the participants' representations, and indeed it was interesting to observe the group process whereby the participants appeared to both question and validate each others and their own representations. Moreover, the participants representations of schizophrenia in this study largely resembled those found in previous studies (e.g. Morant, 1995; Foster, 2001, Levey & Howells, 1995).

However, given the interesting findings (which have not been given justice due to word constraints) the research process and methodological issues require addressing. Firstly, although the analysis was interpreted by the author, the authors' personal experience or understanding etc. of the topic was not made explicit (Elliott et al., 1999). As this was a qualitative piece of research, the author's perspective may have helped the reader understand the interpretation more, which may have improved the transparency of the data.

Secondly, due to practical considerations it was difficult to pilot the focus group. Although the participant's were mixed in terms of professions, no reliable comparisons could be made about professions having particular representations, as found by Zani (1993). Therefore, in terms of future research, it may be more advantageous to consider running more than one focus group that each comprised of individuals from one profession/discipline, and compare representations.

A second consideration around focus groups is whether one should be using IPA to analyse the data, because using IPA with focus groups is not standard practice. IPA aims to explore an individual's experiences from their perspective, often in a face-to-face interview. This is very difficult to achieve in a group context. Therefore, one must question the 'richness' of the data and whether the focus group and analysis captured each individuals' experience and their representation of schizophrenia. Indeed, on reading through the transcript, it was evident that a few participants had contributed much less than others.
Finally, the participants were not invited back to meet with the researchers to discuss the findings from the research (Elliott et al., 1999). Therefore, the author is unaware if her interpretations of the participants' social representations and experiences are an accurate reflection of their internal world.
6. References


APPENDIX I

FOCUS GROUP QUESTIONS
Focus Group Questions

What comes to mind when you hear the word schizophrenia?

What kinds of feelings are evoked in you when you hear the word schizophrenia?

How would you know if someone had schizophrenia?

What impact (if any) might schizophrenia have on a person’s life?

How might a diagnosis of schizophrenia affect a person’s life?

How do you think society views a person with schizophrenia?

What is the basis of your views on schizophrenia?

Where have your ideas about schizophrenia come from?
APPENDIX II

PARTICIPANT INFORMATION SHEET
PARTICIPANT INFORMATION SHEET

Title of Project:
An investigation into the social representations of schizophrenia in undergraduate students.

What is aim of this study?
We are interested in your views and opinions about schizophrenia, and where you have gathered your information (e.g. media, personal experience, conversations with other people). We do not expect people to have any expert knowledge. As far as we are concerned there are no right or wrong opinions, it is simply interesting to hear what people think, and have to say about schizophrenia.

What will the research involve?
The research will involve you participating in a focus (discussion) group, in which we will invite you to discuss and reflect on your views on schizophrenia. This should take approximately one hour. The group will be recorded (via videotape) to allow us to keep a record of what is said.

Do I have to take part?
Your participation in this study is entirely voluntary. If you decide to take part you will be asked to sign a consent form, which you keep a copy of. You will also be asked to sign a consent to videotape form. You can withdraw from the group at any stage and without giving a reason. If you decide to withdraw, any data derived from your comments will be destroyed.

Will my taking part in the study be kept confidential?
The interviews / conversations will be transcribed to enable us to analyse the data. Names, ages, and any identifying information will not be included in the final report. We therefore guarantee confidentiality and anonymity.

Who will be conducting the research?
The research is being conducted by a small group (7) of Trainee Clinical Psychologists and Trainee Counselling Psychologists.

What will happen to the results of the research study?
The results will be put into a report for the coursework requirements of the PsychD in Clinical Psychology and the PsychD in Counselling Psychology.

We thank you for your participation and hope you enjoy the group!
APPENDIX III

CONSENT FORM
CONSENT FORM

An investigation into the social representations of schizophrenia in undergraduate students

Please tick boxes as appropriate

1. I confirm that I have read and understand the information sheet for the above study.

   □

2. I have had the opportunity to ask questions which have been answered to my satisfaction.

   □

3. I understand that my participation in this study is voluntary, and that I am free to withdraw at any time, without giving any reason.

   □

4. I agree to take part in the above study.

   □

Name of Participant                Date        Signature

Name of Person taking consent      Date        Signature
APPENDIX IV

CONSENT TO VIDEO AND AUDIOTAPE RECORDING
CONSENT TO VIDEO AND AUDIOTAPE RECORDING

I consent to the video and audio recording of the focus group in which I will take part, and understand that this recording is for the sole use of the research team facilitating the group. I understand that the video and audio tapes will be completely erased by the facilitators once its contents have been used for analysis. It has been explained to me that the material that is recorded will be treated as confidential.

Name: ____________________________

Signature: _________________________

Date: ______________________________

Facilitator: _________________________

Signature: _________________________

Date: ______________________________
APPENDIX V

TRANSCRIPT OF FOCUS GROUP
**FOCUS GROUP**

|   |   | Janice: We're just sending a sheet round at the moment with sticky labels on for your names so that we can remember them. I think we'd just like to welcome you here and say thank you very much for turning up. We appreciate you giving your time to us, and we hope that you'll enjoy it. We want it to be relaxed and informal; it's not a test. But just thank you very much for coming, and hope it's fun. I'll introduce myself and then Oliver and Grace can just say a bit about themselves. My name's Janice Wood and I'm a first year student on the counselling psychology course, and we're doing a course in research methodology, and as part of that course we want to learn about focus groups. And this is a focus group! [laughs] Or what will become a focus group, so we're hoping that we're going to be able to analyse the data and submit a report on it, and that will be part of our course work, so you're doing us a big favour. Do you want to introduce yourself?  

Oliver: Yep. My name's Oliver White. Like Janice I'm a first year trainee on the counselling and psychotherapeutic psychology, Psych D. So, and as Cindy said, it's just a research project. We're as much really interested in the process of going through the kind of, well, the research process as much as the outcome of what comes up. So this is as new for us as it is for you in many ways [laughs], so it's a kind of learning experience for us all. Again I guess the important thing is to emphasise the informal nature of this. If we think of this as a kind of sand pit, if you like, where we can muck around, play, like kids and just muck around with the ideas then rather than something that is rather formal and rigid and right and wrong, which, which, isn't the kind of atmosphere we're trying to create at all. Okay.  

Grace: And I'm Grace Peters. I'm a second year clinical psychologist and our groups have obviously come together to do this research. And for those of you, I know some of you here are interested in clinical psychology so this is something you will have to do if you
<table>
<thead>
<tr>
<th></th>
<th>come onto the Surrey course, so it'll be a good experience for you. I think it's also a good experience for me because I've not run a focus group before so - enjoy it. I intend to, and thank you all for participating.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Janice</strong>: Just a couple of things that I'd like to say before we begin. First thing is that everything that's said within this room is going to be completely confidential and we're obviously going to be keeping a record, a video record, of the focus group, but when we've analysed that, then that will be destroyed so you won't have any, we don't want you to have any worries that there's information being stored on you that, that you're not going to have control over. That will be destroyed when we've all analysed the data. If any of you want information about our study, if you contact us we'll be very happy to give you the results when we've got them. When we're actually doing the group, it's my experience that sometimes you know, some people are shyer than others and it can sometimes be difficult for those people who are perhaps feeling a bit less confident, or perhaps less knowledgeable about schizophrenia to have their turn. So really be mindful of the other people in the group in terms of how much you're talking and how much other people are talking, and we don't want you to feel uncomfortable in any way. So whatever you say, whatever your opinions are we're not here to judge what you say. Your opinions are equally valid with everybody else's opinion. So please don't hold back, really, just use this as a fun time as BJ was saying, like it's a playground, it's a sort of sand pit for us to play in. I think perhaps if we just go round so if everybody at least has an idea of people's names. We've got our little name badges, but if you perhaps just say what your name is and maybe what course you're doing, or what you're doing at the University, just in a brief sentence.</td>
</tr>
<tr>
<td></td>
<td><strong>Kate</strong>: So I'm Kate, I'm from Mauritius. I've just arrived from Mauritius, I was not living here, and I've started a nursing course, a diploma in nursing, and I will be branching out in mental health in</td>
</tr>
</tbody>
</table>
Charles: I'm Charles, and I'm a first year computer modelling and simulation student.

Janice: Right

Conor: I'm Conor, first year computing and IT student.

Grace: You know me

Wesley: I'm Wesley, I do the same course computing and IT

Cordelia: I'm Cordelia, I do first year psychology

Janice: You're welcome

Lindsey: I'm Lindsey, I'm doing mental health nursing. This is my first year too.

Darla: I'm Darla and I'm a first year psychologist.

Tara: I'm Tara and I'm a first year psychology student.

Oliver: Right well, just to get the ball rolling I suppose to pose a question in the broadest sense, I'd just like to ask you what comes to mind when you hear the word Schizophrenia?

Cordelia: Well, people's moods change a lot I think, but it's not just moods, it's something, something deeper than that, that they can't control — that's what I think.

Tara: I understood it as people have very polar personalities, and they, they switch from one to the other and possibly without them
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>85</td>
<td>realising that they show the other side.</td>
<td></td>
</tr>
<tr>
<td>86</td>
<td><strong>Oliver:</strong> Right</td>
<td></td>
</tr>
<tr>
<td>87</td>
<td><strong>Kate:</strong> I should think that they are quite normal people but at</td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>sometimes there's something happening and they start changing their</td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>personality and they hear voices in their heads, and they're always</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>having a conversation which is not part of the reality, and then they</td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>may switch back to normal again.</td>
<td></td>
</tr>
<tr>
<td>92</td>
<td><strong>Lindsey:</strong> I think it comes like a sudden change in their behaviour,</td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>maybe it's because of too much pressure, stress, or something like</td>
<td></td>
</tr>
<tr>
<td>94</td>
<td>that, that's beyond their control. From time to time they change their</td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>personality.</td>
<td></td>
</tr>
<tr>
<td>96</td>
<td><strong>Oliver:</strong> Right.</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td><strong>Oliver:</strong> Could you say what kind of feelings come up in you when</td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>you hear the word schizophrenia? I mean, What kind of emotional</td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>feelings does that evoke in you, if any.</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td><strong>Darla:</strong> I have, I have quite a lot of sympathy, a lot of sympathy for</td>
<td></td>
</tr>
<tr>
<td>101</td>
<td>people suffering from schizophrenia because I think, you know,</td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>they are discriminated against because of their condition, and I think</td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>they way that people perceive them very often affects how we</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>actually treat them, which I think it is a shame because it does a great</td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>disservice to them I think...Yeah. I think, That's how I feel really,</td>
<td></td>
</tr>
<tr>
<td>106</td>
<td>you know. I think they need a great deal of help and support which I</td>
<td></td>
</tr>
<tr>
<td>107</td>
<td>don't think is always available to them.</td>
<td></td>
</tr>
<tr>
<td>108</td>
<td><strong>Oliver:</strong> Can you say more about why you feel that they're</td>
<td></td>
</tr>
<tr>
<td>109</td>
<td>discriminated against, that bit, in what way. Can you say a bit more</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>about that?</td>
<td></td>
</tr>
<tr>
<td>111</td>
<td><strong>Darla:</strong> Well I think that, you know, people have, you know, a very</td>
<td></td>
</tr>
</tbody>
</table>
fixed view of what schizophrenia is like. Most people’s sort of
general view is that, you know, they’re very mentally disturbed
people. And that, you know unless they’re sort of, unless they’re
being treated properly and cared for, you know people think that
they go of and do all these sort of crimes which I think the media
blow up sort of out of all proportion and I think that people latch
onto incidents like that and discriminate against them because of
that.

Oliver: Yeah.

Janice: What does anyone else think about that? You think they’re
discriminated against?

Charles: Well I think society as a whole, when they hear
schizophrenia they think paranoid and then there’s kind of almost a
backlash reaction towards that and I think it’s basically a lack of
knowledge towards schizophrenia persons.

Tara: I suppose perhaps that discrimination in the sense that …
you may, you may, feel you can’t predict how a schizophrenic person
may react and what may bring on a change in their character, so you
may feel a bit afraid to if you don’t understand much about it, to
approach them or be in a one on one situation in case you trigger off
something which, that you then don’t know how to help.

Grace: We’ve had a couple of emotions like sympathy and being
afraid. Are there any other sorts of emotions that hearing the word
schizophrenia evokes in people?

Wesley: A lot of sympathy, a lot of sadness and you can’t do
anything about them really

Cordelia: Well, the first word that comes to mind when I think of
schizophrenia, is just I'm uneasy about it, because I don't know what
to expect, as Tara was saying. I don't know what defines
schizophrenia because some people are told they're schizophrenic
but they're different to loads of other people who're told they're
schizophrenic. And, um, I don't know what to expect really.

Grace: And that's a really important point I think. Just sort of
thinking along those lines is, you know, how would you know if
someone has schizophrenia. I mean, what are the signs you look for?

Conor: I've never met a schizophrenic person so I don't know how
I'd act if I was... I don't really know.

Tara: I don't think I'd be able to tell if someone was or not because
it's not, it's not something, from my understanding, which is a
physical, you know that you can see it. They may be acting strangely,
or perhaps - I'm not sure if it's right - but perhaps a little violently,
or confused. So I might think that's why they're doing that, which I
might not think its schizophrenia, because I don't understand some
of it.

Lindsey: I think sometimes they are very nervous and they can be
very quiet. And sometimes they just keep walking around. Walking
and walking. Walking around. Or the smokers, they used to smoke a
lot to make sure they be rid of time. And then it's the explosion that
they cause, it's beyond their control. *******

Kate: No they're active. They never sit quietly. Like I have an uncle
who's very far away. Well, he always visits, he's always visiting
everybody in the town, but he will never sit down. You tell him,
"have a seat," "yeah, yeah, I'm going, I'm going." They never can
stay in one place. They have to move. They need lots of space, and
as long as they are harmless I don't see why not. Because they will
come back to their home and they know they can recognise people.
They recognise their family members.

Janice: Are there any other characteristics or things that you think of when you hear the word schizophrenia? Sort of, a picture that you might have of somebody who has schizophrenia?

Charles: Well I think there was the film, 'Me Myself and Irene' which was about a guy with some kind of disorder similar to schizophrenia. It wasn’t, I don’t think it was a very fair portrayal of schizophrenia as a whole because it was basically a comedy film. It may give people the wrong impression. It might not be quite what the schizophrenia people needed.

Oliver: So what kind of – broadening it out a bit – what sort of impact do you think schizophrenia might have on someone’s life? How do you think it might effect them on a daily basis as they move through their lives just like we all do really?

Cordelia: I think they might just feel isolated, and they’re worried about what people will think of them as well, If they hear the term schizophrenic – how are they going to be treated?

Darla: And I think in terms of their sort of general everyday lives, they’re… it’s quite possible that they have a great deal of difficulty holding down a job.

Oliver: Right, hmmm

Darla: And I mean that in itself will do nothing for their self-esteem. So I think that’s quite an important factor, and even the sort of aspects such as their social life are bound to be affected, well every aspect of their life I think is going to be effected. Because it has several effects on their life. As I say I think it does nothing for their self-esteem and makes it even more difficult for them to be able
to think that they can actually do something to get out of this position, or even to try and help themselves.

**Oliver:** So that it really effects a large area of their lives

**Darla:** Yes I would say so...

**Oliver:** Work, opportunities for employment and their social life

**Darla:** Yes, yes.

**Oliver:** Has anyone else got any ideas? About how might it impact?

**Kate:** The need of a good family support because if everybody— you know sometimes you have to go and look for them when they are not coming back, so they need somebody really attentive to take care of their washing, and to always keep an eye... it's very important I think for them to have a good family background. Because otherwise you know, they'll be left on their own and they need that, they understand. People perhaps sometimes don't realise but they tend to understand what's going on at sometime and then at sometime then they are cut off from the reality.

**Oliver:** Right.

**Tara:** I think that must be a very hard thing, because from my understanding they are completely normal people, which just have little, I don't know if attacks the right word, but little, like sections where the schizophrenia shows, but then the rest of time they're normal. So they understand what's, what's going on, they feel exactly the same emotions, and it must be... they must have the same wants that we, that everyone else does, but there's just something which gets in the way. And as Darla said, if they're unable to hold down a job, then they're family life.. you know, they may not be able to
support other people; or they may need more support from their family, and it must be very distressing to them.

Oliver: So there's a real sense of spaces of normality interspersed with spaces of disruption somewhat to their function.

Tara: yeah....So they can feel all the same emotions, and they can't control the little bursts in between.

Kate: And they feel what other people are doing to them. They know why they have support, where they don't have support. They know they have a problem. It's not that they don't care about it: they know about it.

Lindsey: I also think that maybe they live all the time with this fear, that anytime something is going to happen because they know they have this problem, and so they are never, like you say, in peace mentally, so there's always this fear, because they get the sign before that this ball *** is going to happen. I think that all the time it's like their life is really big problem all parts of their life is affected. Just with this fear of this is going to happen.

Oliver: So there's a sense of sort of constantly looking over your shoulder in some senses. There is something that will inevitably happen.

Lindsey: That's it, yeah.

Janice: I'm just wondering... Wesley was saying before that he thought that people with schizophrenia would feel quite a lot of sadness, and that sort of echoes what Darla and Tara were saying as well; and I'm just wondering if anybody thinks that the opposite might be true. Or that they might have a different experience that's not sadness, or do you think that all people of schizophrenia do have
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>248</td>
<td>a high level of awareness of their problem so they’re inevitably feeling sad? Do you think there's other people who have a different perspective on it?</td>
</tr>
<tr>
<td></td>
<td>249</td>
<td>Wesley: I suppose there would be some people who try and deny it in some way because they don’t want to be classed as schizophrenic for all the reasons we’ve just gone through, because they don’t want to be paranoid, and constantly looking over their shoulder.</td>
</tr>
<tr>
<td></td>
<td>251</td>
<td>Janice: Hmmmm, Hmmmm,</td>
</tr>
<tr>
<td></td>
<td>256</td>
<td>Darla: And I suppose really it's our interpretation of what we see as them, whereas they, actually... the beliefs that they have... to them they're not false, they are actually true, so the world they're living in is actually how it is, if you see what I mean. So perhaps if that's how they view the world as being as it is, perhaps for them it is a happy place to be?</td>
</tr>
<tr>
<td></td>
<td>262</td>
<td>Oliver: Right. So there’s something about: for them inside their own reality...</td>
</tr>
<tr>
<td></td>
<td>264</td>
<td>Yes, yes...</td>
</tr>
<tr>
<td></td>
<td>265</td>
<td>Oliver: That really is as strong a feeling for them as it is for us in our sense of reality...</td>
</tr>
<tr>
<td></td>
<td>267</td>
<td>Darla: Yes, yes...yeah but because we see the world differently, and we view them differently, for them, we see them as sad and feeling sad, but for them inside, because they perceive the world differently, it might not be a sad place.</td>
</tr>
<tr>
<td></td>
<td>271</td>
<td>Oliver: So there’s a sense maybe then that there might even be some positive elements to their experience..</td>
</tr>
</tbody>
</table>
Darla: Yes... For them, Yes, I think that's possible...

Oliver: Right...

Tara: But only perhaps if they're allowed to live in their experience of the world without us trying to force them to be along our route. Because, there's... from what I understand, they don't know which parts are real and which parts aren't, and um so perhaps for them everything is real — if they were allowed to believe that then things might... you know... they might carry on and it might be okay. But if we try to force them to see our reality then I should think that

Oliver: So there's a sense of a real difference between what's considered normal, and if you like “shared reality,” and then their own individual reality, and it's the tension between those two that causes the problems.

Tara: Yeah, I mean from the way I understand it, they sometime imagine different, different things, they can see people or they can hear people, but they don't know that's it's not there, it's just an imagination.

Oliver: Right

Tara: And it's only when they're told to conform that that isn't real that that's, you know, that's... hard

Oliver: Speaking more generally, maybe moving from your own sense, maybe to your sense of society more generally, how do you think society views people with schizophrenia? Well, if you're thinking about the population generally, what kind of received views, or views do we see, do you get a sense of that the way that people feel about schizophrenia more generally?
Conor: Well I think people in general see them as outsiders because they don't understand society, but just based on what the media portrays them as.

Kate: And there's a big lack of information – because the word itself will trigger some fear in some people, but there's a variety of schizophrenic cases and the general public, I think they need to be educated, taught, about the illness. And then they probably will see that the people who are suffering from schizophrenia in a different way, and society don't have enough time even for normal people now! In some places they are viewed as burdens I'm sure.

Charles: Yeah because like, Western society is moving so fast, lots of people just, kind of say, put them in a kind of room and have done with it because there's no time these days. And also it depends on kind of which culture you're from really, I mean some.. if there is they might be viewed as some kind of spirit or something, you know an evil spirit or demon.

Oliver: Right, In other cultures?

Charles: Yeah right, in less built up areas, less developed.

Oliver: Right, right...

Lindsey: Yeah, I think it depends on the culture and the family background, and most are like.. compared to my country and Europe, it's completely different you know, how they treat people. And I think it depends on the country.

Oliver: Can you say more about that, about your own experience?

Lindsey: You know. To be true my father used to suffer from this problem, but we are a strong family you see, so he just got over it
quickly, and now he’s okay completely. But he didn’t go really to a mental health hospital, spend most of the time there feeling alone or something like that. He had the depression it may be, it’s a bit the case I don’t know really, but like in Europe people don’t have time rather to look after people suffering from this problem, so they are sent into a mental health hospital, but I don’t think it’s the right solution. I think the most important thing is family background, friends and other things that’s coming around that can keep an eye on them. Like they feel secured in their mind that we are there to help them; people who are closer to them are here to help them and they will get out of the problem. It doesn’t matter if even they lose their job but they know there will be people to look after them, see? I think it’s the most important thing.

| 13 | 326 | Oliver: Right. So, social support, particularly from the family seems very important. |
| 327 | 340 | Lindsey: Yeah social support is good. |
| 328 | 342 | Oliver: And coming back to what Charles, said it sounds like that in some way is lacking in our society. |
| 329 | 344 | Charles: Yeah… |
| 330 | 345 | Oliver: We tend to kind of externalise it… |
| 331 | 346 | Charles: Concentrate on your own career, your job, your own time, and it’s too fast. Need to stop and take stock of the situation. |
| 332 | 348 | Oliver: Right…. |
| 333 | 349 | Darla: I think a lot of schizophrenic people, you know, because of their condition, it’s tended to lead to them to become very isolated, so they end up actually in the end with no family support at all. So I
think, you know, some of these people are very much on their own and they don’t get the support they need. You know, families don’t want to know. I mean there are some families of course who are very supportive but then equally I’m sure, there are some families who are not, or just cannot, have not been able to cope with the condition, and there are many of them on their own.

Tara: I think it’s perhaps true in England that the whole variety of mental disorders where there’s just such a lack of education about it, and unless you’ve had first hand experience, you just don’t think about it, and that of course then leads to the problem that people don’t understand it if they were to come across a person with Schizophrenia and they wouldn’t know how to react and they wouldn’t know how to help, because I think most people would want to keep their life as normal as possible, but just because you don’t understand, you find it hard to know what’s right and how it is best to help out. And I think that’s true with all disorders. They just tend to be ignored and kept quiet and hush hush.

Janice: Do other people agree with that? Or do you think that there’s something slightly different about Schizophrenia that sets it apart from other disorders? I’m not really sure what I think about that. Does anyone have any ideas what they think?

Cordelia: Well the thing is that nobody knows much about a lot of disorders, as Tara said, and there should be more education starting from school age, because me personally, I wasn’t taught anything about these kind of disorders during school. I mean, we’re taught sex education, there’s more emphasis on that, there’s more emphasis on you know, accepting all colours, all races and things like that, but they just shun that to one side; they think it’s not important, children don’t need to know about it. Well, that’s what I think for my view. Because I’m just sitting here, I really don’t know much about it at all, because of that, I just really don’t know.
15
tara: Perhaps if we did know a bit more about it then everyone
would be more integrated and society would be more supportive,
everyone that you know, jobs and families, you could support more,
it’s not that perhaps you don’t want to, it’s that you just don’t
understand enough about it to know what’s best. And that probably
leads to the isolation as much as the actual schizophrenia itself, but
it’s just the reaction and the lack of education about it.

oliver: It sounds like there’s a real sense that we don’t know enough
[everyone: yeah, yeah...]. Literally we in this room don’t know
enough about it. But I’m very surprised that given that you’ve
actually been able to articulate a lot of very clear and distinct ideas
about this condition. And I suppose the next thing that comes to
mind is, where do you think your ideas have come from? We’ve said
quite a lot here about the condition schizophrenia, or the kind of
emotions it generates, or the effect we think it has on society, and
the effect that that kind of diagnosis might have on their individual
lives on a daily basis. Where has this information come from? Where
have you got your ideas about what schizophrenia is and everything
we’ve talked about so far?

kate: Mostly from the people we have seen on the streets, because
since you are very young, you go around and you hear people talking
to themselves and then you say, “he’s not normal.” The children will
look, you know? And then you will get information from your
parents or whoever is with you, “oh don’t worry, this person has a
problem.” And it comes from there, and you grow up and you start
learning more. Especially if you have family member then you get
more information, but then you start treating the people differently.
But it comes as your experiences... even still now I can see
somebody from schizophrenia, I believe, but in a different way
because it might be a different type of schizophrenia, which is
different, but you should be open always to new experiences and
new learnings. I think.
Darla: I think a lot of information also comes from the media, because by and large, if there is a violent incident, for example, which is highlighted in the newspaper, and then usually for the next two days you get articles about schizophrenia, so they're trying to inform people more about the condition. So I think quite a lot of the information comes through the media. And I think, you know, some people who have perhaps had an experience with dealing with schizophrenic people and so have gained a fair bit of knowledge that way.

Tara: I've worked with people who have behavioural disorders, no one, it was a school for children and I was just an assistant, no-one had schizophrenia there, but it gave me a lot of insight into general behavioural and personality disorders. I then went on to work with adults with schizophrenia, but it was just very much... I wasn't anything to do with the therapy, I was just, helping them horse ride actually, so we didn't discuss anything to do with the schizophrenia, it was just there time out, their time to relax. But obviously I'm doing psychology so I am interested in disorders like that. I've seen a couple of films about schizophrenia; there's one out at the moment about someone who won the Nobel Prize...

Darla: Called 'Beautiful Mind'...

Tara: Yes, that's it, and I think because I've, what that taught me, it's they're very normal, their IQ is within the normal human range, so they do understand everything. I think because of my basis of the other disorders, you can compare it a little bit; but then of course it was just a film, so you don't know how true it is, when that's the only knowledge that you have, you have to take that as something to go by.

Janice: Have other people watched films that have got people who are schizophrenic, or is it that one in particular.
Grace: Wesley was saying....

Charles: Well, it was 'Me, Myself and Irene,' but that was a very
more concentrated on the comedy really. But, I don't think it was a
fair representation to be honest.

Janice: I'm just thinking of other forms of media that other people
might have... are aware of reading articles in the newspapers on
schizophrenia perhaps?

Janice: No, you're shaking your head then Wesley because ********.
How what about other people?

Darla: Yeah, it's mostly newspapers that I've seen, television
programmes as well from time to time.

Janice: Right.

Oliver: So Tara, it sounds like your experience is kind of routed in,
well, quite a lot of personal experience by the sound of it, up to this
point anyway. Plus I think you said that the movie...

Tara: Hmmm, it's, I didn't really learn much about schizophrenia
when I was working with the adults because it was very much... you
know trying to... that was their time away from it, you know, just to
relax. So we weren't asked to question them about anything or try
and bring up any conversation. So it was limited.

Oliver: Can anyone else say anything about where they've got the
ideas from that they've brought here today, their contributions?

Lindsey: Can be level of intelligence or interest in the problem, and
past experience, or what you feel emotions when you see someone
like that, or hear about this problem. If you feel sad for these people,
<table>
<thead>
<tr>
<th></th>
<th>470</th>
<th>maybe you want to know more about it, more about the problem.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>471</td>
<td>You will be interested in it, like when you see an article in the paper,</td>
</tr>
<tr>
<td></td>
<td>472</td>
<td>you go through it and are interested, but if you are not really</td>
</tr>
<tr>
<td></td>
<td>473</td>
<td>interested, so you say no and leave it, and not read it. Maybe it’s your</td>
</tr>
<tr>
<td></td>
<td>474</td>
<td>personal interest in this problem. That’s my point of view.</td>
</tr>
<tr>
<td></td>
<td>475</td>
<td><strong>Oliver</strong>: So it sounds like, Lindsey you’ve got some of your ideas</td>
</tr>
<tr>
<td></td>
<td>476</td>
<td>from, well sounds like a lot of family personal experience to a certain</td>
</tr>
<tr>
<td></td>
<td>477</td>
<td>extent but also interest and reading. And Darla you got yours from</td>
</tr>
<tr>
<td></td>
<td>478</td>
<td>the media…</td>
</tr>
<tr>
<td></td>
<td>479</td>
<td><strong>Darla</strong>: Yes, I’ve also, I used to work in an accident and emergency</td>
</tr>
<tr>
<td></td>
<td>480</td>
<td>department and of course the only time that we ever came into</td>
</tr>
<tr>
<td></td>
<td>481</td>
<td>contact with schizophrenics there, was when they were creating</td>
</tr>
<tr>
<td></td>
<td>482</td>
<td>some disturbance, and they were usually brought in, or very often</td>
</tr>
<tr>
<td></td>
<td>483</td>
<td>brought in by, with the police. Because perhaps a member of the</td>
</tr>
<tr>
<td></td>
<td>484</td>
<td>public will phone up and have said there was a problem, but then</td>
</tr>
<tr>
<td></td>
<td>485</td>
<td>they were usually passed on the psychiatric department, or sort of to</td>
</tr>
<tr>
<td></td>
<td>486</td>
<td>deal with them. So from our point of view we only ever saw it from a</td>
</tr>
<tr>
<td></td>
<td>487</td>
<td>very negative aspect, you know they were there because they had</td>
</tr>
<tr>
<td></td>
<td>488</td>
<td>been, you know creating, you know, were violent or whatever else.</td>
</tr>
<tr>
<td></td>
<td>489</td>
<td>So I couldn’t ever say that I learnt very much about them from that</td>
</tr>
<tr>
<td></td>
<td>490</td>
<td>one incident. And as I say they were then passed on to, you know to</td>
</tr>
<tr>
<td></td>
<td>491</td>
<td>be dealt with, with the appropriate department really.</td>
</tr>
<tr>
<td></td>
<td>492</td>
<td><strong>Charles</strong>: Well yeah, like Darla was saying you saw a lot more</td>
</tr>
<tr>
<td></td>
<td>493</td>
<td>negative aspect in the media as well, like on the TV and the radio,</td>
</tr>
<tr>
<td></td>
<td>494</td>
<td>you always hear like news bulletins of a schizophrenic perhaps</td>
</tr>
<tr>
<td></td>
<td>495</td>
<td>committed crime or a murder etc, but it doesn’t do much for</td>
</tr>
<tr>
<td></td>
<td>496</td>
<td>schizophrenics in general, but there’s a big… that also creates a kind</td>
</tr>
<tr>
<td></td>
<td>497</td>
<td>of a general fear in the public, but people, if people knew more, well</td>
</tr>
<tr>
<td></td>
<td>498</td>
<td>if there were more education on the subject, then maybe there might</td>
</tr>
<tr>
<td></td>
<td>499</td>
<td>be some sympathy towards them, and perhaps understanding of</td>
</tr>
<tr>
<td></td>
<td>500</td>
<td>what they might be going through. I mean, when I hear this on the</td>
</tr>
</tbody>
</table>
radio, I don't know, I just react as kind of an intrigued person, because it’s on the radio, and it doesn’t affect me. But I’m sure if I met this individual in public I would be quite scared, but it’s kind of, I distance myself from it at the moment until I know more and how to react to it. So, that’s my opinion.

**Oliver:** Right....Can you say what your idea about that is, ? Do you... how do you...

**Wesley:** What? Idea about....sorry...

**Oliver:** About what Charles said about the notion that often the image that's created is the one that’s in the media. There doesn’t seem to be much real information, accurate information about it, so at the moment

**Charles:** there is the negative side but there is very little information about how to deal with it...

**Wesley:** Yeah that's always the way with the media. Always concentrating on the bad news because no-one really wants to hear good news. It’s not as interesting is it?

**Kate:** They want to sell the newspapers... Use it as a element to sell the papers maybe. It’s always on the first page.

**Oliver:** Something sensationalised...

????? Yes, yes...

**Kate:** It's blown up. I think it can happen but once I was reading about a schizophrenic who couldn’t remember if he’d killed his father in law or not. And it was making ever such a big splash on the newspapers, and it's not proven and who knows? But it was creating
Research Dossier
Qualitative Research Project: Appendix V

20 20 20 20

Conor: I think, generally, when people hear things like that when he
526 527 528 529 530 531 532
528 couldn’t remember if he killed someone, because the society doesn’t
529 have, doesn’t know very much information about the condition they
530 might see it as an excuse, rather than, because they don’t know
531 enough about it.
532
533 Oliver: Right, so it sounds like you’re saying, Conor, that there’s a
534 feeling that they actually have more control over the behaviour
535 than...
536
537 Conor: Yeah, I’m saying that’s because of lack of understanding and
538
539 Oliver: yeah...yeah, and there’s a feeling that one might use it as an
539 excuse......yeah
540
541 Charles: That also works the other way, I mean sometimes people
542
543 think that the schizophrenics have no control at all, whereas the
544 actual people in question might have quite a bit of control over how
545 they move, and their actual... due to the general lack of
546 information...
547
548 Kate: I think society sometimes push them to react in an aggressive
549
550 way...like when they are not being understood they are being
551 reprimanded or...er...locked up or something like that they become
552 violent..
553
554 ??: mmm
555
556 Kate: ... but its normal because they should be left to lead a quite
557 normal life in a normal environment but they just need time and
558 extra care that’s all...but if you start reacting aggressively towards
559 them its normal they will have a reaction like everybody else would
Cordelia: So is it... is it society’s reaction to them that makes them do the bad stuff? Or if they were left by themselves would they... would they just be normal? Would they not do any of these bad things like... I don’t know... stealing or murdering or something like that ‘cause I'm not clear where the... the crimes come from... is it society’s reaction or not that causes these things. I don’t know if anyone has any ideas about that... ’cause I don’t know.

[about 5 second pause]

Kate: I think there are lots of schizophrenics roaming in the city... walking around... but they are very harmless. If there is any problem I think it wouldn’t come from them it would come from those who are staying... er... within a family or... they will hurt people they know... I think... or people who have been telling them things they didn’t like. But they won’t hurt anybody on the street... you know... you will never find somebody schizophrenic coming and hitting you on the street. It will be more likely to be a normal human being [laughter]. They don’t react... they will just walk round, talk to themselves, watch... and... sometimes start talking, making a speech and... they are quite harmless. We shouldn’t fear them as we fear... we should fear other people... If they have... they have a space around them I think they become quite pacific.

Tara: Perhaps there are different... um... levels and different types... um... and perhaps some... um... are more extreme and some of the ways it shows... um... are more calm or more violent... but probably if they feel isolated by society... if they don’t feel understood then that makes it worse because... um... if they were to lose their job I mean... that... that would... that would make them very angry and they wouldn’t, you know, have more time to do... to
do nothing so they...that might turn negative...um...I should think
that...I just think if there was more support then...the, the cases of
crime in the crime sense would be less.  [about 7 second pause]

Oliver: so it sounds like there's a real sense that there is
not...um...enough support...as you said...and not enough
information for us either...those two things seem to have come out
quite...quite strongly here.  [about 5 second pause]

Oliver: it seems like you were asking a question...a rhetorical
question to the group about is it a chicken and egg type situation?
Are they...are they violent...um...because of something about their
illness and we respond to that or...do we treat them in a way that
makes them angry or gives them a...generates feelings in them and
then they behave in accordance with those feelings.

Cordelia: The thing is it's a bit of both really isn't it...because of
their condition...yeah if somebody reacted to a normal person 'cause
they thought they were a bit weird they wouldn't suddenly lash out
and do something bad but a schizophrenic would so...it is to do
with them but then it is to do with the reaction of society.  [about 7
second pause]

Grace: I'm just wondering...if you had more information or people
had more information about schizophrenia would they...do you
think they would respond any differently to the way they do
now...would it make a difference?

Lindsey: To be true I think yes. It depends how you describe
it...in terms of...how do you understand if there are different levels
of...people...the way they react...and if you had more information
then you can...you can help maybe...I think it's the lack of
information that must make people and the media...the negative
aspects of the term and...um...yeah that's it.
Conor: I think if people had more contact with people with schizophrenia as well...I mean its all very well having the information but if you...if you’ve still never had contact its still quite...it seems quite, I don’t know,...that you still really don’t know how...how to deal with it.

Kate: Because when the people have information then they can know how to handle the problem if they have one...the fear that they have is when they are faced with a situation and they don’t know how to handle the situation...they don’t have the information so it creates a gap...and...but if they have information then they would know how to react...how to keep the situation under control...

Conor: Like a chip pan fire.

Kate: yes [laughter].

Darla: I still don’t think that you could absolutely guarantee that by informing people you going to change their opinion...[general agreement from group]...I think that...you know this whole schizophrenia label has stigmatized people for so long that even if you inform them...give them all the facts...you know...that doesn’t mean to say...it cannot guarantee that people are going to change their mind...I mean you know, everybody knows the facts about the dangers of smoking...but that doesn’t make people stop smoking...they still carry on doing it so in the same way however well informed people are...um...its no guarantee that they’re going to change their opinions and views I think.

Charles: I think people have become...well society as a general whole...has become so polarised by other peoples opinions...the media and suchlike...there is, that it’s going to be very hard to actually get them to understand what schizophrenia is...like...was saying its a very stigmatized point of view that they hold and I
think...due to the fast pace we have its going to stay that way as well. So...

Tara: And perhaps there's...that's as...um...sorry I've forgotten your name...

Lindsey: Lindsey

Tara: ...um...it depends on whether you want to...whether your personal interest is...you want to find out you want to understand and um...perhaps as here...because we're here and we do want to help and we do want to understand...um...but other people who, you know, might...its not to do with them so...[general agreement from group].

Lindsey: I do agree but...you can change their mind I think...it depends like in the sense of their feelings and emotions...maybe now they don't care about it but once the problem happen to lets say close member of the family to them...their wife or their husband or their child...a close friend maybe...then they will start to react with feeling...you know...like they will have this weakness...to focus a bit more on the problem...I think its like a trigger in there that now they have to think about it because it happened once in the family...it can happen again with someone else...I think...*********

Kate: And education should start very young...you know maybe this generation already have their preconceived ideas but if you start at school slowly...it will be a long process I'm sure but...we can try to make the young children now understand and when they will grow up they will be teaching other things to their children I hope.

Cordelia: I.I agree with that point...um...because my mum is a head of a primary school and she does similar things to teach children how to...to be able to talk about things that people maybe a
bit older find a bit difficult to talk about like their own emotions...and so far...they call it circle time where the children sit around in a circle and they'll say things like I like apples or I don't and they start with simple things like that and then they go on to say I don't like it when somebody hits me but I like it when somebody...um...says I'm doing good work and if you start off with the simple things like that then perhaps...um...in an educational sense issues that concern society as a whole could be integrated into a program like that...um...and it would help a lot and then children would find that they would be able to speak about it and as they got older people would be a lot more comfortable with things like that.

Oliver: It sounds like the view generally is that...um...that society is not comfortable with the idea of someone with schizophrenia...um...and I wonder if we could kind of focus that right down on a kind of individual sense here...um...and if I created a kind of...right off of the top of my head vignette where you were let's say for arguments sake...sat next to someone in a pub or in a bus or something like that and I said to you that they were schizophrenic how would that make you personally feel? If society feels uncomfortable how do you feel personally?

Cordelia: I think my immediate reaction would...it sounds horrible but my immediate reaction would be try and get away and sit somewhere else...I mean that sounds really horrible but that is my first reaction...and maybe later on I'd think a bit more about it and think that maybe that wasn't a nice thing to do but 'cause I'm uneasy about things like that...about things I don't know about and I have no control over...yeah I might be sitting there thinking oh they might suddenly do something...um...so I'd just move.

Oliver: It sounds quite frightening.

General mmmms
Janice: Well I appreciate your honesty because it's quite difficult sometimes to say that sort of thing isn't it...you know...but we're all human beings and we might intellectually understand what schizophrenia involves but...you know at a sort of visceral level...if we're sitting right next to somebody and our survival...we perceive that our survival might be at stake...you know it can be really very...um...frightening. Yeah.

Oliver: How does that scenario impact on other people here?

Charles: I've well I've personally never knowingly met a schizophrenic person so I don't know if you told me that this person I was sitting next to was schizophrenic I would I would sit there but I'd try and kind of ignore them completely and if they started talking to me I'd be polite and talk back but I wouldn't I would be you know treading amongst broken glass because it would be a very hard topic to talk about really I wouldn't know what to say and I wouldn't want to like cause any friction that might start something off.

Oliver: Right.

Wesley: I would say if they weren't doing anything to me then I wouldn't do anything to them, I'd be quite happy...but I do feel inclined towards Sarah's point of view...it can be scary.

Oliver: At the very least it would make you feel uneasy [general agreement from group]

Kate: You wouldn't feel like...as if you were sitting next to a normal person on the bus...you would know that this person was special and you would try to keep an eye on his movements and...its automatic you know...if you feel like you can't handle it you will have to change seats and...being a woman I would say this but...I don't know like a normal human being after some time you will say I
| 27 | 727 | need some space. |
| 728 | **Oliver:** Right. |
| 729 | **Darla:** And I think that is the problem with this label... because it immediately evokes this sense of unease... you know if you’re just sitting next to them on the bus and you don’t know they’re schizophrenic well you don’t know anything else so everything is alright... but as soon as somebody says do you know that person sitting next to you is a schizophrenic, immediately, you know, your stomach would [Kate: churn inside] start to churn and you start to think well... you know... they’re alright, I’ll stay sitting where I am, they’re alright, they’re not doing anything but... there is going to be that sense of unease simply because that word has been said. |
| 739 | **Tara:** I don’t think I... um... would feel uneasy or afraid... um... because... maybe because I’ve worked with them and seen them and... I think I’d try and act normally... [laughter in group]... but I might overdo it... [more laughter]... I might be thinking am I being normal, am I being normal... [more laughter]... ?? are you thinking of... so it might not work out too well if I tried. |
| 746 | **Oliver:** So it sounds like trying to sum that up... it sounds like that at the very least, whether it be a kind of neutral response in some ways or maybe a sense of unease on the other hand, it sounds like it would for everyone... the one common element is that it would increase your kind of vigilance in the situation... you can kind of... |
| 751 | **Tara:** As much to yourself though as to them... You know... what am I doing? Is my reaction OK?... Am I being normal?... probably would be thinking about what should I be doing to... you know... make this OK. |
Darla: You tend to sit there perhaps and think I’ve got to be very careful what I say in case I trigger anything off (general agreement from the group)...I think that would perhaps go through people’s minds.

Grace: there’s this real sense as well...this very sense of triggering something off...it’s like what were you expecting to happen...there’s this unpredictability about someone with schizophrenia [Darla: um...that’s right]

Tara: perhaps their unpredictability is much from the lack of our knowledge as from the disorder...

Janice: you looked as though you were about to say something.

Lindsey: yeah I think its not...two elements...that once you are afraid, or you are just taking precautions...you are not at ease...I, you are, just thinking if something happens would I be able to handle this situation...or not... and then...um...if you feel you’ll...you’ll be weak you won’t be strong enough to handle this person...and then maybe you’ll be afraid...but if you say, no its OK, I’ll be able to handle it...if its a child...say no it won’t be so violent...I’ll be able to handle it whatever happen...and then you will feel at ease with this person.

Oliver: right...

Janice: so your worry there would...um... focus more on the sort of the physical [Lindsey: physical aspect yeah] dangers...um...yeah...whereas was talking about the sort of social embarrassment issues that...um... you’d be wanting to appear very normal, in case they’d realise that you [laughter]...you...you were thinking that there might be something wrong with them.
Oliver: has anyone else got anything to add to that... at all?

Conor: um I'd like...um I know it sounds really horrible but if I was sitting next to...if I was sitting next to someone who, like I knew was schizophrenic, I'd probably...because I've never been in contact with them...cos...I'd probably like... treat them the same as if I was sitting next to...lets just say, a criminal or murderer or something, that's a really horrible thing to say because I know its...they're completely different things but, because you don't...cos you've never met anyone like that before, you wouldn't know...you wouldn't know how to react.

Kate: people confuse serial killers and schizophrenics...

[laughter]...[agreement]

Charles: the media's portrayal of schizophrenia

Oliver: that's because of what sorry?.......right, yeah

Tara: its just...awful...I mean its awful...*** but theres no

Kate: yeah they confuse all the...[Tara: yeah]...?????

Tara: yeah and that for them...going back to what I said earlier how must they feel...I mean that just...to be labelled as that...when you are completely, you know...if there are different levels and some people may never be violent they may just hear voices if any... it must just be...it must be terrible, and it must make you feel like you don't want to be in society...um because you'll be labelled that way so then you would just stay in and then you become isolated and then probably things just spiral down.

Oliver: well, just before we wrap up...um...has anyone else got anything to add at all to the discussion we've had that um, maybe
they’ve thought about at some point, but haven’t yet had a chance to articulate...

Kate: Well, I’ve been travelling a lot...and um...I’ve seem to find that um...schizophrenia is um...evenly um...distributed all around the world, so there’s...we can’t say that there’s more schizophrenics in England than in Mauritius...but racial wise I think it’s well balanced all around the world...you have the same amount...yah...but some...I think, some schizophrenia is triggered by perhaps alcohol or drugs?...I’m not sure...I...that’s the feeling I have, that’s the feeling I have.

Tara: I was just wondering if anyone knew what the incidence of schizophrenia is because I mean...um...I’ve never come into contact with anyone, anywhere, oh you know only when I was working with the group yes but...in my life...um...I’m just wondering how...it...it’s rare? Or if it’s just that when people are diagnosed they get taken away or something...does anyone know?

Cordelia: I seem to remember hearing...it’s probably on the radio or something...um...that there are quite a few people...um...in around that don’t actually know they are schizophrenic cos it’s such a low level that they can live with the schizophrenia and just not know about it at all...but that you know, you could suspect that somebody is but they don’t know about it themselves. I don’t know about the incidence.

Grace: I just want to pick up on what Kate was just saying about how...um...its...schizophrenia develops, and you were sort of saying about drugs and alcohol, and I was just wondering if anyone else has any ideas about how actually it develops in some way.

Lindsey: they’re too much under pressure sometimes, stress [Grace: stress] yah, too much to do, can be family problems, they can’t
<table>
<thead>
<tr>
<th>Line</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>839</td>
<td>handle it mentally, morally.</td>
</tr>
<tr>
<td>840</td>
<td><strong>Kate:</strong> It could be a sort of ... shut off valve you know? Just don't want to ... its ... could be like a nervous breakdown in a way....</td>
</tr>
<tr>
<td>842</td>
<td><strong>Cordelia:</strong> maybe when, when it develops from alcohol or drugs, maybe, um the chemicals do something to the connections in the brain which um, makes it work differently and makes you makes you hear voices in your head, maybe that's what happens in those cases.</td>
</tr>
<tr>
<td>846</td>
<td><strong>Darla:</strong> and I think if you, people have had a sort of either very stressful situation, or particularly poor relationships with members of their family, it might actually develop as a reaction to that, perhaps</td>
</tr>
<tr>
<td>849</td>
<td><strong>Grace:</strong> way to cope</td>
</tr>
<tr>
<td>850</td>
<td><strong>Darla:</strong> yeah [6 second pause] I think the main worry, well, the main worry, concern that I have, is that I don't personally think that there is enough support and care for schizophrenics um... and I'm not suggesting that we go back to the old... days, with, you know with great long, huge great, you know, mental hospitals or that sort of thing, but I think that, you know, community care... to my way of thinking has not worked particularly well for some of these people, a, particularly for those completely on their own and are just depending on a carer, social carer... um... so although that sort of system was set up to help people like that, I think its... in many cases its failed and I think the fact that as you say, you do see these people sort off wondering around the street and, you know, some are more disturbed than others, you know, is a reflection of that failure... and I think something like that is a situation that really seriously needs to be addressed... I think its failed because there's never been enough financial investment in it... and, and, you know, the very system that was set up to help people in this position, and its failed miserably in my opinion.</td>
</tr>
</tbody>
</table>
32 868 Grace: what do other people think ... on what Darla has just said...

870 Kate: they are quite vulnerable too because they are subject to attacks..., there have been cases where schizophrenics have been killed on the streets...its quite common...in Mauritius I know there was a guy, a small one...he was killed, and raped and because he was vulnerable, he was an easy catch for the criminals....

875 Janice: Wesley, do you have any ideas about causes?

876 Wesley: no, I've got to say, I'm one of the least educated here on the um...subject...[laughter], it's true...

878 Janice: anyone else have any ideas it doesn't matter if they are wrong ideas, or just interesting, don't necessarily know any of the answers

880 Tara: I think as well as the causes, um... the treatment that I've heard off...um... I'm not sure if it is still used widely now, but it certainly was before, is the electric convulsive? Is it called, I mean I'm sure that would turn anyone mad [laughter] ***but...just I was reading about it actually in a book so...I think it was a fairly good source of factual information and it just, I mean it sounded like torture it just sounded horrendous and you wonder if um...after that, you know, how you could, I don't think it could have helped you know the emotional drain and physical pain and it must just have been terrible, um how you could have come out of that wanted to live a normal life. I don't know, it sounded like it belonged in like a prison of war camp or something [Kate: torture] yeah.

892 Cordelia: I was going to say more about the causes, you know, I wasn't going to really say that I know about what causes it...but um... it seems, according to what I've heard, that it is inherited throughout generations, not...not by everyone obviously, but um it
is...does have...you know it is inherited sometimes, and perhaps it is
something to do with...the genes maybe, I mean, there might be one
particular gene, but I think that'll be too easy, I think is more of a
complicated condition, maybe there are lots of different genes which
um...put together causes this condition.

Oliver: well, I think we can probably wrap it up now unless anyone
else has got anything to add to the discussion OK...well, personally
I'd like to say this has been a very, very interesting discussion, and
it's been um... very interesting, it's been a pleasure to hear your
contributions to this, so...thank you very much indeed.

Janice: yes thank you, thanks for being willing to be very honest
and sort of brave, you know, maybe putting forward controversial
views that's really, really good of you to be generous enough to be
honest, so thanks...great ........Shall we get something to eat then
and drink?

END OF TRANSCRIPT
MAJOR RESEARCH PROJECT

An investigation of the comorbidity and relationship between post-traumatic stress disorder, personality disorders and Axis-I disorders in a psychiatric outpatient population of active duty armed forces personnel

JULY 2003
YEAR 3
ACKNOWLEDGEMENTS

My thanks go to Dr Stanley Renwick (Head of MoD Psychological Services) and the MoD's Ethics committee for allowing me to undertake my major research project within the military. I also thank the Community Mental Health teams from Aldershot (Duchess of Kent Barracks), Tidworth Delhi Barracks, RAF Brize Norton, Colchester and Waterbeach for their support and contributions. I particularly thank Ms Annette Sexton, Mr Andy Gritt, Ms Fiona Cameron and Ms Caroline McSherry for providing me with participants for the major research and for their unquestionable support. Without the kind contribution from Mr John Caldwell scoring the MCMI-III by hand would have been a nightmare. I am eternally grateful! I especially thank Dr Brian Solts and Dr Nashater Deu for their support, supervision and guidance throughout the entirety of the major research project.
Abstract

Title: An investigation of the comorbidity and relationship between post-traumatic stress disorder, personality disorders and Axis-I disorders in a psychiatric outpatient population of active duty armed forces personnel.

Main Objectives:
To investigate the types of traumatic events that lead to post-traumatic stress disorder (PTSD) and whether personality disorder (PD) acts as a possible exacerbating factor in the experience of PTSD and other Axis-I disorders from the Diagnostic and Statistical Manual for Mental Disorders (American Psychiatric Association; APA, DSM-IV, 1994), and also to establish differences in the prevalence of particular PDs among participants with PTSD and those without PTSD.

Design and Setting:
The study employed a retrospective, comparative between and within groups design. Participants were recruited from Army and RAF military outpatient psychiatric settings (Department of Community Psychiatry; DCP) around the UK.

Participants:
Participants were a UK sample population of active duty armed forces personnel presenting for treatment at a DCP. Of the sample population (n = 46), 21 met criteria for PTSD on the Posttraumatic stress Diagnostic Scale (PDS; Foa, 1995) and were assigned to the experimental PTSD group. As the remaining 25 participants did not meet PTSD diagnostic, they formed the Non-PTSD group. All female personnel were excluded from the study, as were males presenting with an organic or psychotic disorder.

Main outcome measures:
Each participant completed the PDS and the Millon Clinical Multiaxial Inventory-III (MCMI-III; Millon, 1994) and was interviewed by the Trainee Clinical Psychologist using the Structured Clinical Interview for DSM-IV Axis II disorders (SCID-II; First, Gibbon, Spitzer, Williams & Benjamin, 1997).
Results:
No significant differences were found between the two groups regarding the presence of PD or types of PDs identified. Participants with PTSD were found to have more Cluster A PDs and participants in the Non-PTSD group had more Cluster B PDs. In this study, the presence of PD made no difference to PTSD symptom severity. Alcohol dependence was not observed to be a significant comorbid Axis-I disorder in either group. The comorbid PTSD-PD group had higher MCM-I-III mean BR scores for anxiety, dysthymia, major depression, somatoform and delusional disorder compared with the other groups. No difference was observed between the groups on the number or types of traumas experienced. Participants who just failed to meet PTSD diagnostic criteria may have influenced the results, although this finding was not statistically significant.

Conclusion:
PTSD may be underdiagnosed when trauma is not the obvious presenting problem; therefore the disorder should be screened for during routine psychiatric interviews. Relying on cut-off scores on PTSD diagnostic tools may result in those individuals with sub-threshold levels of PTSD being misdiagnosed. Diagnostic measures should not be used in isolation of other clarifying information.
1. Introduction

This research aims to investigate the comorbidity and relationship between PTSD, PD and Axis-I disorders in active duty armed forces personnel. Numerous studies have already examined comorbid PTSD and Axis-I disorders within DSM-III (APA, 1980) and DSM-III-R (APA, 1987) and to a lesser extent, PTSD and some Axis-II PDs within community, psychiatric and combat veteran populations (e.g. Lauterbach, 2001; Zanarini, Frankenburg, Dubo, Sickel, Trikha, Levin & Reynolds 1998; Barrett, Resnick, Foy, Dansky, Flanders & Stroup, 1996). More recently, interest has grown in exploring PTSD within active duty (i.e. currently employed) military personnel. This interest appears to be primarily driven from the United States Veterans Administration Centre (e.g. Wolfe, Erickson, Sharkansky, King, & King, 1999). What appears to have been neglected within the US and UK literature however, is the identification of PD in active duty military personnel presenting with PTSD.

Active duty personnel are often exposed to highly stressful and dangerous situations (e.g. peacekeeping, combat). Such experiences may result in them being at increased risk for developing PTSD (Bolton, Litz, Britt, Adler & Roemer, 2001), although there is the counterargument that the military environment and preparedness for military duties (e.g. realistic expectations about specific military operations) may actually lessen the likelihood of PTSD development (Wolfe et al., 1999; Stretch, Marlowe, Wright, Bliese, Knudson & Hoover, 1996). An exploration of the types of events leading to PTSD, and also of the presence of PD may contribute towards an understanding of whether character pathology is a possible exacerbating factor in the course and severity of PTSD and other Axis-I disorders (Southwick, Yehuda & Giller, 1993). In addition, this area of research may have implications for military personnel and clinical practice.

In order to address the research hypotheses stated at the end of this introduction, and to outline the main concepts in sufficient detail, the introduction has been divided into three sections; i) PTSD, ii) PD and iii) comorbidity studies. To begin, a brief history of how PTSD became recognised as a psychiatric disorder will be considered before discussing more recent perspectives. Secondly, unravelling the complexities that surround PD far exceeds the scope of this research. Therefore, only particular issues deemed pertinent to the research
hypotheses, such as definition, diagnosis and classification are discussed. Prevalence of PD and implications for active duty personnel are considered. The third section focuses on comorbidity studies within PTSD and PD research, starting with a brief examination and discussion of comorbid PTSD and Axis-I disorders and comorbid PD and Axis-I disorders. The latter part of this section will discuss studies that have examined PD and PTSD comorbidity. Precedence is given to those studies that have used military personnel over comparative populations. The introduction concludes with the rationale for the research and the research hypotheses.
2. Post Traumatic Stress Disorder (PTSD)

2.1 A brief history of PTSD

Tragedies, disasters and exposure to traumatic events are not a new phenomenon. During the Victorian times, the arrival of mass transport brought with it the experience of mass transport catastrophes (Yule, Williams & Joseph, 1999) and early evidence for post-traumatic reactions. For example, Erichsen (1866) documented that following a railway accident, individuals presented with exaggerated psychological reactions such as tiredness, anxiety, nightmares and perceptual disorders. He linked these reactions to the effects of microtraumas to the spinal cord and aptly derived the concept of "railroad spine syndrome". Erichsen's concept typified what we know today as PTSD and his was one of the first papers to be published in medical literature relating to post-traumatic reactions.

Much of the research into traumatic stress evolved from studies of soldiers' reactions following trench warfare. During the early part of the 20th century, war traumatisation and the reactions of soldiers in combat were being researched from a psychiatric viewpoint. C. S. Myers, a British Military Psychiatrist, introduced the term "shell-shock" into the specialist literature in 1915, following his experiences treating traumatised soldiers returning from the firing line during World War I (WWI; Lamprecht & Sack, 2002). Shell-shock was originally conceived in physical terms rather than being recognised as a psychological reaction. This was because the symptoms of shell-shock, amnesia, nightmares and flashbacks, were believed to be the result of shells exploding near the soldier causing damage to the physical nervous system. However, this assumption was challenged when it became apparent that some soldiers developed the same symptoms, but had not experienced shells exploding near them (Yule et al., 1999). By the end of WWI, approximately 80,000 soldiers from Britain had presented with symptoms of shell-shock (Holden, 1998).

As interest in traumatic stress evolved, so did concepts and definitions. During World War II, Kardiner (1941) developed the concept of "post-trauma syndrome", whereby symptoms included outbursts of aggression, irritability, exaggerated startle response and being fixated on the traumatic event. Later, beliefs that predisposing factors may have played a vital role in combat sequelae lead to the concept of "war neurosis" (Glass, 1969). However, it was the
consequences of the Vietnam War that led to the recognition of the syndrome PTSD (Figley, 1978).

Studies concerning combat reactions led to the inclusion of the diagnosis "gross stress reactions" in the first edition of the DSM (APA, 1952). This was replaced with "transient situational disturbance" in DSM-II (APA, 1968). However, because both diagnoses lacked an operational definition, the reliability of the diagnosis was uncertain (Lam.precht & Sack, 2002). PTSD was formally included in DSM-III (APA, 1980) as an anxiety disorder following an investigation into post-war stress of Vietnam veterans. The inclusion of PTSD in DSM-III and revisions in DSM-III-R (APA, 1987) marked an important shift in the conceptualisation of trauma related disorders. Specifically, it was accepted that an incident or event perceived as 'outside the usual human experience' could lead to PTSD symptomatology.

2.2 Current diagnostic criteria for PTSD

PTSD remains classified as an anxiety disorder in DSM-IV (APA, 1994) because the fundamental components of anxiety in behavioural, cognitive and physiological responses are evident in the disorder (Jones & Barlow, 1990). DSM-IV stipulates that for a diagnosis of PTSD to be made, an individual must satisfy six diagnostic criteria (see Box 1, p. 246).

The criterion stipulates that the main feature of PTSD is the exposure to a traumatic stressor. Studies of war veterans, particularly combat veterans, have suggested that the degree of combat exposure positively correlated with the incidence and/or severity of PTSD (Foy, Sipprelle, Rueger & Carroll, 1984). However, the relationship between trauma exposure and PTSD is a complex one. Epidemiological research has strongly suggested that the rate of trauma exposure outweighs the occurrence of PTSD. Hence, not everyone exposed to a traumatic event or even the same event will develop PTSD (Breslau, Kessler, Chilcoat, Schultz, Davis, & Andreski, 1998). Moreover, some studies have found that an extreme traumatic event is not always the critical element for PTSD. Hence, PTSD can occur following uncomplicated medical procedures, 'normal' loss, an accumulation of less severe stressors or one chronic stressful event (Scott & Stradling, 1994).
BOX 1: DSM-IV diagnostic criteria for PTSD

A: The individual must have witnessed, experienced or confronted a life-threatening event or events that involved actual death or serious injury and reacted with intense fear, helplessness, or horror

B: The traumatic event is frequently re-experienced through unwanted distressing recollections, nightmares, flashbacks and stimuli that resemble the traumatic event

C: The individual must persistently avoid stimuli associated with the trauma (e.g. conversations, people and places), may present with amnesia to aspects of the event and may present with numbing of responses, such as restricted affect, marked disinterest in pleasurable activities and lack of involvement with others

D: The individual experiences some form of hyperarousal, such as hypervigilance, exaggerated startle response and difficulty falling or staying asleep

E: The duration of symptoms stipulated in B, C and D persists for more than one month

F: The above symptoms must cause clinically significant impairment in daily functioning.

The symptoms of PTSD may develop days, weeks or even years following the traumatic event.

i) ‘Acute’ phase: the duration of symptoms is less than three months.

ii) ‘Chronic’ phase: the duration of symptoms are more than three months.

iii) ‘Delayed onset’: symptom onset at least six months after exposure to the traumatic event.

2.3 Traumatic events associated with PTSD

Studies investigating the traumatic events associated with PTSD have reported that women were more likely than men to develop the disorder following a physical attack, including rape (Helzer, Lee, Robins & McEvoy, 1987; National Comorbidity Survey1 (NCS), Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995), discovering a spouse’s affair and having a miscarriage (Helzer et al., 1987). Men were more likely than women to develop PTSD after witnessing the death or injury of someone, or being involved in combat (Helzer et al., 1987; National Vietnam Veterans Readjustment Survey (NVVRS), Kulka, Schlenger, Fairbank, Hough, Jordon, Marmar & Weiss, 1990; Kessler et al., 1995). Some other traumatic events associated with PTSD are presented in Table 1, p. 247 (Volpe, 1996).

1 The NCS is a collaborative epidemiological investigation of the prevalence, cause and consequence of psychiatric comorbidity and morbidity in the USA. The NCS was conducted between September 1990 and February 1992 on 8,098 respondents aged 15-54 years.
Table 1: Traumatic events associated with PTSD

<table>
<thead>
<tr>
<th>Traumatic Event</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Disasters</td>
<td>Hurricanes, floods, earthquakes, volcanic eruptions, avalanches</td>
</tr>
<tr>
<td>Accidental Disasters</td>
<td>Road traffic accidents, plane crashes, train crashes, fires, explosions</td>
</tr>
<tr>
<td>Terrorism</td>
<td>Bombings, being a political prisoner, POW, hostage, hijacking</td>
</tr>
<tr>
<td>Military/War Atrocities</td>
<td>Mass death, peacekeeping, body-handling, identifying human remains</td>
</tr>
<tr>
<td>Violent Personal Assaults</td>
<td>Child Sexual Abuse, rape, physical abuse, spousal battery</td>
</tr>
</tbody>
</table>

2.4 Risk factors for development of PTSD

Since research findings have suggested that not everyone with PTSD has been exposed to an adverse or traumatic event, later studies have investigated other possible risk factors for PTSD development (Davis & Breslau, 1998; see Table 2).

Table 2: Risk factors for PTSD

<table>
<thead>
<tr>
<th>Source</th>
<th>Risk factor</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davidson, Hughes, Blazer &amp; George (1991)</td>
<td>Environmental</td>
<td>History of prior exposure to trauma or chronic stress</td>
</tr>
<tr>
<td>King, King, Foy &amp; Gudanowski (1996)</td>
<td>Demographic</td>
<td>Lack of functional social support and/or family instability</td>
</tr>
<tr>
<td>Breslau et al. (1998)</td>
<td>Prior psychiatric disorders</td>
<td>Gender, low education &amp; income</td>
</tr>
<tr>
<td>Breslau et al. (1998)</td>
<td>Cognitive</td>
<td>Anxiety or substance abuses</td>
</tr>
<tr>
<td>Macklin, Metzger, Litz, McNally, Lasko, Orr &amp; Pitman (1998)</td>
<td>Genetic</td>
<td>Lower intellectual functioning</td>
</tr>
<tr>
<td>Davidson, Swartz, Storck, Krishnan, &amp; Hammett (1985)</td>
<td>Genetic</td>
<td>Individuals' with PTSD had first degree relatives and parents with mood disorders, anxiety and substance abuse</td>
</tr>
</tbody>
</table>

Despite increased research interest into the risk factors for PTSD, it continues to remain relatively unclear whether the risk factors imply a predisposition to PTSD per se, or reflect a general predisposition to a psychiatric illness caused by an adverse event (Yehuda & McFarlane, 1995). Understanding risk factors is limited by the vast differences between individuals, and therefore for determining exactly how or why some individuals develop PTSD and others do not. Risk factors that appear to lead to PTSD may be contaminated or complicated by the presence of co-occurring Axis-I disorders or PD, making it more difficult to associate factors related only to PTSD. Research regarding protective factors that act as a buffer to the disorder may help understand more about risk factors for PTSD.
Differences in methodology must be considered when attempting to generalise the findings regarding risk factors across different populations. For example, Davidson et al. (1991) examined a community sample using the Diagnostic Interview Schedule (DIS; Robins, Helzer, Croghan & Ratliff, 1981). This diagnostic tool, although widely used with community samples, has little research evidence for its diagnostic performance. Findings from the NVVRS (Kulka et al., 1990) suggested that the DIS may poorly identify PTSD in community samples where there is less prevalence of PTSD compared with combat veteran settings.

2.4.1 Personality as a risk factor for PTSD

The role of personality in the etiology of PTSD remains uncertain because of a lack of clarity about what constitutes a normal response to an extremely traumatic event (McFarlane, 1990). McFarlane argued that an individual’s response to a ‘traumatic’ event is basically determined by the personal meaning they have placed on the event and other premorbid characteristics. Thus, an individual’s cognitive set at the time of the ‘traumatic’ event may significantly impact on their behaviour and influence their capacity to survive. In his study of a massive Australian bushfire disaster, McFarlane (1988) reported how some individuals perceived the disaster as a personal challenge for survival, and rather stimulating. Hence, despite the magnitude of the disaster, the perceived threat was not necessarily subjectively distressing.

Janoff-Bulman (1985) suggested that an individual may be vulnerable to PTSD because of a relationship that exists between the nature of the trauma and its impact on personality structures. Specifically, an individual’s core beliefs about the self and world may become ‘shattered’ by the traumatic experience. Thus, the individual shifts from believing that they are invulnerable (e.g. I am a strong person) to the belief that they are indeed vulnerable (e.g. I am a weak person). Janoff-Bulman proposed that the idea of shattered beliefs following a traumatic experience implies that the beliefs were not secure in the first instance. Supporting research for this ‘vulnerability model’ is sparse because prospective studies are often difficult to design (i.e. unable to anticipate when a ‘traumatic’ event will occur or identifying individuals prior to a traumatic event), and retrospective studies may be subjected to recall bias or methodological problems when assessing personality variables (Williams, 1999).
Williams (1989) suggested that personality characteristics such as negative attitudes and attributional styles, can affect the expression and course of PTSD. For example, negative attitudes towards emotional states could lead to strong avoidant tendencies in behaviour, cognition and affect. Consequently, the successful processing of traumatic events into previously held beliefs about the self, world and others become blocked (Horowitz, Bonanno, & Holen, 1993). Research in this area has largely focussed on personality as a maintaining factor for PTSD rather than the impact of personality attributes on the expression and course of PTSD (Williams, 1999).

Prospective longitudinal research with populations who are most at risk of experiencing trauma, such as the rescue services (fire-fighters, paramedics) and active duty personnel may help elucidate hypotheses about the role of personality in PTSD and the relationship between personality and trauma exposure. An exploration of individuals among these populations who have coped well with trauma and whose attributional styles towards traumatic experiences are positive and functional, may shed light on the critical factors involved in the development, expression and course of PTSD.

2.5 Psychometric assessment of PTSD

Psychometric assessment of PTSD can be clinician rated such as the Structured Clinical Interview for DSM-IV Axis-I disorders (SCID-I) clinical version (First, Spitzer, Gibbon & Williams, 1997) and Clinician-Administered PTSD Scale-Form 1 (CAPS 1; Blake, Weathers, Nagy, Kaloupek, Klauminzer, Charney, & Keane, 1990) or self-report, such as the Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995) and Impact of Events Scale (IES; Zilberg, Weiss & Horowitz, 1982).

2.5.1 Clinician rated interviews

Clinician rated interviews, whether they are structured or semi-structured, aim to ensure all the PTSD symptomatology is examined in detail. An advantage of clinician rated interviews is that the interviewee can discuss their traumatic experiences using their own words, and the clinician can observe behaviours pertinent to the disorder (e.g. hyperarousal and avoidance) to inform the clinical decision-making process (Newman, Kaloupek & Keane, 1996).
The most widely used semi-structured interview across a variety of trauma populations is the SCID-I (First et al., 1997). The SCID-I was developed to increase diagnostic reliability and validity of Axis-I disorders through standardisation of the assessment process and by systematically probing for symptoms pertaining to the disorder.

The SCID-I has demonstrated excellent reliability (kappas range from .70 to 1.00) and correlates well with other PTSD diagnostic instruments such as the Mississippi Scale for Combat-Related PTSD (Keane, Caddell & Taylor, 1988) and the self-report measure Posttraumatic stress Diagnostic Scale (PDS; Foa, 1995). However, because the measure of lifetime PTSD is based on the interviewee's most distressing experience, the SCID may overestimate its occurrence (Newman et al., 1996). The CAPS-I (Blake et al., 1990) addresses the limitations of the semi-structured interviews by considering specific criteria for the range, intensity and frequency of symptoms and associated features. The CAPS-I has good reliability and convergent validity with the SCID-I ($r = .89$).

2.5.2 Self-report measures

Self-report measures have the advantage over clinician rated interviews by being less time consuming, having no influence of an interviewer on the interviewee's responses and can be useful for individuals who have difficulty articulating trauma-related symptoms (Sheeran & Zimmerman, 2002). The Impact of Events Scale (IES; Zilberg et al., 1982) is a 15 item questionnaire and the most widely used self-report measure across different trauma samples. The IES assesses the extent of avoidance/numbing and intrusive symptoms rather than the full range of PTSD symptoms, but has good sensitivity (0.91) and moderate specificity (0.61).

By comparison, the PDS (Foa, 1995) has been structured to reflect the PTSD diagnostic criteria in DSM-IV (APA, 1994). The PDS is designed to help detect and diagnose PTSD, and quantify the severity of PTSD symptoms (see method section 6.3.1, p. 279 for further details on the PDS). The PDS has demonstrated high internal consistency, test-retest reliability (0.93), good sensitivity (0.89) and specificity (0.78; Foa, Cashman, Jaycox & Perry, 1997; Sheeran & Zimmerman, 2002). The PDS has demonstrated high diagnostic agreement (82%) with the PTSD module from the SCID-I (First et al., 1997) and has good concurrent
and convergent validity with other measures of psychopathology (Foa et al., 1997). However, the PDS does not detect whether someone is over or under-reporting their symptoms, leading to false positive or false negative outcomes.

Although the above instruments enable the clinician to determine a basic understanding of PTSD, caution should be given when attempting to diagnose PTSD in isolation of other clarifying information. The diagnostic usefulness of different PTSD measures may vary across specific populations. For example, the development of instruments for specific trauma populations (e.g. combat veterans) may not perform as well when used across other trauma populations (e.g. community, Newman et al., 1996).

2.6 Prevalence of PTSD

Few epidemiological studies are available that provide true figures of the prevalence and incidence of PTSD for specific trauma populations and the general population. Estimates of prevalence rates have tended to be cited from studies undertaken in the USA (see below). There are no large-scale epidemiological studies of PTSD from the UK.

2.6.1 General population

Helzer et al. (1987) reported findings from a US nationwide general population survey on psychiatric disorders. Approximately 1-2% of the general US population (i.e. 5 men and 13 women per 1000) met criteria for lifetime PTSD based on DSM-III (1980). However, the prevalence rate reported in this study was considered an underestimation because subsequent studies have placed PTSD prevalence rates much higher. Resnick, Kilpatrick, Dansky, Saunders and Best (1993) reported a PTSD prevalence rate of 12.3% for women following experiences of rape. Findings from the NCS (Kessler et al., 1995) suggested that approximately 7.8% of Americans were estimated to experience PTSD at some point in their lifetime, affecting 10.4% of women compared with 5% of men. Table 3 (p. 252) shows the lifetime prevalence rates of a range of traumatic experiences leading to PTSD. The figures are based on gender differences (Kessler et al., 1995).
Table 3: Lifetime prevalence of trauma (NCS; Kessler et al., 1995)

<table>
<thead>
<tr>
<th>Traumatic stressor</th>
<th>Lifetime prevalence of trauma</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men %</td>
</tr>
<tr>
<td>Rape</td>
<td>0.7</td>
</tr>
<tr>
<td>Sexual molestation</td>
<td>2.8</td>
</tr>
<tr>
<td>Physical attack</td>
<td>11.1*</td>
</tr>
<tr>
<td>Combat</td>
<td>6.4*</td>
</tr>
<tr>
<td>Being threatened with a weapon</td>
<td>19.0*</td>
</tr>
<tr>
<td>Childhood physical abuse</td>
<td>3.2</td>
</tr>
<tr>
<td>Childhood neglect</td>
<td>2.1</td>
</tr>
<tr>
<td>Natural disaster</td>
<td>18.9*</td>
</tr>
<tr>
<td>Accident</td>
<td>25.0*</td>
</tr>
<tr>
<td>Witnessing the death of another person</td>
<td>35.6*</td>
</tr>
</tbody>
</table>

Note: * Gender differences significant at the 0.05 level (two-tailed).

Specific differences in prevalence rates are noted between studies investigating community and military populations, and between men and women. These differences may be a consequence of variation in methodology, assessment and diagnostic criteria and sampling. PTSD was diagnosed in the Helzer et al. (1987) study using DSM-III criteria, whereas Resnick et al. (1993) and Kessler et al. (1995) used DSM-III-R criteria. In addition, in Resnick’s study, interviews about rape experiences were conducted over the telephone. This ensured a degree of anonymity and may have contributed to the high number of women respondents. Helzer et al. (1987), however, conducted face-to-face interviews, which may have influenced the participant’s responses to the questions posed (Kessler et al., 1995).

2.6.2 Military population

Most of the trauma research has typically been carried out with American Vietnam veterans regarding the psychological effects of war. There are no large scale prevalence studies of trauma experiences from British veterans or on active duty personnel (Hunt & Robbins, 2001). Helzer et al. (1987) cited that the highest level of trauma-induced symptoms was reported in combat veterans wounded in Vietnam. Of this small group (n=15), 20% met full diagnostic criteria for PTSD. The NVVRS (Kulka et al., 1990) of 3,016 American Vietnam veterans revealed an estimated lifetime PTSD prevalence rate of 30.9% in men, with a current rate of 15.2%, and lifetime PTSD prevalence rate of 26.9% in women, with a current rate of 8.1%. A few papers have been published using British military populations involved in the Falklands. O’Brien and Hughes (1991) documented that 22% of their sample
responded positively to items about PTSD (DSM-III, 1980) symptomatology on a questionnaire. Omer, Lynch and Seed (1994) found a 63% rate of PTSD from the 53 Falklands war veterans who responded to a postal questionnaire.

Studies examining PTSD following conflict in Northern Ireland have not considered prevalence rates but instead the rate of PTSD in compensation claimants (e.g. Curran, Bell, Murray, Loughrey, Roddy & Rocke, 1990). Consequently, the view exists that some combat veterans over-report their symptoms to present themselves as being disabled by military experiences to obtain compensation (Richman, Frueh & Libet, 1994). Therefore, extreme caution is required when interpreting the findings and making assumptions about the prevalence of PTSD in the population.

2.7 PTSD in active duty military personnel

Although American and British soldiers experienced combat in the recent Gulf War (Gulf War II, 2003), it is often the case that military personnel have limited opportunity for combat-related experiences. PTSD therefore is often experienced as a consequence of the stresses of peacekeeping and other everyday duties. Pre-military trauma (i.e. civilian trauma experienced before joining the military) has also been implicated as increasing the risk for PTSD during active-duty (Barrett et al., 1996).

2.7.1 Peacekeeping

The role of peacekeeping operations has traditionally involved maintaining a strictly neutral presence, observing, monitoring and overseeing peace accords between formerly warring parties (Moskos & Burke, 1994). Peacekeeping duties also include working alongside local citizens' groups to provide emergency relief, clearing mines, demobilizing former fighters and reintegrating them into society (www.un.org). Given the peacekeepers duties, it is unsurprising that they are often exposed to ongoing, unpredictable and uncontrollable life-threatening events. For example, during peacekeeping operations in Lebanon, UN peacekeepers were subjected to terrorist attacks, sniper-fire and hostage-taking. Although peacekeeping requires impartiality, neutrality and restraint, the soldier is trained for combat and therefore faced with role-conflict (Litz, 1996). Witnessing atrocities against civilians
without the opportunity to help, and being subjected to incidents without permission to return fire, seem to represent especially severe trauma typical for the peacekeeper in contrast to the traditional combat soldier (Weisaeth, Mehlum & Mortensen, 1996). The main concerns for peacekeepers have been their perceptions of powerlessness and the lack of concrete operational goals and objectives. Therefore, the rules of peacekeeping are not as clear-cut as they are in combat.

2.7.2 Combat
Many PTSD studies are retrospective in design because determining a traumatic event is extremely difficult (Williams, 1999). However, using a prospective design Wolfe et al., (1999) was able to examine the rates and predictors of PTSD immediately following the 1991 Persian Gulf War, and then two years later, in 2,949 male and female Gulf War veterans. At Time 1, participants completed a number of self-report measures assessing demographic information, experiences of the Gulf region and psychological outcomes, including PTSD. At follow-up (Time 2; two years later), the participants completed another set of self-report measures. The authors reported that although the rates of PTSD were initially low, the rates of PTSD doubled over a period of two years. Furthermore, women and personnel who experienced high levels of combat were at increased risk for PTSD both following the War and two years later. Stretch et al., (1996) found PTSD prevalence rates of 8.0% for the active duty veterans involved in the 1991 Persian Gulf War.

2.7.3 Non-combat duties
Military personnel are also called upon to support rescue services following major accidents/disasters. Leffler and Dembert (1998) reported how U.S. Navy Occupational Divers were required to recover the remains of 230 adult and children passengers following a plane crash. The authors argued that military personnel involved in dangerous and stressful operations were at risk for PTSD. Although the risk for PTSD increases when faced with stressful or dangerous duties, military personnel are probably at equal risk (as the rescue service they are supporting) to develop PTSD as a consequence of the event itself (e.g. recovering bodies). However, personal meaning placed on the event and other risk factors need to be factored into the equation.
2.7.4 Pre-military trauma

Stretch, Knudson and Durand (1998) investigated the effects of pre-military and military trauma on the psychological well-being of active duty personnel. They reported significant gender differences in the traumas experienced. Female personnel reported more pre-military traumas (specifically sexual traumas) than male personnel, who reported more military related traumas. Although not examined in active duty personnel, Barrett et al. (1996) investigated the relationship between combat exposure and adult antisocial behaviour in 2,490 Vietnam veterans. They found a significant association between childhood behavioural problems and PTSD and later adult antisocial behaviour. The authors suggested that exposure to traumatic events during late adolescence and prior to a military career significantly impacted on later adult functioning.

2.8 Considerations when researching PTSD

Although our understanding of the nature of trauma is increasing, why some events perceived as traumatic for one particular population, but may not be perceived as traumatic for another, remains unanswered. Studies have demonstrated that different types of trauma may have a different impact on an individual's responses, resilience and vulnerabilities (McFarlane 1990). Personal meaning placed on the event, personality and premorbid characteristics result in difficulties grouping traumatic events into distinct categories; for instance, those that are traumatic and those that are not traumatic (Kessler, Sonnega, Bromet, Hughes, Nelson, & Breslau, 1999). Perhaps less emphasis should be placed on trying to categorise traumatic events because of the difficulties reported above. Moreover, because important clinical information can be missed through categorisation, consideration of the qualitative aspects of trauma (e.g. extent, severity and expression) may supplement current research regarding what differentiates individuals who have experienced a traumatic event but failed to meet diagnostic criteria, from those who do meet PTSD criteria.
3. Personality Disorders

The term ‘personality’ may be commonly used within psychiatry, yet its definition remains somewhat unclear (Livesley, 2001). However, a general agreement appears to exist in the research literature that personality refers to regularities and consistencies in behaviour and forms of experience (Bromley, 1977); to behaviours that persist across situations and occasions, as well as consistencies in thinking, perceiving and feeling (Livesley, 2001), and the organization and integration of various qualities that compose an individual (Cervone & Shoda, 1999). It is these elements that elucidate our ideas and understanding of PDs (Livesley, 2001). In psychiatry, the construct of personality is largely considered within the ‘medical model’ of psychiatric disorders. Within this model, a PD is a “category of mental illness, with discrete boundaries between normality and pathology, and between one personality and another” (Livesley, 2001, p. 44). However, in psychology models, the relationship between personality and personality disorder is not regarded as being either absent or present, but instead as being a continuum along a dimension between normality and pathology (Livesley, 2001).

3.1 Definition of personality disorder

A satisfactory systematic definition for PD has yet to be provided although many definitions have been proposed (some cited in Table 4, p. 257). Although the definitions are not completely adequate, they do contain several assumptions about the central features of PDs, such as chronic interpersonal difficulties and problems with the self or identity (Livesley, 2001).

3.2 The DSM-IV personality disorders

There are currently twelve PDs included in DSM-IV (Table 5, p. 258) which are grouped into three clusters based on descriptive similarities. PDs grouped in Cluster A are characterised as odd or eccentric; Cluster B PDs are characterised as dramatic, emotional or erratic; and Cluster C PDs, as anxious or fearful. A number of revisions from DSM-III-R were made within the DSM-IV criteria sets for the PDs. Passive-aggressive PD was down graded to the appendix for further research on its utility and efficiency (Wetzler & Morey, 1999). A new PD: ‘depressive’ was added to the appendix requiring further study (Ryder & Bagby, 1999). Two PDs, ‘masochistic’ and ‘sadistic’ approved for inclusion by the DSM-III-R Advisory
Committee were deleted entirely from the DSM-IV manual (Widiger, 1995). The rationale for the deletion of these personalities was due to the lack of adequate scientific research and empirical support, together with their continuing controversial characteristics (Widiger, 1995).

### Table 4: Some definitions of personality disorder

<table>
<thead>
<tr>
<th>Source</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schneider (1923)</td>
<td>Abnormal personalities who either suffer personally because of their abnormality or make a community suffer because of it (p.3)</td>
</tr>
<tr>
<td>Vallaint &amp; Perry (1980)</td>
<td>The tendency to create a vicious cycle in which already precarious interpersonal relationships are made worse by the person’s mode of adaptation (p. 1563)</td>
</tr>
<tr>
<td>Rutter (1987)</td>
<td>Characterised by a persistent, pervasive abnormality in social relationships and social functioning generally (p.454)</td>
</tr>
<tr>
<td>ICD-10 (WHO, 1992)</td>
<td>A severe disturbance in the characterological constitution and behavioural tendencies of the individual, usually involving several areas of the personality and nearly always associated with considerable personal and social disruption (Section F60; World Health Organisation)</td>
</tr>
<tr>
<td>DSM-IV (APA, 1994)</td>
<td>An enduring pattern of inner experience and behaviour that deviates markedly from the expectations of the individual’s culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment (p.629)</td>
</tr>
</tbody>
</table>

### 3.3 Categorical verses dimensional classification

#### 3.3.1 Categorical approach

Mental disorders conceptualised within a categorical approach are generally accepted as discrete pathological entities that exhibit varying degrees of severity. A categorical classification system such as DSM-IV assumes a distinction between Axis-I and Axis-II disorders and classifies each disorder as present or absent, according to whether the specified diagnostic criteria has, or has not, been met (Haslam, 2003). This classification system therefore assumes that PDs are “qualitatively distinct clinical syndromes” (APA, 1994, p. 633) that advocates demarcation between normality and abnormality (Livesley, Schroeder, Jackson & Jang, 1994).
Table 5: DSM-IV (and DSM-III-R deleted) personality disorders

<table>
<thead>
<tr>
<th>Label</th>
<th>Personality disorder characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cluster A</strong></td>
<td></td>
</tr>
<tr>
<td>Paranoid</td>
<td>pervasive pattern of distrust and suspiciousness of others</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>acute discomfort in close relationships, cognitive or perceptual distortions, eccentricities in behaviour</td>
</tr>
<tr>
<td>Schizoid</td>
<td>detachment from social relationships, restricted emotional experience and expression</td>
</tr>
<tr>
<td><strong>Cluster B</strong></td>
<td></td>
</tr>
<tr>
<td>Antisocial</td>
<td>longstanding disregard and violation of the rights of others, onset by age 15</td>
</tr>
<tr>
<td>Borderline</td>
<td>pervasive instability of emotions, self-image and interpersonal relationships</td>
</tr>
<tr>
<td>Histrionic</td>
<td>pervasive pattern of excessive emotionality and attention-seeking</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>pervasive grandiosity, lack of empathy and a need for admiration</td>
</tr>
<tr>
<td><strong>Cluster C</strong></td>
<td></td>
</tr>
<tr>
<td>Avoidant</td>
<td>social inhibition, hypersensitive to negative evaluation, feelings of inadequacy</td>
</tr>
<tr>
<td>Dependent</td>
<td>pervasive clinginess and submissiveness, need to be cared for, fear of separation</td>
</tr>
<tr>
<td>Obsessive-</td>
<td>preoccupation with orderliness, perfectionism, and mental and interpersonal control, inflexible</td>
</tr>
<tr>
<td>Compulsive</td>
<td></td>
</tr>
</tbody>
</table>

**Personality Disorder Not Otherwise Specified:**
This category is considered when the individual's personality pattern meets the general criteria for a personality disorder and evidence of traits of several different personality disorders, but not a specific personality disorder. In addition, personality disorder NOS is used when the individual's personality pattern meets the general criteria for a personality disorder but the personality disorder is not included in the classification.

**Appendix**

<table>
<thead>
<tr>
<th>Label</th>
<th>Personality disorder characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressive</td>
<td>pervasive pattern of depressive cognitions and behaviours, pessimistic, negativistic, critical of self and others</td>
</tr>
<tr>
<td>Negativistic (passive-aggressive)</td>
<td>hurting others passively, aggressively not doing things: failing to keep promises, deliberately withholding needed information, doing anything except the thing someone wants you to do</td>
</tr>
</tbody>
</table>

**DSM-III-R deleted**

<table>
<thead>
<tr>
<th>Label</th>
<th>Personality disorder characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masochistic (self-defeating)</td>
<td>avoid pleasurable experiences, a tendency to undermine themselves when they have opportunities to succeed, and choose relationships that will inevitably hurt them</td>
</tr>
<tr>
<td>Sadistic (aggressive)</td>
<td>cruel, demeaning, they enjoy hurting others and live to inflict pain, whether physical or psychological</td>
</tr>
</tbody>
</table>
Advocates of the categorical approach argue that conceptualising PD as dichotomous makes it easier for clinicians to diagnose based on specific criteria. Thus, if the individual does not possess the sufficient number of symptoms or indicators, then it can be assumed that they do not possess a PD (Livesley et al., 1994). The failure of this approach to consider personality traits as part of a continuum rejects information about the degree to which an individual may exhibit a particular PD. This approach tries to separate intrinsically entwined constructs by placing a division between normality and disorder.

3.3.2 Dimensional approach

Critics of the categorical approach have argued for PD classification to be made dimensionally (Lynam & Widiger, 2001; Livesley et al., 1994; Widiger & Costa, 1994). Advocates of the dimensional approach state that their view is theoretically consistent with patterns of symptoms that can be observed clinically. Although largely accepting the notion of distinct PDs, dimensional theorists propose that personality composes a cluster of traits that allow conceptual continuity between normal and disordered personalities (Livesley et al., 1994). Consistent with DSM-III-R, the dimensional approach assumes that PD lies at the extreme position on the continuum of normal personality (e.g. Millon, 1981). However, being positioned at the extreme of a dimension does not necessarily indicate personality pathology (Livesley et al., 1994). The dimensional approach argues that dichotomising behaviour that exists along a continuum diminishes the reliability of diagnosis. Furthermore, that discrete categorisation of disorders permits unnecessarily high rates of comorbidity among PDs (Haslam, 2003; Livesley et al., 1994). Dimensional models that attempt to understand PD categories as configurations of basic dimensions of personality include the five-factor model (Widiger & Costa, 1994) and 18-factor model (Livesley, 1998).

The dimensional approach can supplement the categorical approach by providing further information about the degree to which an individual exhibits particular personality traits within particular PDs and the extent to which the individual has a PD. This may be achieved through examining responses on PD measures, whether self report (e.g. Millon Clinical Multiaxial Inventories; MCMI, MCMI-II, MCMI-III; Millon, 1977, 1987, 1994) or structured interview (e.g. Structured Clinical Interview for DSM-III-R and DSM-IV Axis-II disorders,
SCID-II; First, Spitzer, Gibbon, & Williams, 1995; First, Gibbon, Spitzer, Williams, & Benjamin, 1997).

3.4 Axis-I and personality disorder distinction

The distinction between Axis-I disorders and PDs was formalised in the DSM-III (1980) multiaxial classification system. The rationale for this decision was to “insure that consideration is given to the possible presence of disorders that are frequently overlooked when attention is directed to the usually more florid Axis-I disorder” (APA, 1980, p.26). The implications of this distinction were that it permitted clinicians to diagnose both a dysfunction of personality and a clinical syndrome. Moreover, the introduction of improved operational descriptions increased the reliability in diagnosing and reduced the decisions about choosing which disorder was the ‘most’ problematic (Francis, 1980). However, assuming a distinction exists between the axes has fuelled beliefs that maybe Axis-I disorders and PDs are mutually exclusive (Livesley, 2001). Debates about whether certain PDs (e.g. avoidant) are exaggerated Axis-I disorders (e.g. social phobia; Liebotwitz, 1992) or whether PDs can be treated with a course of pharmacotherapy rather than psychotherapy (Livesley, 2001) continues. The tendency to blur distinctions between the axes inevitably leads to problems with classification; particularly when trying to distinguish between a chronic Axis-I disorder and a PD (Tyrer, 1995).

3.5 Psychometric assessment of personality disorders

A central issue in PD research is whether PDs can be diagnosed effectively and accurately through semi-structured clinical interviews or self-report questionnaires (Clark & Harrison, 2001).

3.5.1 Semi-structured interview

When considering categorical diagnoses, semi-structured interviews are often the norm, and the preferred method for research (Widiger & Costa, 1994). This is because they allow for a degree of clinical judgement, objectivity and clarification of enduring traits by requiring the interviewee to provide examples that support their affirmation. For example, the SCID-II (First et al., 1995; 1997) provides the clinician with a checklist of features (i.e. personality traits, attitude, and behaviour) unique to each PD. Thus, in the avoidant PD criterion, social
inhibition and feelings of inadequacy are typical avoidant traits. When many of the traits occur together, a diagnosis of PD would be made. The SCID-II has a cut-off score for each PD. Hence, for a diagnosis of avoidant PD to be considered, the individual must meet criteria for four out of seven items (see appendices I to XIII for the SCID-II diagnostic criteria for each DSM-IV PD).

Inter-rater reliability of semi-structured interviews (agreement; kappa) was calculated to be .60 (Zimmerman, 1994). Reliability was higher for joint compared with separate interviews and for skilled interviewers compared with newly trained interviewers (Zimmerman, 1994). The most widely used diagnostically based measures are the International Personality Disorder Examination (IPDE; Loranger, 1995, 1999) and the SCID-II (First et al., 1995; 1997; see method section 6.3.3, p. 282 for details of the SCID-II). With regards to convergent validity, studies have reported mixed results between interview-based measures. A comparison of the IPDE and SCID-II across studies of outpatients in the US yielded low to medium kappas of .38 to .40 for any PD, and for specific PDs; .35, .46 and .50 (Clark & Harrison, 2001).

Maffei, Fossati, Agostoni, Barraco, Bagnato, Deborah, Namia, Novella and Petrachi (1997) assessed the inter-rater reliability and internal consistency of the new version of the SCID-II for DSM-IV PDs (SCID-II 2.0) on 231 patients admitted to the Medical Psychology and Psychotherapy Unit in Italy. Inter-rater reliability coefficients ranged from .48 (for mixed PD) to .98 (for narcissistic PD) for categorical diagnosis, and from .90 (for depressive PD) to .98 (for antisocial PD) for dimensional judgments.

3.5.2 Self-report questionnaires
The most widely used self-report questionnaires are the Personality Disorder Questionnaire-Revised (PDQ-R; Hyler, 1994) and the MCMI inventories (Millon, 1977, 1987, 1994; see method section 6.3.2, pp. 280-281 for details about the MCMI-III). The advantage of using self-report questionnaires is that they can determine dimensional classifications of PD (Widiger & Costa, 1994). However, self-report questionnaires are approached with caution when used for obtaining a valid PD diagnosis. This is because self-report questionnaires
provide only one opinion; whereas psychometric theory has a preference for multiple sources of information to increase reliability (Klonsky, Oltmanns & Turkheimer, 2002). Because individuals with PDs are often considered as possessing an unrealistic view of themselves and having limited insight into the effect of their behaviour on others, their self-reporting may be biased and relevant information omitted or misleading (Klonsky et al., 2002). Furthermore, responses may be affected by the presence of Axis-I disorders, making it more difficult for clinicians to objectively disentangle mood, anxiety or psychotic disorder from a PD.

3.5.3 Comparison of structured interview and self-report instruments

Studies that have compared the assessment of PDs using self-report questionnaires and structured interviews have suggested that self-report questionnaires yield higher rates of PD diagnosis. Bronisch, Flett, Garcia-Borreguero and Wolf (1993) assessed 60 patients admitted to a Crisis Intervention Ward in Munich. They reported low agreement (κ value) between the PDQ-R (Hyler, 1994) and Munich Diagnostic Checklist for the assessment of DSM-III-R PDs (MDCL-P; Bronisch, Garcia-Borreguero Flett, Wolf & Hiller, 1992). The authors reported the range for specific PDs to be κ = -0.03 to 0.52, with large discrepancies not only in agreement, but also in the frequency of PD diagnosis. In their sample (n = 60), 58% (n = 35) were diagnosed with at least one PD using the PDQ-R and 43% (n = 26) using the MDCL-P.

Kennedy, Katz, Rockert, Mendlowitz, Ralevski, and Clewes (1995) compared the MCMI-II and the SCID-II in the assessment of PDs on 43 Canadian inpatients who had a diagnosed eating disorder. Although both measures yielded high prevalence rates of PDs (i.e. 74.4% met criteria for at least one PD using the SCID-II and all met criteria using the MCMI-II), agreement between the two instruments in diagnosing individual PDs was low.

Blackburn, Donnelly, Logan and Renwick (in press) examined the convergent and discriminative validity of the IPDE, PDQ-IV and MCMI-II for assessing PD in 156 male mentally disordered offenders, in four maximum secure psychiatric hospitals in Britain. The authors reported that in terms of categorical diagnoses, the three instruments identified at
least one PD diagnosis in approximately two thirds of their sample. However, differences in the frequency of PD were noted, dependent on whether diagnosis was made through interview or self-report. Specifically, self-report questionnaires (e.g. MCMI-II) identified a higher prevalence rate of PDs than the IPDE, with the exception of antisocial PD. Whether this finding represented over-diagnosis on the questionnaire or under-diagnosis on interview was not established. Inter-rater reliabilities for the IPDE were 0.77 for dimensional scores on 10 DSM-IV disorders, and between 0.66 (for dependent PD) to 0.92 (for schizoid PD).

The poor agreement between self-report and structured interview instruments in the diagnosis of PDs may be accounted for by inherent differences in the reporting process. Kennedy et al. (1995) argued that behavioural observations cannot be detected in self-report, but are observed by the rater during interview. Furthermore, differences may relate to the construction of the instruments. For example, Retzlaff (1996) argued that the positive predictive value on the MCMI-III is low, thus questioning its validity as an instrument for diagnosing PDs.

3.6 Prevalence of personality disorder

Research regarding the prevalence, clinical and demographic correlates of DSM-IV PDs is lacking (Livesley, 2001). Therefore, epidemiological studies have been based on the DSM-III and DSM-III-R diagnostic criteria. Livesley (2001) reviewed a number of studies (epidemiological, controlled and surveys and primarily from the US) from 1985 to 1997. Across these studies, prevalence rates in the general population varied for each PD according to methodology and criteria used (see Tables 6, 7 & 8, p. 264). Prevalence rates of any PD in the general population range from 10% to 13% (de Girolamo & Dotto, 2000). In primary care settings, prevalence figures range between 10% and 30% (e.g. Moran, Jenkins, Tylee, Blizard & Mann, 2000; Casey & Tyrer 1990). Studies have documented high prevalence rates within psychiatric inpatient and outpatient populations.
Table 6: Prevalence ranges (%) for Cluster A personality disorders in the general population

<table>
<thead>
<tr>
<th>Studies</th>
<th>DSM Criteria</th>
<th>PD measure</th>
<th>PD</th>
<th>Range (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kendler, McGuire, Gruenberg,</td>
<td>DSM-III-R</td>
<td>SIS</td>
<td>Paranoid</td>
<td>0.4 - 2.7</td>
</tr>
<tr>
<td>O'Hare, Spellman &amp; Walsh (1993)</td>
<td>DSM-III</td>
<td>SIB &amp; SADS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baron, Gruen, Rainer, Kane, Asnis &amp; Lord (1985)</td>
<td>DSM-III-R</td>
<td>SIS</td>
<td>Schizoid</td>
<td>0.2 - 5.7</td>
</tr>
<tr>
<td>Kendler et al., (1993)</td>
<td>DSM-III-R</td>
<td>SIS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drake &amp; Vaillant (1985)</td>
<td>DSM-III</td>
<td>Unspecified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maier, Minges, Lichtermann &amp; Heun (1995)</td>
<td>DSM-III-R</td>
<td>SCID-II</td>
<td>Schizotypal</td>
<td>0.3 - 5.1</td>
</tr>
<tr>
<td>Reich, Yates &amp; Nduguba (1989)</td>
<td>DSM-III</td>
<td>PDQ</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Measures to assess personality disorder: SIS (Kendler, et al., 1989); SIB (Schedule for Interviewing Borderlines; Baron & Gruen, 1980); SADS (Schedule for Affective Disorders and Schizophrenia Lifetime Version; Endicott & Spitzer, 1978); SCID-II (Spitzer, Williams, Gibbon & First, 1990); PDQ (Hyler, Skodol, Kellman, Oldham, & Rounsav, 1990)

Table 7: Prevalence ranges (%) for Cluster B personality disorder in the general population

<table>
<thead>
<tr>
<th>Studies</th>
<th>DSM Criteria</th>
<th>PD measure</th>
<th>PD</th>
<th>Range (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black, Noyes, Pfohl, Goldstein &amp; Blum (1993)</td>
<td>DSM-III</td>
<td>SIDP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kendler et al., (1993)</td>
<td>DSM-III-R</td>
<td>SIS</td>
<td>Antisocial</td>
<td>0.2 – 3.7</td>
</tr>
<tr>
<td>Reich et al., (1989)</td>
<td>DSM-III</td>
<td>PDQ</td>
<td>Borderline</td>
<td>0.4 – 5.5</td>
</tr>
<tr>
<td>Black et al., (1993)</td>
<td>DSM-III</td>
<td>SIDP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reich et al., (1989)</td>
<td>DSM-III</td>
<td>PDQ</td>
<td>Narcissistic</td>
<td>0.4 – 5.7</td>
</tr>
<tr>
<td>Drake &amp; Vaillant (1985)</td>
<td>DSM-III</td>
<td>Unspecified</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Measures to assess personality disorder: SIS (Kendler, et al., 1989); SIDP (Structured Interview for DSM-III personality; Pfahl, Stang, & Zimmerman, 1982); DIS (Robins et al., 1981); SCID-II (Spitzer et al., 1990); PDQ (Hyler et al., 1990)

Table 8: Prevalence ranges (%) for Cluster C personality disorder in the general population

<table>
<thead>
<tr>
<th>Studies</th>
<th>DSM Criteria</th>
<th>PD measure</th>
<th>PD</th>
<th>Range (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blanchard, Hickling, Taylor</td>
<td>DSM-III-R</td>
<td>SCID-II</td>
<td>Avoidant</td>
<td>1.1 - 4.6</td>
</tr>
<tr>
<td>&amp; Loos (1995)</td>
<td>DSM-III</td>
<td>Unspecified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drake &amp; Vaillant (1985)</td>
<td>DSM-III</td>
<td>SIDP</td>
<td>Dependent</td>
<td>0.5 - 7.9</td>
</tr>
<tr>
<td>Drake &amp; Vaillant (1985)</td>
<td>DSM-III</td>
<td>Unspecified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drake &amp; Vaillant (1985)</td>
<td>DSM-III</td>
<td>SIDP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maier et al., (1995)</td>
<td>DSM-III-R</td>
<td>SCID-II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black et al., (1993)</td>
<td>DSM-III</td>
<td>SIDP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nestadt, Romanoski, Brown,</td>
<td>DSM-III</td>
<td>SPE</td>
<td>Obsessive-Compulsive</td>
<td>1.5 - 7.9</td>
</tr>
<tr>
<td>Chahal, Merchant, Foltstein,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gruenberg &amp; McHugh (1991)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black et al., (1993)</td>
<td>DSM-III</td>
<td>SIDP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Measures to assess personality disorder: SCID-II (Spitzer et al., 1990); SIDP (Pfahl et al., 1982); SPE (Standardized Psychiatric Examination; Nestadt et al., 1991).
3.7 Personality disorders in the military

The assessment of personality and PD characteristics within Military personnel has a number of implications. In terms of selection, recruitment and suitability for military life, there appears to be some recognition that personality plays an important role (Milgram, 1991). However, there appears to be a lack of research in terms of whether personality and indeed PDs (or characteristics) can serve as protective and/or risk factors in adaptations to the demands of, resilience within, and recovery from continuing stressful situations within the military environment (Deu, 2002).

In the US, PDs are the most common grounds for military discharge under “other designated physical and mental condition”, although discharge is only recommended when the PD is considered severe enough to significantly impair the ability to function effectively in the military environment (www.girights.org). However, satisfactory evidence to demonstrate that the presence of a PD is the nemesis to a successful military career has yet to be documented; and it is possible that particular PDs may in fact be better suited for specific military environments and duties (Deu, 2002).
4. Comorbidity Studies

4.1 PTSD and other Axis-I disorders

It has been well documented that PTSD is associated with high incidences of comorbidity with other Axis-I psychiatric disorders, such as anxiety, depression, substance abuse and somatisation (e.g. Labbate & Snow, 1992; O'Toole, Marshall, Schureck & Dobson, 1998). The type of trauma, such as fire-fighting (McFarlane & Papay, 1992), victims of crime (Kilpatrick, Saunders, Amick-McMullen, Best, Veronen & Resnick, 1989) and natural disaster (Shore, Vollmer & Tatum, 1989) appear to significantly influence the number of comorbid disorders as well as the extent and course of PTSD (Deering, Glover, Ready, Clay Eddleman & Alarcon, 1996). However, combat veterans with PTSD appear to have the highest incidences of comorbidity with other Axis-I disorders (e.g. Kozarić-Kovačić & Kocijan-Hercigonja, 2001; Skodol, Schwartz, Dohrenwend, Levav, Shrout & Reiff, 1996).

Deering et al. (1996) undertook a literature review examining the co-occurrence of PTSD and other psychiatric disorders among individuals who had experienced various types of trauma. Depression was commonly reported in combat veterans (e.g. Sharkansky, King, King, Wolfe, Erickson & Stoke, 2000). Anxiety disorders were reported as prevalent in studies of Australian fire-fighters (McFarlane & Papay, 1992). Studies of Vietnam veterans (compared with veterans of other wars), fire-fighters and rape victims showed elevated rates of panic disorder (McFarlane & Papay, 1992). Estimated prevalence rates of between 41.6% (Milas & Jelovac, 1999) and 61.6% (Kozarić-Kovačić & Kocijan-Hercigonja, 2001) for comorbid PTSD and alcohol abuse in Croatian combat veterans have been found, with higher rates of alcoholism being found among Vietnam veterans compared with veterans from other wars. Varying estimates of comorbid PTSD and drug abuse ranging from 5% among Persian Gulf War veterans (Sutker, Uddo, Brailey & Allain, 1994) to 86% among Vietnam veterans (Breslau & Davis, 1987) have been reported. By comparison to combat-related PTSD, non-combat related PTSD has low incidences of comorbid substance abuse (Deering et al., 1996).
Various explanations for comorbid Axis-I disorders and PTSD have been proposed. First, that pre-existing disorders constitute a vulnerability to PTSD. Helzer et al. (1987) reported how earlier experiences of substance abuse predicted greater exposure to traumatic events, possibly by placing the individual in situations that are high-risk or trauma-prone. Secondly, other psychiatric disorders are a subsequent complication to PTSD. For example, substance dependency develops following attempts at self-medication (Engdahl, Dikel, Eberly & Blank, 1998) and that depression occurs as a consequence of withdrawal from pleasurable activities and increased isolation. Thirdly, the disorders co-occur because of shared risk factors, or as a result of a measurement artefact. Thus, intrusive ruminations as a feature of major depression become “re-experiences” in PTSD; and irrational fear for anxiety becomes symptomatic “avoidance” if an antecedent trauma-stressor has been identified (Young, 1995).

4.2 Personality disorder and Axis-I disorders

Following the publication of DSM-III (1980), a plethora of studies has established that many individuals with an Axis-I disorder often meet criteria for a variety of PDs (Pfohl, 1999). Gunderson, Triebwasser, Phillips and Sullivan (1999) reviewed studies exploring the comorbidity of PDs and mood disorders. The types of PDs found to be most prevalent in individual’s presenting with dysthymia and major depression were avoidant, dependent and borderline PD, followed by obsessive-compulsive and passive-aggressive PDs. Evidence from US community samples (Kessler, Crum, Warner, Nelson, Schulenberg & Anthony, 1997), US veteran samples (Scheidt & Windle, 1994) and Israeli veteran samples (Skodol et al., 1996) have found a strong association between substance abuse and antisocial PD. A review of the studies examining comorbidity of Axis-I and PDs suggests that the strongest relationship appears to be between substance use disorders and Cluster C PDs and between somatoform and Cluster C PDs (Livesley, 2001).

Studies examining comorbidity contend that comorbid PDs worsen prognosis for patients with a variety of Axis-I disorders (Noyes, Reich, Christiansen & Suelzer, 1990). However, studies have also reported that PD symptomatology is often exacerbated during episodes of Axis-I disorders. This finding has been supported by various studies in which the severity of
personality symptoms often diminishes when the Axis-I condition resolves (Noyes, et al., 1990). However, although the personality symptoms may diminish, they are still comparatively elevated compared with population norms (see Pfohl, 1999). Gunderson et al. (1999) suggested that PDs may not be as stable as the definition stipulates, because they appear to change and even remit or relapse in response to the environment. This idea would fit more closely with the dimensional approach to PD because it allows for 'movement' between the constructs that underpin personality and also about which factors influence those personality functions to become 'disordered'.

4.2.1 Comorbid personality disorders and Axis-I disorders
Feinstein (1970) coined the term comorbidity to describe "any distinct additional clinical entity that has existed or that may occur during the clinical course of a patient who has the index disease under study" (pp. 456-457). Understanding comorbidity, particularly between Axis-I disorders and PDs is essential to clinical practice because of the view that the presence of one disorder can affect the treatment, expression and course of another disorder. Furthermore, co-occurring disorders from different axes may represent areas of symptom overlap and problems with the classification and diagnostic systems. Research literature has suggested that the rate of comorbidity between distinctive disorders can be affected by a number of factors (Clark, Watson & Reynolds, 1995).

Clark et al. (1995) suggested that the time at which diagnoses are made will influence the rate at which comorbidity is reported to occur. Thus, two disorders co-occurring at the same point in time may be very different in meaning from two disorders occurring over the course of a lifetime. Furthermore, comorbidity rates tend to be lower in community samples and higher in inpatient or clinical samples (Newman, Moffitt, Caspi & Silva, 1998). This tends to be because inpatient and clinical samples are over-represented as they are often more accessible for researchers, may seek out treatment so are within the clinical/inpatient system already, and may be more severely afflicted by their symptoms thus leading to a psychiatric admission.
4.3 Comorbid PTSD and personality disorder studies

Because the comorbidity between PDs and PTSD has been largely unstudied, it is unsurprising that reviews of the available research literature regarding the co-occurrence of these two disorders are inconclusive (Reich, 1990). Research using war veteran populations with PTSD have found that coexisting character pathology can influence symptom severity, course and prognosis of traumatic stress disorders. Character pathology has also been implicated as contributing towards a poorer response to treatment interventions, both pharmacological and psychological (Southwick et al., 1993). Thus, there is an increased risk of experiencing a more severe course of trauma symptomatology in individuals presenting with comorbid PTSD and PD, as compared with traumatised individuals without PD (Horowitz, Wilner, Kaltreider & Alvarez, 1980).

The extant research on combat veterans with PTSD suggests a high degree of comorbidity with PD; specifically, that combat experience and exposure to abusive violence or atrocities predict chronic PTSD and a tendency toward adverse personality change (Reich, 1990). Typically, studies that have examined comorbidity between PD and PTSD in combat veterans, have tended to focus primarily on antisocial PD (e.g. Barrett et al., 1996) and borderline PD (e.g. Zanarini et al., 1998). This appears to be because of the problems that brought the veterans into treatment in the first instance (e.g. difficulty controlling anger and violent behaviour, substance abuse, isolation and alienation). Barrett et al. (1996) found that 11% of male Army Veterans met criteria for antisocial PD and 15% met criteria for PTSD. Veterans with PTSD were significantly more likely to report violence, marital and relationship instability, vocational difficulties and engagement in illegal activities, compared with veterans without PTSD. Furthermore, exposure to traumatic events during late adolescence or early adulthood was associated with multiple adult adjustment problems in vocational, interpersonal and societal functioning in later life. Zanarini et al. (1998) assessed the comorbidity of a full range of Axis-I disorders with borderline PD and a comparison group with other PDs. PTSD was found to be a common (56%) but not ubiquitous comorbid disorder among individuals with borderline PD, and found in approximately 22% of the comparison group.
4.3.1 Personality disorder features and PTSD

Some research has focused on the relationship between certain types of trauma and their association with particular PD features (Shea, Zlotnick, Dolan, Warshaw, Phillips, Brown & Keller, 2000). PD features that have emerged from studies of complex PTSD and extreme stress include problems with anger and aggression control, identity disturbance, feelings of alienation and inability to trust others.

Shea et al. (2000) examined the association of PD diagnosis, assessed using a shortened version of the Personality Disorder Examination (PDE, Loranger, 1988) and features, a history of trauma, and PTSD in 622 participants with anxiety disorders. Of this sample, 35% reported a history of trauma, of which 31% met criteria for PTSD. The sample was subdivided into three groups; no trauma (n = 403); trauma without PTSD (n = 151) and trauma with PTSD (n = 68). The rate of any PD in each group was 22%, 23% and 38% respectively. Compared to the other groups, the trauma with PTSD group had a higher profile across all disorders, with highest elevations for avoidant PD.

The PD features of borderline, self-defeating and schizotypal PD were examined further as these distinguished the PTSD group from the other groups, to ascertain an association with a PTSD diagnosis. The authors reported that the most frequently rated ‘as present’ borderline criteria in the PTSD group included chronic emptiness and boredom (59%), general impulsivity (46%) and intense anger (46%). On the self-defeating criterion, mistreatment (49%) and reject help (46%) were rated and unusual perceptual experiences (22%) were rated on the schizotypal criteria (Shea, et al., 2000). In this study, individuals with combat-related trauma showed higher levels of avoidant and obsessive-compulsive PDs.

Shea et al. (2000) concluded that the relationship between PD features and PTSD may simply represent an overlap in diagnostic criteria. For example, diagnostic criteria that overlap for complex PTSD and borderline PD include self-destructive behaviours and dissociative experiences. For schizotypal and avoidant PDs; feeling alienated from others and social withdrawal were overlapping criteria. The authors argue that inherent weaknesses in their study were the absence of a detailed assessment of traumatic experiences and other
PDs (e.g. antisocial), and that they used participants with a primary diagnosis of anxiety. Since all the PTSD participants also met criteria for another anxiety disorder, the ability to generalise the findings was limited. Moreover, the certainty of symptoms being purely trauma related has put into question by the presence of other comorbid anxiety disorders.

4.3.2 Personality profiles of combat veterans with PTSD
Richman and Frueh (1996) examined the personality profiles of 42 US Vietnam veterans with combat-related PTSD who had completed the SCID-II (Spitzer et al., 1990) self-report questionnaire. These profiles were contrasted with two clinical groups: i) 51 outpatients with a primary diagnosis of an anxiety disorder (not including PTSD) and ii) 16 outpatients with a primary diagnosis of major depression. The three groups were assessed on the mean percentage of traits endorsed within the DSM-III-R PD categories and three clusters.

Comparing the PTSD with the anxiety group using multivariate analysis of variance (MANOVA) revealed that the PTSD group showed more elevations on their personality profile compared with the anxiety group, specifically for borderline (26.9%), schizotypal (16.8%), paranoid (15.8%) and schizoid (14.9%). The anxiety group endorsed more traits than the PTSD group on the histrionic scale (10%). The PTSD group also had elevations on their personality profile compared with the major depression group, specifically on the schizotypal (22%) and paranoid (21.6%) personality scales. The PTSD group profile was higher on the Cluster A profile (odd/eccentric) compared with the anxiety and depression group.

Research on comorbid PTSD and PD profiles using various versions of the MCMI have formed the view that a PTSD personality profile exists. Hyer, Woods, Boudewyns, Harrison & Tamkin (1990) used the MCMI on 60 Vietnam veterans with PTSD. The authors reported that veterans with PTSD generated an MCMI personality profile: '8-2' (passive-aggressive/avoidant). This profile was represented by features such as control problems, contrary behaviour (i.e. passive-aggressive) and isolation and low self-image (i.e. avoidant). The clinical syndromes anxiety and dysthymia were also elevated which may suggest a relationship between these disorders or evidence for symptom and diagnostic overlap. These
findings were supported by Sherwood, Funari and Piekarski (1990), who also reported drug and alcohol abuse as commonly comorbid clinical syndromes.

Similar findings were reported by Munley, Bains, Bloem, Busby and Pendziszewski (1995), who investigated the profile characteristics of 39 US inpatient veterans with PTSD and a comparison group (without PTSD but with other axis-I disorders) using the MCMI-II. A MANOVA was undertaken to compare the two groups across the MCMI-II basic personality scales, pathological personality scales and the scales for the clinical syndromes. Compared to the comparison group, the PTSD group yielded high base rate (BR) scores on the PD scales, avoidant and passive-aggressive (BR >90) and schizoid and antisocial (BR > 85). On the severe personality scales, the PTSD group scored highly on the borderline (BR > 85) and schizotypal (BR > 75) scales. Comorbid axis-I disorders were dysthymia (BR > 85), anxiety (BR > 75) and alcohol dependency (BR > 75).

There are a number of inherent limitations in the extant literature. Firstly, researchers examining the personality profiles of traumatised individuals have tended to use Vietnam veterans. The many disadvantages of this include: many of the symptoms and personality ‘disturbance’ of these individuals are likely to have been part of their functioning for a number of years. Thus, because the duration of PTSD symptoms in combat-veterans may be longer, they may also be more severely afflicted than comparative groups (Richman & Frueh, 1996). In addition, as the samples’ trauma is combat-related, the ability to generalise the findings to other trauma groups is not viable. The sample sizes also tend to be rather small thus questioning the generalisability of the findings. Finally, methodological differences (e.g. self-report compared with clinical interview) will naturally generate variation in results, making interpretation of findings across studies more difficult.

4.3.3 Personality profiles of a non-combat sample with PTSD
Lauterbach (2001) examined the prevalence of PDs among 402 US psychology undergraduates with and without PTSD, and among those who had experienced a substantially greater number of traumatic events. This study is relevant because the sample was non-military and therefore had not experienced combat, thus allowing some comparison
to be made with the present study. Lauterbach used two self-report measures, the Personality Diagnostic Questionnaire-Revised (PDQ-R; Hyler & Rieder, 1987) to assess DSM-III-R PD symptomatology and the Traumatic Events Questionnaire (Vrana & Lauterbach, 1994) which assessed the presence or absence of trauma and severity of various traumatic events. Consistent with previous research, the PTSD group generated elevated personality profiles compared with the non-PTSD group. Group differences were significant for borderline, narcissistic, paranoid, passive-aggressive, self-defeating, and schizotypal PDs, although not all PDs were elevated among individuals with PTSD.

Lauterbach found that the severity of PD symptoms covaried with PTSD severity and that the PTSD group scored significantly higher than the comparison group on Clusters A (odd/eccentric) and B (dramatic). Individuals who experienced more than one traumatic event had higher elevations overall and were significantly higher on levels of antisocial, borderline and narcissistic PDs. A weakness of this study was that all of the data was collected using self-report measures and a subject sample motivated by receiving a course credit.

4.3.4 PTSD and the full spectrum of personality disorders
Southwick et al. (1993) and Bollinger, Riggs, Blake and Ruzek (2000) attempted to delineate the full spectrum of PDs in a treatment seeking population of war veterans with chronic PTSD. Southwick et al. (1993) explored comorbid PTSD and PDs in 18 inpatient and 16 outpatient treatment seeking combat veterans with PTSD. Diagnosis of PD was obtained through clinical interview using the Personality Disorder Examination (PDE; Loranger, Susman, Oldham & Russakoff, 1988) for DSM-III-R and diagnosis of PTSD was made using the SCID for DSM-III-R – Patient Version. Southwick et al. (1993) reported a high rate of character pathology in the entire sample. The most frequent single PDs reported were borderline (76%), obsessive-compulsive (44%), avoidant (41%) and paranoid (38%). Inpatients were more likely to meet diagnostic criteria for nearly every PD compared with outpatients. Inpatients also obtained elevations on Clusters A and B. Despite these interesting results, the sample sizes were relatively small (outpatients, n = 16; inpatients, n = 18) and specific to combat-related trauma in war veterans.
Bollinger et al. (2000) assessed all the DSM-III-R PDs in 107 combat veterans with PTSD in a specialised inpatient unit. Diagnosis of PD was obtained using the SCID-II for DSM-III-R PDs (Spitzer et al., 1990). The Clinician-Administered PTSD Scale-Form 1 (CAPS-I; Blake et al., 1990) was used to assess the core and associated symptoms of PTSD. Bollinger et al. (2000) reported 79% (n = 83) of the participants were diagnosed with at least one PD. Cluster C yielded the most PD diagnoses, followed by Cluster A and Cluster B. The most frequent single PD diagnoses reported were avoidant (47.2%), paranoid (46.2%), obsessive-compulsive (28.3%) and antisocial (15.1%). Table 9 provides a comparison of the percentages of single PDs reported in Southwick et al. (1993) and Bollinger et al. (2000) studies.

Table 9: Personality disorders identified in earlier studies

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>all patients (n = 34)</td>
<td>all patients (n = 107)</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Cluster A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paranoid</td>
<td>13</td>
<td>38</td>
</tr>
<tr>
<td>Schizoid</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>9</td>
<td>26</td>
</tr>
<tr>
<td>Cluster B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antisocial</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Borderline</td>
<td>26</td>
<td>76</td>
</tr>
<tr>
<td>Histrionic</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>Cluster C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidant</td>
<td>14</td>
<td>41</td>
</tr>
<tr>
<td>Dependent</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>Obsessive-compulsive</td>
<td>15</td>
<td>44</td>
</tr>
<tr>
<td>Passive-aggressive</td>
<td>12</td>
<td>35</td>
</tr>
<tr>
<td>Self-defeating</td>
<td>11</td>
<td>32</td>
</tr>
</tbody>
</table>

Bollinger also explored the relationship between PDs and the severity of PTSD symptoms. They reported a positive correlation with the number of SCID-II diagnoses and the Mississippi Scale for Combat-Related PTSD (Keane et al, 1988) and the CAPS-1. In particular, when the CAPS-1 was separated into the symptom clusters avoidance, hyperarousal and re-experiencing, the number of SCID-II diagnoses were found to be significantly correlated with the avoidance and hyperarousal clusters (Bollinger et al., 2000).
In comparisons to earlier studies, Southwick and Bollinger did not find the 8-2 (passive-aggressive/avoidant) profile (e.g. Hyer et al., 1990; Munley, et al., 1995). This may have been a result of the measures used to assess PD. The elevations found in the PDs paranoid and obsessive-compulsive may have been a consequence of the overlap in diagnostic criteria for aspects of personality features or aspects of PTSD symptomatology. Such traits may also represent elements of combat behaviour (e.g. distrust and suspiciousness of others and attention to routine and structure; Bollinger et al., 2000).

5. Proposed research
Most of the research base has been driven by North American Veteran Administration studies on combat-related PTSD. There has been little published research undertaken in the United Kingdom or on active duty personnel. The current study is novel in examining the comorbidity of PTSD and PD in a British population of active duty armed forces personnel with PTSD. Because at the commencement of the study (October 2002) there was limited opportunity for combat, the current study will consider all traumatic events leading to PTSD and subsequent referral to a Department of Community Psychiatry.

In line with existing research, the population will be males and will attempt to draw from the three armed forces; Army, Navy and Royal Air Force. The study will comprise two outpatient treatment-seeking groups, with and without PTSD. Similar to the studies by Southwick et al. (1993) and Bollinger et al. (2000), this research will be using standardised diagnostic measures which are clinician rated and self-report; the MCMI-III (Millon, 1994), SCID-II (First et al., 1997) and Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1995). The measures aim to identify the whole range of DSM-IV PDs and clinical syndromes, PTSD diagnosis and PTSD symptom severity.
5.1 Hypotheses

1. There will be no difference with respect to the presence of PD within the two groups; PTSD and Non-PTSD (e.g. Richman & Frueh, 1996).

2. There will be a difference in the prevalence of particular PDs between the two groups. Borderline, avoidant, paranoid and obsessive-compulsive PD will be more prevalent in the PTSD group (e.g. Southwick et al., 1993; Bollinger et al., 2000).

3. Increased PTSD symptom severity will be related to PD diagnosis (Richman & Frueh, 1996).

4. Other comorbid Axis I type disorders, such as alcohol abuse and depression (Kozarić-Kovačić & Kocijan-Herčigonja, 2001) will be more prevalent in the co-morbid PTSD-PD group compared with those identified in the other group.

5. The type of trauma (e.g. combat, road traffic accident) will be associated with particular PD features (e.g. Shea et al, 2000) in the PTSD group.
6. Method

6.1 Design

Individuals presenting to the Department of Community Psychiatry (DCP) and who had experienced a traumatic event or who were currently experiencing any other psychiatric disorder were assessed using the PDS (Foa, 1995) to determine group status (i.e. PTSD group or Non-PTSD group). The present study employed a comparative within and between groups design. To investigate the presence of PD and PD clusters, participants in the PTSD group were compared with the participants in the Non-PTSD group using the MCMI-III (Millon, 1994) and SCID-II (First et al, 1997). To investigate the relationship between PTSD symptom severity and PD, participants with comorbid PTSD-PD were compared with participants with PTSD but no PD. The incidence of Axis-I disorders in the two groups was also examined.

6.2 Participants

Approximately 73 individuals, who had been referred as outpatients to a DCP clinical team around the UK between October 2002 and June 2003, were approached and agreed to complete the questionnaires for use in the study. Of this group, 63% (n = 46) formed the entire sample of male, active duty armed forces personnel. The remaining individuals (37.5%, n = 27) were not accessible due to one of the following reasons: did not attend appointment, was deployed, was discharged, invalidated the MCMI-III questionnaire, was out on exercise or had gone AWOL. Because these data sets were incomplete, they were not used in the data analysis. All female personnel were excluded from the study, as were males presenting to the DCP with an organic or psychotic disorder.

Participants were assigned to the PTSD group if they met the six diagnostic criteria for PTSD on the PDS (Foa, 1995). Those participants who had experienced a traumatic event but did not meet criteria for PTSD on the PDS, and who had any Axis-I disorder or other psychiatric problems were assigned to the Non-PTSD group. From the total sample population, 21 participants formed the PTSD group, and 25 participants formed the Non-PTSD group. Each participant was given a Participant Information Sheet (appendix XIV) and provided informed consent by signing a Consent Form (appendix XV).
Twenty participants in the PTSD group were white British and one participant was black Jamaican. All participants in the Non-PTSD group were white British. The mean current age of the participants in the PTSD group was 31.00 years (SD = 9.61), with a mean number of 128.29 (SD = 106.80) months (8 years) in service. The mean current age of the participants in the Non-PTSD group was 27.64 years (SD = 7.04), with a mean number of 108.44 (SD = 81.54) months (9 years) in service. Other basic military and personal demographic information is shown in Table 10.

Table 10: Military and personal demographic information

<table>
<thead>
<tr>
<th>Demographic Information</th>
<th>PTSD Group (n = 21)</th>
<th>Non-PTSD Group (n = 25)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Branch of service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Army</td>
<td>13</td>
<td>61.9%</td>
</tr>
<tr>
<td>Navy</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Royal Air Force</td>
<td>8</td>
<td>38.1%</td>
</tr>
<tr>
<td>Military Rank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private (or equivalent)</td>
<td>10</td>
<td>47.6%</td>
</tr>
<tr>
<td>Lance Corporal (or equivalent)</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td>Corporal (or equivalent)</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td>Sergeant (or equivalent)</td>
<td>7</td>
<td>33.3%</td>
</tr>
<tr>
<td>Commissioned officer</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>6</td>
<td>28.6%</td>
</tr>
<tr>
<td>Married</td>
<td>11</td>
<td>52.4%</td>
</tr>
<tr>
<td>Divorced/Separated</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td>Co-Habiting</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td>Reason for current referral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depressive disorder</td>
<td>3</td>
<td>14.3%</td>
</tr>
<tr>
<td>Anxiety disorder</td>
<td>1</td>
<td>4.8%</td>
</tr>
<tr>
<td>Anger</td>
<td>5</td>
<td>23.8%</td>
</tr>
<tr>
<td>PTSD / trauma related</td>
<td>12</td>
<td>57.1%</td>
</tr>
<tr>
<td>Relationship problems</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Stress management</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
6.2.1 Demographic information

There was no significant difference in the service origin of participants in the PTSD group from the RAF (38.1%, n = 8) or Army (61.9%, n = 13) compared with participants in the Non-PTSD group (RAF; 16%, n = 4; Army; 84%, n = 21; \( \chi^2 = 1.857 \), df.1, \( p = .173 \)). Participants from the RAF (n = 12, mean rank; MR = 27.96, sum of ranks; SR = 335.50) did not significantly differ to participants from the Army (n = 34, MR = 21.93, SR = 745.50) in terms of military rank (\( z = -1.433, p = .152 \)), age joined military (\( z = -1.522, p = .128 \), 2-sided), number of months in service (\( z = -.287, p = .774 \)) or current age (\( z = -.961, p = .337 \)).

6.3 Measures

6.3.1 Posttraumatic Stress Diagnostic Scale (PDS).

The PDS questionnaire (Foa, 1995; appendix XVI) is a 49-item self-report instrument that takes approximately 10-15 minutes to complete and comprises four parts which refer to the traumatic experiences, symptoms, duration and impact on daily functioning (see Box 2).

**BOX 2: Procedure for completing the PDS**

**Part 1:** The participant is required to read through a list of traumatic events and checkmark any event that they had witnessed or lived through at some point during their life.

**Part 2:** The participant is instructed to identify which traumatic event in Part 1 (if more than one was checkmarked) bothered them the most, how long ago the event happened and questions concerning the actual event. Part 1 and Part 2 of the PDS correspond to Criterion A of DSM-IV for PTSD.

**Part 3:** This consists of a list of symptoms that people sometimes experience following a traumatic event, and requires the participant to circle a number that best describes how often the problem had bothered them within the past month. Part 3 of the PDS corresponds to Criterion B through to E of DSM-IV for PTSD.

**Part 4:** The participant is required to consider how much the problems rated in Part 3 had interfered with a number of areas in daily functioning. Part 4 of the PDS corresponds to Criterion F of DSM-IV for PTSD.

The PDS takes approximately 5-10 minutes to score by hand (see appendix XVII for scoring sheet) and has six scales and specific criterion that must be met for a PTSD diagnosis to be made (see Box 3, p. 280).
**BOX 3: PDS scales and diagnostic criterion**

1: PTSD Diagnosis (i.e. Yes or No)
2: Symptom Severity Score (ranging from 0-51, based on the summation of scores)
3: Number of Symptoms Endorsed
4: Specifiers: Acute, Chronic or With Delayed Onset
5: Symptom Severity Rating (i.e. Mild, Moderate, Moderate to Severe, Severe)
6: Level of Impairment of Functioning (No impairment, Mild, Moderate, Severe)

A PTSD diagnosis is only made when all the six DSM-IV criteria are endorsed; specifically, exposure to a traumatic event (Criterion A), re-experiencing (Criterion B), avoidance (Criterion C), arousal (Criterion D), symptom duration (one month or more; Criterion E), distress and impairment (Criterion F).

The PDS has normative data from the USA on 248 non-psychotic men and women aged between 18 and 65, who had experienced or witnessed a traumatic event (e.g. natural disaster, combat, assault, serious accident, fire) at least one month before the PDS was administered. The normative sample were recruited from PTSD treatment and research centres such as the Veterans Administration Hospital, anxiety and PTSD treatment clinics and trauma centres, as well as from non-treatment seeking populations (e.g. fire-fighters, paramedics; Foa et al., 1997).

### 6.3.2 Millon Clinical Multiaxial Inventory-III (MCMI-III).

The MCMI-III (Millon, 1994) was developed for use with adults seeking mental health treatment. It is a 175-item true/false self-report instrument that takes approximately 25-30 minutes to complete (Millon, Davis & Millon, 1997; appendix XVIII). The MCMI-III is designed to assess DSM-III-R and DSM-IV related Axis-II PD and Axis-I clinical syndromes, and can help identify PDs that underlie an individual's presenting symptoms.

The MCMI-III has six scales comprising 24 clinical scales (see Box 4, p. 281). The scales are in factions of personality and psychopathology, and reflect the DSM distinction between the more enduring personality characteristics of individuals from the presenting acute clinical disorders (Millon et al., 1997). An individual's profile based on all the 24 clinical scales can reveal information about the relationship between enduring character patterns and idiosyncratic clinical symptoms being manifested.
BOX 4: MCMI-III clinical scales

11 Clinical Personality Pattern Scales
3 Severe Personality Pathology Scales
7 Clinical Syndrome Scales
3 Severe Syndrome Scales

The MCMI-III also has 3 Modifying Indices and 1 Validity Index

The MCMI-III takes approximately 45-60 minutes to score by hand. Each raw score is transformed to a base-rate (BR) score and then one or two final adjustments may be necessary to arrive at the final BR scores (see Box 5 for the most basic level of interpretation of BR scores). However, a computerised scoring package was available for the study (John Caldwell, 2002) which reduced the scoring time to approximately 10 minutes. The reliability of the computerised package was checked by scoring a number of MCMI-III response sheets both manually and using the computerised package.

BOX 5: Basic interpretation of MCMI-III BR scores

For the Axis-II disorders, BR scores between 75 and 84 indicate the presence of clinically significant personality traits. Base rate scores that are 85 and above are likely to indicate personality pathology pervasive enough to be called a personality disorder.

For the Axis-I disorders, BR scores of 75 indicates the presence of a clinical syndrome and BR scores of 85 indicate prominence.

The MCMI-III has normative data for 998 males and females representing a wide variety of psychiatric diagnoses. Because the normative sample was taken from clinics, mental health centres, residential settings, hospitals and independent practices, the MCMI-III is not considered appropriate for use with non-clinical populations (Millon, 1994; Millon et al., 1997). The MCMI-III demonstrated strong internal consistency for the clinical scales, ranging from .66 for Compulsive to .90 for Major Depression. Alpha coefficients exceed .80 for 20 of the scales. Test-retest reliabilities range from .82 for Debasement (scale Z) to .96 for Somatoform (scale H), with a median stability coefficient of .91 (Millon et al., 1997). With regards to validity, correlations between scale BR scores and other measures of psychopathology were good (Millon, 1994; Millon et al., 1997).
6.3.3 Structured Clinical Interview for DSM-IV Axis II disorders (SCID-II).

The SCID-II (First et al., 1997) is a semi-structured clinical interview designed to assess and diagnose the DSM-IV Axis-II personality disorders, as well as those in the DSM-IV appendix and Personality Disorder Not Otherwise Specified. The SCID-II consists of 119 criterion questions that are organised into sections that correspond to each individual personality disorder. Scoring the SCID-II is described in Box 6 (First et al., 1997).

**BOX 6: Scoring method for the SCID-II**

Each personality disorder criterion is rated as either:
- (?) Inadequate information to code the criterion
- (1) Absent or false
- (2) Sub-threshold
- (3) Threshold/true

The numbered questions may elicit a 'yes' answer, so following up and clarifying questions (which are not numbered) are also provided. These questions serve to elicit corroborating evidence from the participant to ascertain whether the criterion item is present at the threshold level. To assign a rating of '3', evidence about the described characteristic must be sufficient enough to be considered pathological, persistent and pervasive.

To be considered pathological, the described characteristic must be outside the range of 'normal' variation and had clearly deviated from the expectations of the individual's culture. To be pervasive, the described characteristic must be present in various contexts and in several different relationships. Finally, to be considered persistent, the characteristic must had been present over a period of at least 5 years with an onset by early adulthood.

The evaluation of PD in the presence of Axis-I conditions is often difficult as the presenting behaviour may be a consequence of an episodic mood or anxiety disorder, rather than a disorder of personality per se. In order to ensure that there were no contaminating effects resulting from presenting Axis-I disorders on the MCMI-III self-report measure, any participant whose BR scores were 75 or above on the MCMI-III Clinical Personality Pattern Scale and Severe Personality Pathology Scales, was interviewed by the Trainee Clinical Psychologist using the relevant sections of the SCID-II to clarify whether the 'disordered personality' was enduring (i.e. persistent, pathological and pervasive). The outcome of these interviews can be found in the Results section, Table 15, p. 290.
6.4 Procedure

New referrals to the DCPs were identified for the research. The Trainee Clinical Psychologist approached each potential participant to ascertain if they would take part in the research, following their initial psychiatric assessment with a member of the multidisciplinary team. The Trainee Clinical Psychologist described the research to the participant who was given a Participant Information Sheet and if agreeable, provided consent by signing the Consent Form. The participant was then asked to complete the PDS (Foa, 1995) and MCMI-III (Millon, 1994), which took approximately 45 minutes. Following completion of the questionnaires, the Trainee Clinical Psychologist arranged with the participant an appointment to conduct the clinical interview using aspects of the SCID-II (First et al., 1997). This appointment was always arranged before the participant started treatment.

Because participants were recruited from various DCPs around the UK, the Trainee Clinical Psychologist was not always able to meet with participants to inform and discuss with them the research, following their initial assessment. In these cases, the multidisciplinary team for each DCP supported the research by agreeing to give the referred individual the PDS (Foa, 1995) and MCMI-III (Millon, 1994) following the initial assessment, asking if they would agree to participate in the research. On their verbal agreement the participant was provided with the Participant Information Sheet and asked to complete the PDS and MCMI-III. They were then informed that the Trainee Clinical Psychologist would meet with them on their next appointment to the DCP or arrange a separate time to go through the consent procedures, and to ask them more specific questions pertaining only to the research using the SCID-II.

The SCID-II was administered only by the Trainee Clinical Psychologist, who received training in administering the SCID through role play and discussion. The Trainee Clinical Psychologist was supervised by a Consultant Clinical Psychologist who had experience in administrating the SCID and conducting the SCID clinical interview. The diagnostic reliability of the interviews was evaluated on two participants for antisocial, passive-aggressive, paranoid, avoidant, depressive and dependent PDs by the Consultant Clinical Psychologist. Inter-rater reliability quotients established were 100% for categorical diagnosis,
and for dimensional data, between 28% for avoidant PD and 85% for antisocial PD.

6.5 Statistical analysis

All analysis of the data was performed using SPSS version 11.0 for windows. Most of the variables and the sample population violated the assumptions of normal distribution. Therefore, all the data was analysed using non-parametric tests. The two groups (PTSD and Non-PTSD) were compared on categorical data for demographic features, trauma related variables (e.g. trauma experienced, types of traumatic events, chronicity and onset) and PD variables (e.g. frequency, types and clusters) using chi-squared ($\chi^2$) tests, or Fisher's Exact Probability Test when the expected cell frequencies in $\chi^2$ were small. Mann Whitney U tests were performed on continuous trauma variables (e.g. PTSD symptom severity, number of experiences within trauma categories) and PD variables (e.g. BR scores). The Kruskal Wallis Test was used on continuous variables such as BR scores following identification of comorbid groups (e.g. PTSD-PD, PTSD-noPD, Non-PTSD-PD, Non-PTSD-noPD), followed by unplanned post-hoc comparisons using Mann-Whitney U. The Bonferroni adjustment was used to control for type I error. Correlation analysis using Spearman's rho examined the relationship between the PDS diagnostic criterion and the MCMI-III PTSD BR scale, and between the three PDS clusters and the MCMI-III PD BR scores.

6.6 Ethical issues

The Trainee Clinical Psychologist anticipated that creating discomfort for participants or danger of evoking aggression in participants was unlikely during the research interview as detailed information about all aspects of trauma was not necessary. However, in the event that some individuals may have experienced some discomfort the Trainee Clinical Psychologist provided time and space for the participant to talk through their concerns. In such an event, the interview was suspended until the participant felt ready to continue, or the interview was rearranged for another time or terminated completely. In these cases, the Trainee Clinical Psychologist offered crisis management and the field supervisor (Consultant Clinical Psychologist) provided the clinical supervision for the crisis management. Where more ongoing therapeutic support was required members of the multidisciplinary team involved with the participant's treatment were involved.
The Trainee Clinical Psychologist recognised the sensitivity of the diagnostic label ‘personality disorder’. Therefore, on the information sheets and consent form, personality disorder was referred to as ‘personality characteristics’. It was hoped that this would minimise the potential for stigmatisation and recognised limitations of being labelled as having a personality disorder. Furthermore, not all participants were anticipated to have a personality disorder. The Participant’s Information Sheet outlined the issue of confidentiality in accordance with the Data Protection Act 1998, for the participants who agreed to partake in the study. Participant confidentiality was preserved in not using participant names or any other identifiable information on data forms. Participants were however informed during the consent procedure of the limitations on confidentiality (i.e. that should they reveal information considered as being a risk to self or others, the Trainee Clinical Psychologist would refer them back to their treating clinician for appropriate clinical interventions or management).

The present research was approved by the University’s and the MoD’s Research and Ethics Committees (appendices XIX and XX).
7. Results

7.1 PD identified using the MCMI-III and SCID-II

7.1.1 Hypothesis 1: **There will be no difference with respect to the presence of PD within the two groups: PTSD and Non-PTSD (e.g. Richman & Frueh, 1996)**

From the entire sample (n = 46), based on the participants' self-reporting on the MCMI-III, less than half (45.7%, n = 21) obtained a BR score of 85 and above, indicating personality pathology pervasive enough to be called a PD. Just under half the PTSD group (47.6%; n = 10) obtained elevated BR scores of 85 and above for at least one PD, compared to 44% (n = 11) in the Non-PTSD group. The frequency of PDs were collapsed into two ranges; '1-2' and '3-7'. The PTSD group did not have significantly more PDs than the Non-PTSD group for the ranges '1-2' ($\chi^2 = .048, df.1, p = .85$) or '3-7' ($p = .14, 1$-sided).

Based on the SCID interviews, 32.6% (n = 15) participants from the entire sample population (n = 46) were identified as having at least one PD. Of this group (n = 15), 33.3% (n = 7) were from the PTSD group and 32% (n = 8) were from the Non-PTSD group. The presence of PD did not significantly differ between the two groups ($\chi^2 = .000, df.1, p = 1.000$). The Mann-Whitney U test confirmed that there were no differences between the PTSD group (mean rank; MR = 23.43, sum of ranks; SR = 492.00) and the Non-PTSD group (MR = 23.56, SR = 589.00) for the number of participants with PD ($z = -.04, p = .97$).

The findings support the first hypothesis that there will be no difference between the PTSD group and Non-PTSD group for the presence of PD. Table 11 (p. 287) shows the frequency of PD identified in both groups based on MCMI-III and SCID-II.

---

1 Based on the elevated BR scores (e.g. 75 and above) on the MCMI-III Clinical Personality Pattern Scale and Severe Personality Pathology Scales, relevant sections of the SCID-II were used to clarify whether the 'disordered personality' was enduring (i.e. persistent, pathological and pervasive) rather than being a contaminating effect from the presenting Axis-I disorder.
The agreement and disagreement between the MCMI-III and SCID-II in the identification of PDs appeared quite low. See Table 33 in appendix XXI, p. 403 for the percentage of agreement.

### Table 1: Frequency of personality disorders identified with MCMI-III and SCID-II

<table>
<thead>
<tr>
<th>Frequency of PD</th>
<th>PTSD (n = 21)</th>
<th>Non-PTSD (n = 25)</th>
<th>PTSD (n = 21)</th>
<th>Non-PTSD (n = 25)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MCMI-III n %</td>
<td>MCMI-III n %</td>
<td>SCID-II n %</td>
<td>SCID-II n %</td>
</tr>
<tr>
<td>0</td>
<td>11 52.4</td>
<td>14 56</td>
<td>14 66.7</td>
<td>17 68</td>
</tr>
<tr>
<td>1</td>
<td>3 14.3</td>
<td>4 16</td>
<td>4 19</td>
<td>3 12</td>
</tr>
<tr>
<td>2</td>
<td>2 9.5</td>
<td>5 20</td>
<td>2 9.5</td>
<td>3 12</td>
</tr>
<tr>
<td>3</td>
<td>1 4.8</td>
<td>1 4</td>
<td>0</td>
<td>2 8</td>
</tr>
<tr>
<td>4</td>
<td>1 4.8</td>
<td>1 4</td>
<td>1 4.8</td>
<td>0 -</td>
</tr>
<tr>
<td>5</td>
<td>2 9.5</td>
<td>0 -</td>
<td>2</td>
<td>0 -</td>
</tr>
<tr>
<td>7</td>
<td>1 4.8</td>
<td>0 -</td>
<td>1</td>
<td>0 -</td>
</tr>
<tr>
<td><strong>Total PDs</strong></td>
<td><strong>31</strong></td>
<td><strong>21</strong></td>
<td><strong>12</strong></td>
<td><strong>15</strong></td>
</tr>
<tr>
<td><strong>Any PD</strong></td>
<td><strong>10 47.6</strong></td>
<td><strong>11 44</strong></td>
<td><strong>7 33.3</strong></td>
<td><strong>8 32</strong></td>
</tr>
</tbody>
</table>

7.2 Types of PD and personality traits

7.2.1 Hypothesis 2: There will be a difference in prevalence of particular PDs between the two groups (e.g. Southwick et al., 1996; Bollinger et al., 2000)

Table 12 (p. 288) shows the number of PDs identified by the MCMI-III based on BR scores of 85 and above, and clinically significant personality traits based on BR scores between 75 and 84 for the two groups. Among the PTSD group, the most frequent single PD were borderline (23.8%, n = 5) and passive-aggressive (23.8%, n = 5). Among the Non-PTSD group, the most frequent single PD were passive-aggressive (20%, n = 5), borderline (20%, n = 5) and depressive (20%, n = 5).

The most frequent personality traits (i.e. BR scores between 75 and 84) identified in the PTSD group were passive-aggressive (42.9%, n = 9), followed by depressive (33.3%, n = 7), dependent (33.3%, n = 7) and self-defeating (28.6%, n = 6). Among the Non-PTSD group, the most frequent personality traits identified were avoidant (44%, n = 11), followed by passive-aggressive (40%, n = 10), self-defeating (32%, n = 8) and dependent (32%, n = 8).
Table 12: PD and personality traits identified with the MCMII-III (BR scores of >75)

<table>
<thead>
<tr>
<th>Personality disorder (DSM-III-R &amp; DSM-IV)</th>
<th>Disorder (BR 85 and above)</th>
<th>Traits (BR 75 - 84)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PTSD (n=21)</td>
<td>Non-PTSD (n=25)</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Cluster A (odd)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paranoid</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>Schizoid</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>Cluster B (dramatic)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antisocial</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Borderline</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>Histrionic</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Cluster C (anxious)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidant</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>Dependent</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Compulsive</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Appendix</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depressive</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Passive-aggressive</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>Deleted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-defeating</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Sadistic (aggressive)</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total number</strong></td>
<td>31</td>
<td>21</td>
</tr>
</tbody>
</table>

The PTSD group did not significantly differ from the Non-PTSD group in the prevalence of particular PDs; specifically, borderline, avoidant, paranoid and obsessive-compulsive. Differences between the two groups on the prevalence of clinically significant personality traits also failed to reach statistical significance (Table 13, p. 289).
Table 13: $\chi^2$ statistical levels for prevalence of PDs and personality traits between the two groups

<table>
<thead>
<tr>
<th>Personality disorder</th>
<th>$\chi^2$</th>
<th>Personality disorder</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(BR &gt; 85)</td>
<td>Clinically significant</td>
<td>personality traits (BR 75-84)</td>
</tr>
<tr>
<td>Paranoid</td>
<td>p = .318</td>
<td>p = .614</td>
<td></td>
</tr>
<tr>
<td>Schizoid</td>
<td>p = .318</td>
<td>p = .478</td>
<td></td>
</tr>
<tr>
<td>Schizotypal</td>
<td>p = .088</td>
<td>p = .220</td>
<td></td>
</tr>
<tr>
<td>Antisocial</td>
<td>p = .493</td>
<td>p = 1.000</td>
<td></td>
</tr>
<tr>
<td>Borderline</td>
<td>p = 1.000</td>
<td>p = 1.000</td>
<td></td>
</tr>
<tr>
<td>Histrionic</td>
<td>-</td>
<td>p = 1.000</td>
<td></td>
</tr>
<tr>
<td>Narcissistic</td>
<td>-</td>
<td>p = .493</td>
<td></td>
</tr>
<tr>
<td>Avoidant</td>
<td>p = .318</td>
<td>$\chi^2 = 2.198$, df.1, p = .138</td>
<td></td>
</tr>
<tr>
<td>Dependent</td>
<td>p = .163</td>
<td>$\chi^2 = .000$, df.1, p = 1.000</td>
<td></td>
</tr>
<tr>
<td>Compulsive</td>
<td>-</td>
<td>p = 1.000</td>
<td></td>
</tr>
<tr>
<td>Depressive</td>
<td>p = 1.000</td>
<td>$\chi^2 = .474$, df.1, p = .491</td>
<td></td>
</tr>
<tr>
<td>Passive-aggressive</td>
<td>p = 1.000</td>
<td>$\chi^2 = .000$, df.1, p = 1.000</td>
<td></td>
</tr>
<tr>
<td>Self-defeating</td>
<td>-</td>
<td>$\chi^2 = .000$, df.1, p = 1.000</td>
<td></td>
</tr>
<tr>
<td>Sadistic (aggressive)</td>
<td>p = .457</td>
<td>p = .710</td>
<td></td>
</tr>
</tbody>
</table>

Note: Fisher's Exact Test quoted using 2-sided significance level

The Mann-Whitney U test used to explore differences in the two groups' MCMI-III BR scores for each PD scale suggested no significant differences (Table 14). The above findings do not support the second research hypothesis that borderline, avoidant, paranoid and obsessive-compulsive PDs (e.g. Southwick et al., 1993; Bollinger et al., 2000) will be more prevalent in the PTSD group.

Table 14: Mean, Standard Deviation (SD) and Mann-Whitney U for each PD BR score

<table>
<thead>
<tr>
<th>Personality Disorder</th>
<th>PTSD (n = 21)</th>
<th>Non-PTSD (n = 25)</th>
<th>Mann-Whitney U (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean   SD</td>
<td>Mean   SD</td>
<td>z   p</td>
</tr>
<tr>
<td>Paranoid</td>
<td>58.52 31.13</td>
<td>60.12 20.60</td>
<td>z = -2.76, p = .006</td>
</tr>
<tr>
<td>Schizoid</td>
<td>69.90 16.78</td>
<td>63.56 19.06</td>
<td>z = -1.83, p = .068</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>65.95 18.64</td>
<td>50.40 26.10</td>
<td>z = -1.10, p = .121</td>
</tr>
<tr>
<td>Antisocial</td>
<td>56.62 24.46</td>
<td>54.40 25.67</td>
<td>z = -1.02, p = .305</td>
</tr>
<tr>
<td>Borderline</td>
<td>71.29 16.33</td>
<td>64.48 23.07</td>
<td>z = -2.21, p = .025</td>
</tr>
<tr>
<td>Histrionic</td>
<td>38.62 17.40</td>
<td>39.52 15.70</td>
<td>z = -1.00, p = .315</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>43.14 15.78</td>
<td>47.72 17.32</td>
<td>z = -2.21, p = .025</td>
</tr>
<tr>
<td>Avoidant</td>
<td>63.57 25.36</td>
<td>61.60 25.96</td>
<td>z = 1.24, p = .215</td>
</tr>
<tr>
<td>Dependent</td>
<td>71.43 21.18</td>
<td>64.24 19.49</td>
<td>z = -1.24, p = .215</td>
</tr>
<tr>
<td>Compulsive</td>
<td>37.62 16.29</td>
<td>40.40 16.97</td>
<td>z = -1.44, p = .159</td>
</tr>
<tr>
<td>Depressive</td>
<td>73.10 19.14</td>
<td>68.88 25.66</td>
<td>z = -1.50, p = .136</td>
</tr>
<tr>
<td>Passive-aggressive</td>
<td>72.86 24.12</td>
<td>69.76 24.22</td>
<td>z = -1.50, p = .136</td>
</tr>
<tr>
<td>Self-defeating</td>
<td>62.52 19.62</td>
<td>54.90 29.67</td>
<td>z = -1.30, p = .275</td>
</tr>
<tr>
<td>Sadistic (aggressive)</td>
<td>56.43 20.00</td>
<td>61.28 14.32</td>
<td>z = -1.75, p = .452</td>
</tr>
</tbody>
</table>
Based on the SCID-II interviews, the most frequent single PD identified in the PTSD group was depressive (14.3%, n = 3) and paranoid (14.3%, n = 3). In the Non-PTSD group, avoidant PD was the most frequent (16%, n = 4) followed by antisocial (12%, n = 3) and depressive (12%, n = 3). The PTSD group did not significantly differ from the Non-PTSD group in the prevalence of particular PDs: specifically, borderline, avoidant, paranoid and obsessive-compulsive PDs (see Table 15 for $\chi^2$ statistical levels).

Table 15: Personality disorders identified using the SCID-II and $\chi^2$ statistical levels

<table>
<thead>
<tr>
<th>Personality disorder</th>
<th>PTSD (n = 21)</th>
<th>Non-PTSD (n = 25)</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td><strong>Cluster A</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paranoid</td>
<td>3</td>
<td>14.3</td>
<td>2</td>
</tr>
<tr>
<td>Schizoid</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td><strong>Cluster B</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antisocial</td>
<td>1</td>
<td>4.8</td>
<td>3</td>
</tr>
<tr>
<td>Borderline</td>
<td>1</td>
<td>4.8</td>
<td>2</td>
</tr>
<tr>
<td>Histrionic</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td><strong>Cluster C</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidant</td>
<td>2</td>
<td>9.5</td>
<td>4</td>
</tr>
<tr>
<td>Dependent</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Compulsive</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td><strong>Appendix</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depressive</td>
<td>3</td>
<td>14.3</td>
<td>2</td>
</tr>
<tr>
<td>Passive-aggressive</td>
<td>2</td>
<td>9.5</td>
<td>2</td>
</tr>
<tr>
<td><strong>Deleted</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-defeating</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Sadistic (aggressive)</td>
<td>0</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total number</strong></td>
<td>12</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Regardless of whether PD was identified using the MCMI-III self-report or SCID-II clinical interview, the findings in this study do not support Southwick et al. (1996) and Bollinger et al. (2000) that borderline, avoidant, paranoid and obsessive compulsive PD are prevalent among individuals with PTSD, thus rejecting the second hypothesis.

The line graph (figure 1, p. 291) provides a visual representation of the similarity in PD profiles (similarly set out as described in Shea et al., 2000 and Richman & Frueh, 1996) for
the two groups based on the MCMI-III mean BR scores for each PD scale. The line graph has been subdivided into Cluster A (paranoid, schizoid and schizotypal), Cluster B (antisocial, borderline, histrionic and narcissistic) and Cluster C (avoidant, dependent and compulsive).

**Personality profile of the PTSD and Non-PTSD groups**

![Graph showing personality profile](image)

**Figure 1: Personality profile of the PTSD group and Non-PTSD group based on the mean BR scores for each PD**

**7.2.2 PD clusters, appendix and deleted category**

Further exploratory analysis of the MCMI-III responses indicated that the PTSD group yielded the highest number of PDs within Cluster A (42.8%, n = 9), followed by Cluster C (33.3%, n = 7) and then Cluster B (23.8%, n = 5). By comparison, the Non-PTSD group yielded the most PDs in Cluster B (28%, n = 7), followed by both Cluster A and Cluster C (8%, n = 2 in both). The two PDs from the appendix, passive-aggressive and depressive, were found in 42.8% (n = 9) of the PTSD group and 40% (n = 10) of the Non-PTSD group. One participant from the PTSD group met diagnostic criteria for sadistic PD (deleted category).
A statistically significant difference was found for participants who met criteria for PD within Cluster A in the PTSD group compared with the Non-PTSD group (p = .036, 2-sided). No significant differences were found using $\chi^2$ between the two groups for Cluster B (p = 1.000, 2-sided), Cluster C (p = .117, 2-sided), within the appendix ($\chi^2 = .000$, df=1, p = 1.000) and deleted category (p = .457, 2-sided).

Based on the SCID-II interviews, Cluster A had the highest number of PD (14.3%, n = 3), followed by both Cluster B and Cluster C (9.2%, n = 2) in the PTSD group. The Non-PTSD group had their highest number of PDs in Cluster B (20%; n = 5), followed by Cluster C (16%, n = 4) and Cluster A (8%, n = 2). Five participants in the PTSD group (23.8%) and five participants in the Non-PTSD group (20%) were identified with PD from the DSM-IV appendix (i.e. depressive and passive-aggressive PD). No participants were identified with a PD from the deleted category.

The $\chi^2$ test showed no statistically significant differences between the two groups for the number of PD met within Cluster A (p = .648, 2-sided), Cluster B (p = .673, 2-sided) and Cluster C ($\chi^2 = .000$, df=1, p = 1.000).

### 7.3 PD and PTSD symptom severity

#### 7.3.1 Hypothesis 3: Increased PTSD symptom severity will be related to PD diagnosis (e.g. Richman & Frueh, 1996)

Based on the BR scores of 85 and above from the MCMI-III, the Mann-Whitney U test showed that participants with comorbid PTSD-PD (n = 10; MR = 11.75, SR = 117.50) compared with participants with PTSD-noPD (n = 11; MR = 10.32, SR = 113.50) did not significantly differ in their reporting of PTSD symptom severity (z = -.531, p = .60, 2-tailed). Based on the SCID-II interviews, participants with comorbid PTSD-PD (n = 7; MR = 9.79, SR = 68.50) compared with participants with PTSD-noPD (n = 14; MR = 11.61, MR = 162.50) did not significantly differ in their reporting of PTSD symptom severity (z = -.637, p = .524). The presence of PD therefore makes no difference to PTSD symptom severity, thus rejecting the third hypothesis.
The above procedure was repeated to include BR scores of 75 and above. This altered the group sample sizes to PTSD-PD ($n = 19$) and PTSD-noPD ($n = 2$). Clinically significant personality traits also makes no significant difference to PTSD symptom severity (PTSD-PD; $MR = 11.18$, $SR = 212.5$; PTSD-noPD; $MR = 9.25$, $SR = 18.50$; $z = .421$, $p = .674$, 2-tailed).

### 7.4 Comorbid groups and Axis-I disorders

#### 7.4.1 Hypothesis 4: Other comorbid Axis-I type disorders (e.g. alcohol dependency and major depression) will be more prevalent in the comorbid PTSD-PD group compared with the other groups (e.g. Kozarić-Kovačić & Kocijan-Hercigonja, 2001)

Based on the MCMI-III BR scores of 85 and above, of the sample population ($n = 46$), 21% ($n = 10$) had comorbid PTSD-PD, 23.9% ($n = 11$) had PTSD but no PD (PTSD-noPD group), 23.9% ($n = 11$) had an Axis-I disorder other than PTSD and PD (Non-PTSD-PD group) and 30.4% ($n = 14$) had neither PTSD or PD but presented to the DCP with an Axis-I disorder (Non-PTSD-noPD group).

The Kruskal-Wallis Test was conducted to test the fourth hypothesis that the BR scores for the Axis-I disorders alcohol dependence and depression will be higher (indicating prevalence) in the PTSD-PD group compared with three comparison groups. See Table 16 for means, standard deviation (SD) and statistical levels.

<table>
<thead>
<tr>
<th>Axis-I clinical syndrome</th>
<th>PTSD-PD ($n = 10$)</th>
<th>PTSD-NoPD ($n = 11$)</th>
<th>Non-PTSD-PD ($n = 11$)</th>
<th>Non-PTSD-noPD ($n = 14$)</th>
<th>Kruskal-Wallis Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Anxiety</td>
<td>93.60</td>
<td>9.18</td>
<td>83.00</td>
<td>20.24</td>
<td>81.91</td>
</tr>
<tr>
<td>Somatoform</td>
<td>72.80</td>
<td>7.44</td>
<td>70.36</td>
<td>11.71</td>
<td>66.45</td>
</tr>
<tr>
<td>Bipolar: Manic</td>
<td>54.40</td>
<td>19.96</td>
<td>62.36</td>
<td>7.24</td>
<td>62.91</td>
</tr>
<tr>
<td>Dysthymia</td>
<td>84.80</td>
<td>7.70</td>
<td>76.91</td>
<td>4.76</td>
<td>78.27</td>
</tr>
<tr>
<td>Alcohol dependence</td>
<td>65.40</td>
<td>23.30</td>
<td>52.55</td>
<td>25.11</td>
<td>70.45</td>
</tr>
<tr>
<td>Drug dependence</td>
<td>49.30</td>
<td>14.72</td>
<td>43.27</td>
<td>19.87</td>
<td>49.27</td>
</tr>
<tr>
<td>PTSD</td>
<td>79.20</td>
<td>14.03</td>
<td>69.27</td>
<td>10.25</td>
<td>63.27</td>
</tr>
<tr>
<td>Thought disorder</td>
<td>74.20</td>
<td>14.54</td>
<td>66.55</td>
<td>5.45</td>
<td>68.27</td>
</tr>
<tr>
<td>Major depression</td>
<td>80.10</td>
<td>13.27</td>
<td>68.09</td>
<td>11.31</td>
<td>76.27</td>
</tr>
<tr>
<td>Delusional disorder</td>
<td>63.40</td>
<td>18.82</td>
<td>30.27</td>
<td>10.27</td>
<td>52.45</td>
</tr>
</tbody>
</table>

Note: those marked with † are significant at $p = 0.05$ level
The line graph (figure 2) provides a visual representation of the differences between the four groups based on the mean BR scores for the clinical syndromes.

![Clinical syndrome mean BR scores for the four groups](image)

**Figure 2: Mean BR scores from Table 16 for the four groups for each clinical syndrome**

There were no significant differences between the four groups for alcohol dependence ($\chi^2 = 4.87$, df.3, $p = .182$). A significant difference was found between the groups for major depression ($\chi^2 = 14.16$, df.3, $p = .003$). An inspection of the means for the groups suggested the PTSD-PD group had significantly higher mean scores for anxiety, somatoform, dysthymia, thought disorder, major depression and delusional disorder compared with the three other groups. The mean BR score for PTSD was also higher for the comorbid PTSD-PD compared with participants who had PTSD but no PD. The Non-PTSD-noPD group had the lowest mean BR scores overall.
Unplanned post-hoc comparisons using Mann-Whitney U with Bonferroni adjustment ($p = < .008$) were performed to identify where the significant differences lay between the four groups. As expected, the clinical syndrome PTSD discriminated between the two PTSD groups and the two Non-PTSD groups. Furthermore, the PTSD-PD group and Non-PTSD-noPD group significantly differed from one another, compared with the other groups (see Table 17).

Table 17: Specific significant differences between the four groups on the clinical syndromes

<table>
<thead>
<tr>
<th></th>
<th>PTSD-PD</th>
<th>PTSD-noPD</th>
<th>Non-PTSD-PD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD-noPD</td>
<td>Delusional disorder</td>
<td>$z = -2.661, p = .008$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PTSD</td>
<td>$z = -2.647, p = .008$</td>
<td></td>
</tr>
<tr>
<td>Non-PTSD-PD</td>
<td>Anxiety</td>
<td>$z = -2.961, p = .003$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Somatoform</td>
<td>$z = -2.965, p = .003$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dysthymia</td>
<td>$z = -3.208, p = .001$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dysthymia</td>
<td>$z = -3.460, p = .001$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Major depression</td>
<td>$z = -2.715, p = .007$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thought disorder</td>
<td>$z = -2.674, p = .007$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Major depression</td>
<td>$z = -3.165, p = .002$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PTSD</td>
<td>$z = -3.401, p = .001$</td>
<td></td>
</tr>
<tr>
<td>Non-PTSD-noPD</td>
<td>Thought disorder</td>
<td>$z = -2.674, p = .007$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Major depression</td>
<td>$z = -3.165, p = .002$</td>
<td></td>
</tr>
</tbody>
</table>

Based on the outcome of SCID interviews, of the sample population ($n = 46$), 15.2% ($n = 7$) had comorbid PTSD-PD, 30.4% ($n = 14$) had PTSD but no PD (SCID-II: PTSD-noPD group), 17.4% ($n = 8$) had an Axis-I disorder other than PTSD and PD (SCID-II: Non-PTSD-PD group) and 37% ($n = 17$) had neither PTSD or PD but presented to the DCP with an Axis-I disorder (SCID-II: Non-PTSD-noPD group).
The Kruskal-Wallis Test was conducted to test the fourth hypothesis for those PDs identified with the SCID-II, with the mean BR scores for the Axis-I disorders alcohol dependence and depression. Similar to the above findings, no significant difference was found between the four groups for alcohol dependence \( (\chi^2 = 1.91, \text{df}3, p = .592) \), but a significant difference was evident for major depression \( (\chi^2 = 10.04, \text{df}3, p = .018) \). An exploration of the remaining clinical syndromes found that the SCID-II: PTSD-PD group had the highest mean BR scores for anxiety, somatoform, dysthymia, thought disorder and delusional disorder. The SCID-II: PTSD-PD group had a higher mean BR score for PTSD compared with participants with PTSD and no PD. See Table 18 for means, standard deviations (SD) and statistical levels. 

<table>
<thead>
<tr>
<th>Axis-I clinical syndrome</th>
<th>SCID-II: PTSD-PD (n = 7)</th>
<th>SCID-II: PTSD-NoPD (n = 14)</th>
<th>SCID-II: Non-PTSD-PD (n = 8)</th>
<th>SCID-II: Non-PTSD-noPD (n = 17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>91.86 ± 9.46</td>
<td>86.14 ± 19.12</td>
<td>82.00 ± 20.09</td>
<td>65.12 ± 28.38</td>
</tr>
<tr>
<td>Somatoform</td>
<td>74.86 ± 6.89</td>
<td>69.86 ± 10.73</td>
<td>66.13 ± 4.67</td>
<td>46.24 ± 27.82</td>
</tr>
<tr>
<td>Bipolar: Manic</td>
<td>61.00 ± 14.29</td>
<td>57.36 ± 15.75</td>
<td>63.13 ± 3.04</td>
<td>47.29 ± 24.25</td>
</tr>
<tr>
<td>Dysthymia</td>
<td>86.57 ± 8.08</td>
<td>77.71 ± 5.03</td>
<td>79.88 ± 11.97</td>
<td>54.82 ± 26.12</td>
</tr>
<tr>
<td>Alcohol dependence</td>
<td>67.57 ± 15.03</td>
<td>54.21 ± 27.55</td>
<td>67.75 ± 29.36</td>
<td>56.41 ± 31.55</td>
</tr>
<tr>
<td>Drug dependence</td>
<td>51.14 ± 15.41</td>
<td>43.64 ± 18.40</td>
<td>50.75 ± 21.96</td>
<td>39.47 ± 20.45</td>
</tr>
<tr>
<td>PTSD</td>
<td>78.29 ± 19.88</td>
<td>71.86 ± 7.71</td>
<td>61.00 ± 11.44</td>
<td>44.94 ± 29.73</td>
</tr>
<tr>
<td>Thought disorder</td>
<td>76.86 ± 16.57</td>
<td>66.86 ± 5.49</td>
<td>66.25 ± 3.15</td>
<td>55.06 ± 22.90</td>
</tr>
<tr>
<td>Major depression</td>
<td>79.43 ± 12.05</td>
<td>71.00 ± 13.63</td>
<td>78.00 ± 17.06</td>
<td>44.71 ± 30.86</td>
</tr>
<tr>
<td>Delusional disorder</td>
<td>61.00 ± 30.73</td>
<td>38.57 ± 27.71</td>
<td>44.50 ± 21.62</td>
<td>38.41 ± 29.45</td>
</tr>
</tbody>
</table>

Note: those marked with † are significant at p = 0.05 level

Unplanned post-hoc comparisons using Mann-Whitney U with Bonferroni adjustment \( (p = .008) \) performed on the four SCID-II groups found that the SCID-II: PTSD-PD group significantly differed from the SCID-II: Non-PTSD-noPD group for somatoform \( (z = -3.277, p = .001) \), dysthymia \( (z = -3.497, p = .00047) \) and major depression \( (z = -2.704, p = .007) \). The SCID-II: PTSD-NoPD group differed from the SCID-II: Non-PTSD-noPD group for dysthymia \( (z = -3.447, p = .001) \), somatoform \( (z = -2.668, p = .008) \) and as expected, PTSD \( (z = -2.963, p = .003) \). The SCID-II: Non-PTSD-PD group differed significantly from the SCID-II: Non-PTSD-noPD group for dysthymia \( (z = -2.684, p = .007) \).
The line graph (figure 3) provides a visual representation of the differences between the four SCID-II groups based on the mean BR scores for the clinical syndromes.

![Clinical Syndromes mean BR scores for the four SCID-II groups](image)

**Figure 3:** Mean BR scores from Table 18 for the four groups for each clinical syndrome

### 7.5 PD features and the type of trauma

#### 7.5.1 Hypothesis 5: The type of trauma will be associated with particular PD features (e.g. Shea et al., 2000).

Table 19 (p. 298) shows the types of traumas experienced across the four groups. The ability to answer the question of whether particular PD features are associated with certain types of trauma was limited by the small sample size, the small numbers of particular traumatic events, the few participants with PD and the lack of a more thorough assessment of traumatic experiences. Had the sample size been larger, questions around the association between participants with traumatic histories of assaultive behaviour and antisocial PD, and sexual contact before 18 or sexual abuse experiences and borderline PD may have been
addressed. Because the sample size was very small, statistical analysis could not be performed. Moreover, if analysis was undertaken on the small numbers available, interpretation and the ability to generalise would have been extremely limited.

Table 19: Type and most distressing trauma experienced

<table>
<thead>
<tr>
<th>Type of trauma experienced (from PDS)</th>
<th>PTSD-PD</th>
<th>PTSD-noPD</th>
<th>Non-PTSD-PD</th>
<th>Non-PTSD-NoPD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MCMI (n = 10)</td>
<td>SCID (n = 7)</td>
<td>MCMI (n = 11)</td>
<td>SCID (n = 14)</td>
</tr>
<tr>
<td></td>
<td>* †</td>
<td>* †</td>
<td>* †</td>
<td>* †</td>
</tr>
<tr>
<td>Serious accident</td>
<td>4 1 1</td>
<td>7 4 10 5</td>
<td>3 2 2 1</td>
<td>4 1 5 2</td>
</tr>
<tr>
<td>Natural disaster</td>
<td>1</td>
<td>1 2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Non-sexual assault – known</td>
<td>2 2 2 2</td>
<td>3 3</td>
<td>3 3 2 2</td>
<td>1 2</td>
</tr>
<tr>
<td>Non-sexual assault – stranger</td>
<td>3 1 2 1</td>
<td>6 2 7 2</td>
<td>2 1 2</td>
<td>2 2 2</td>
</tr>
<tr>
<td>Sexual assault – known</td>
<td>1 1 1 1</td>
<td>1 1</td>
<td>1 1 1 1</td>
<td>1 1</td>
</tr>
<tr>
<td>Sexual assault – stranger</td>
<td>1 1 1 1</td>
<td>1 1</td>
<td>1 1 1 1</td>
<td>1 1</td>
</tr>
<tr>
<td>Military combat or war zone</td>
<td>4 2 2 1</td>
<td>6 2 8 3</td>
<td>3 1</td>
<td>4 2 7 3</td>
</tr>
<tr>
<td>Sexual contact before age 18</td>
<td>1</td>
<td>1</td>
<td>2 1</td>
<td>1 2</td>
</tr>
<tr>
<td>Imprisonment</td>
<td></td>
<td></td>
<td>2 1</td>
<td>1</td>
</tr>
<tr>
<td>Torture</td>
<td>1 1 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life-threatening illness</td>
<td>1 1 1</td>
<td>5 2 6 3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Other traumatic event</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body handling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Witnessed rape</td>
<td>1 1 1 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death of family member</td>
<td>2 1 1 1</td>
<td>1 1 1</td>
<td>1 1 1 1</td>
<td>1 1</td>
</tr>
<tr>
<td>Bullied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Witnessed death of friend</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship problems</td>
<td>2 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical difficulties</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: all figures under '*' indicates most distressing trauma; all figures under '+' indicates traumatic event experienced in lifetime
7.6 Further analysis

7.6.1 Relationship between PDS and MCMI-III PTSD scale

Correlation analysis was used to measure the strength and direction of the relationship between the PTSD BR score on the MCMI-III and the number of criterion met on the PDS. BR scores of 85 and above on the MCMI-III indicate PTSD pathology and six criterion met on the PDS would be sufficient for a diagnosis of PTSD. The scatter-plot (figure 4) suggested that the majority of participants who met diagnostic criteria for PTSD using the PDS obtained BR scores between 60 and 80, rather than 85 or above. Statistical analysis using Spearman's rho showed a positive correlation between the two measures ($r = .632, p = .000$).

![Relationship between PDS criterion and MCMI-III PTSD BR scores](image_url)

**Figure 4:** Scatter-plot showing the relationship between PTSD BR scores and number of criterion met on the PDS

7.7 Trauma experienced

As little differences were found between the PTSD group and Non-PTSD group with regard to comorbidity of PTSD and PD, the two groups' traumatic experiences were further investigated. Based on the participants' self-reporting on the PDS (Foa, 1995), 89% ($n = 41$) of the entire sample ($n = 46$) reported experiencing at least one traumatic event in their lifetime. Participants assigned to the PTSD group were those who reported traumatic
experiences of sufficient intensity to endorse the six PTSD diagnostic criteria on the PDS (45.7%, n = 21). Of the Non-PTSD group (n = 25), five participants reported not having experienced any traumatic episodes in their lifetime, 80% (n = 20) reported having experienced trauma, but not with sufficient intensity to meet PTSD diagnosis on the PDS. This formed a new group: 'Trauma-No-PTSD' (n = 20). In addition, of the Non-PTSD group, 36% (n = 9) fell one criterion short of a full PTSD diagnosis, forming a new group: 'OCS'.

7.7.1 Number of traumas experienced

Fifteen participants of the entire sample (n = 46) reported experiencing one traumatic event in their lifetime and 26 participants reported two or more traumatic experiences (Table 20). A total of 56 traumatic events were reported from the PTSD group compared with 39 from the Non-PTSD group.

<table>
<thead>
<tr>
<th>Number of traumas experienced</th>
<th>PTSD (n = 21)</th>
<th>Non-PTSD (n = 25)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>One</td>
<td>7</td>
<td>33.3</td>
</tr>
<tr>
<td>Two</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Three</td>
<td>3</td>
<td>14.3</td>
</tr>
<tr>
<td>Four</td>
<td>5</td>
<td>23.8</td>
</tr>
<tr>
<td>Five</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td>Six</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Seven</td>
<td>1</td>
<td>4.8</td>
</tr>
<tr>
<td><strong>Total traumas</strong></td>
<td><strong>56</strong></td>
<td></td>
</tr>
</tbody>
</table>

Statistical analysis using Mann-Whitney U found no significant differences between the PTSD group (n = 21, MR = 23.36, SR = 490.50) and Trauma-no-PTSD group (n = 20, MR = 18.52, SR = 370.50) on the number of traumas experienced (z = -1.342, p = .180, 2-tailed). The number of traumas experienced was collapsed into the ranges '1-3' and '4-7' and reanalysed using $\chi^2$. Ninety-five per cent (n = 19) of the Trauma-no-PTSD group experienced more traumas in the range '1-3' compared with 66.7% (n = 14) of the PTSD group (p = .026, 1-sided). Of the PTSD group, 33.3% (n = 7) experienced significantly more traumas in the range '4-7' than the Trauma-no-PTSD group (5%, n = 1; p = .026, 1-sided).
7.7.2 Types and most distressing trauma experienced

The most frequently reported traumatic event in the PTSD group was ‘serious accident’ (52.4%, n = 11) followed by ‘military combat or war zone’ experiences (47.6%, n = 10) and ‘non-sexual assault by a stranger’ (42.9%, n = 9). The PTSD group reported the most distressing traumatic event to be ‘serious accident’ (23.8%, n = 5) followed by ‘military combat or war zone’ experiences (19%, n = 4). Similarly, the most frequently reported and most distressing traumatic event reported in the Trauma-no-PTSD group was ‘serious accident’ (35%, n = 7 and 15%, n = 3 respectively) and ‘military combat or war zone’ experiences (35%, n = 7; 15%, n = 3 respectively; see Table 21).

Table 21: Type and most distressing trauma experienced

<table>
<thead>
<tr>
<th>Type of trauma experienced (from PDS)</th>
<th>PTSD (n = 21)</th>
<th>Trauma-no-PTSD (n = 20)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>experienced</td>
<td>most distressing</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Serious accident</td>
<td>11</td>
<td>52.4%</td>
</tr>
<tr>
<td>Natural disaster</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td>Non-sexual assault – known</td>
<td>5</td>
<td>23.8%</td>
</tr>
<tr>
<td>Non-sexual assault – stranger</td>
<td>9</td>
<td>42.9%</td>
</tr>
<tr>
<td>Sexual assault – known</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sexual assault – stranger</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td>Military combat or war zone</td>
<td>10</td>
<td>47.6%</td>
</tr>
<tr>
<td>Sexual contact before age 18</td>
<td>1</td>
<td>4.8%</td>
</tr>
<tr>
<td>Imprisonment</td>
<td>1</td>
<td>4.8%</td>
</tr>
<tr>
<td>Torture</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td>Life-threatening illness</td>
<td>6</td>
<td>28.6%</td>
</tr>
<tr>
<td>Other traumatic event</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body handling</td>
<td>1</td>
<td>4.8%</td>
</tr>
<tr>
<td>Witnessed rape</td>
<td>1</td>
<td>4.8%</td>
</tr>
<tr>
<td>Death of family member</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td>Bullied</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Witnessed death of friend</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Relationship problems</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td>Physical difficulties</td>
<td>1</td>
<td>4.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>56</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>
Using $\chi^2$ revealed no significant differences between the two groups for the types of traumas experienced or for the most distressing traumatic event experienced (Table 22).

### Table 22: Significance levels for $\chi^2$ for types of trauma and most distressing trauma

<table>
<thead>
<tr>
<th>Type of trauma experienced</th>
<th>$\chi^2$</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>type of trauma</td>
<td>most distressing trauma</td>
</tr>
<tr>
<td>Serious accident</td>
<td>$\chi^2 = .650$, df.1, $p = .420$</td>
<td>$p = .377$</td>
</tr>
<tr>
<td>Natural disaster</td>
<td>$p = .519$</td>
<td>-</td>
</tr>
<tr>
<td>Non-sexual assault – known</td>
<td>$p = .534$</td>
<td>$p = .307$</td>
</tr>
<tr>
<td>Non-sexual assault – stranger</td>
<td>$\chi^2 = 1.529$, df.1, $p = .216$</td>
<td>$p = .524$</td>
</tr>
<tr>
<td>Sexual assault – stranger</td>
<td>$p = .519$</td>
<td>$p = .744$</td>
</tr>
<tr>
<td>Military combat or war zone</td>
<td>$\chi^2 = .253$, df.1, $p = .615$</td>
<td>$p = .529$</td>
</tr>
<tr>
<td>Sexual contact before age 18</td>
<td>$p = .284$</td>
<td>-</td>
</tr>
<tr>
<td>Imprisonment</td>
<td>$p = .481$</td>
<td>-</td>
</tr>
<tr>
<td>Torture</td>
<td>$p = .256$</td>
<td>-</td>
</tr>
<tr>
<td>Life-threatening illness</td>
<td>$p = .053$</td>
<td>$p = .125$</td>
</tr>
<tr>
<td>Other traumatic event</td>
<td>$p = .585$</td>
<td>$p = .645$</td>
</tr>
</tbody>
</table>

The line graph (figure 5) provides a visual representation of the number and types of traumatic events experienced between the PTSD group and Trauma-no-PTSD group.

![Type and number of traumatic events experienced](image)

**Figure 5**: Types of traumatic events experienced and number of events experienced within both groups
The Mann-Whitney U test found a significant difference in the number of participants who had experienced a 'life-threatening illness'. There was no statistical evidence that the number of traumas experienced within the remaining trauma categories differed between the PTSD group and Trauma-no-PTSD group (see Table 23 for statistical levels).

Table 23: Mann-Whitney statistical levels for number and types of trauma

<table>
<thead>
<tr>
<th>Type of trauma experienced</th>
<th>Mann-Whitney Test (2-tailed)</th>
<th>Type of trauma experienced</th>
<th>Mann-Whitney Test (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious accident</td>
<td>( z = -1.107, p = .268 )</td>
<td>Military combat/war zone</td>
<td>( z = -1.107, p = .268 )</td>
</tr>
<tr>
<td>Natural disaster</td>
<td>( z = -.549, p = .583 )</td>
<td>Sexual contact &lt; age 18</td>
<td>( z = 1.091, p = .275 )</td>
</tr>
<tr>
<td>Non-sexual assault — known</td>
<td>( z = -.291, p = .771 )</td>
<td>Imprisonment</td>
<td>( z = .636, p = .525 )</td>
</tr>
<tr>
<td>Non-sexual assault — stranger</td>
<td>( z = -1.553, p = .120 )</td>
<td>Torture</td>
<td>( z = -1.398, p = .162 )</td>
</tr>
<tr>
<td>Sexual assault — known</td>
<td>( z = -1.468, p = .142 )</td>
<td>Life-threatening illness</td>
<td>( z = .980, p = .048^* )</td>
</tr>
<tr>
<td>Sexual assault — stranger</td>
<td>( z = -.549, p = .583 )</td>
<td>Other traumatic event</td>
<td>( z = .111, p = .912 )</td>
</tr>
</tbody>
</table>

Note: * Significant at .05 level

7.8 PTSD symptom severity and duration

The Mann-Whitney U test found that participants in the PTSD group (n= 21, MR = 27.60, SR = 579.50) reported significantly more severe PTSD symptomatology compared with participants in the Trauma-no-PTSD group (n = 20, MR = 14.07, SR = 281.50; \( z = -3.62, p = .000 \)). Using \( \chi^2 \), 85.7\% (n = 18) participants from the PTSD group reported significantly more chronic symptoms compared with 40\% (n = 8) participants in the Trauma-no-PTSD group (\( \chi^2 = 7.362, df.1, p = .007 \)). There was no significant difference between the two groups on their reporting of acute trauma-related symptoms (p = .471, 1-sided), or on the variable ‘when the traumatic event occurred’ (see Table 24).

Table 24: \( \chi^2 \) significance levels for when the traumatic event occurred

<table>
<thead>
<tr>
<th>When traumatic event occurred</th>
<th>PTSD (n = 21)</th>
<th>Trauma-no-PTSD (n = 20)</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Less than 1 month ago</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>1 to 3 months ago</td>
<td>3</td>
<td>14.3</td>
<td>2</td>
</tr>
<tr>
<td>3 to 6 months ago</td>
<td>1</td>
<td>4.8</td>
<td>2</td>
</tr>
<tr>
<td>6 months to 3 years</td>
<td>5</td>
<td>23.8</td>
<td>4</td>
</tr>
<tr>
<td>3 to 5 years ago</td>
<td>5</td>
<td>23.8</td>
<td>2</td>
</tr>
<tr>
<td>More than 5 years ago</td>
<td>7</td>
<td>33.3</td>
<td>9</td>
</tr>
</tbody>
</table>
7.9 Relationship between the PDS clusters and MCMI-III PD BR scores

Analysis was undertaken using Spearman’s rho to examine the relationship between the MCMI-III BR scores for each PD and the total scores for the three PDS clusters: 'Re-experiencing', 'Avoidance' and 'Arousal' (questions 22-38 on the PDS). This was to determine if particular PDs significantly correlated with the specific PTSD symptomatology. No significant correlations were established for the PTSD group (n = 21) on any of the three PDS clusters (see Table 34 in appendix XXI, p. 403). However, significant correlations were found for the Trauma-no-PTSD group (n = 20) on all three clusters, particularly for the ‘Arousal’ cluster (Table 25).

Table 25: Correlations for the Trauma-no-PTSD group on the PDS clusters and PD BR scores

<table>
<thead>
<tr>
<th>Personality disorder</th>
<th>Re-experiencing (Spearman’s rho)</th>
<th>Avoidance (Spearman’s rho)</th>
<th>Arousal (Spearman’s rho)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paranoid</td>
<td>r = .372, p = .106</td>
<td>r = .254, p = .279</td>
<td>r = .541, p = .014*</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>r = .535, p = .015*</td>
<td>r = .452, p = .045*</td>
<td>r = .673, p = .001**</td>
</tr>
<tr>
<td>Schizoid</td>
<td>r = .280, p = .231</td>
<td>r = .356, p = .124</td>
<td>r = .712, p = .00042**</td>
</tr>
<tr>
<td>Antisocial</td>
<td>r = .344, p = .137</td>
<td>r = .430, p = .058</td>
<td>r = .632, p = .003**</td>
</tr>
<tr>
<td>Histrionic</td>
<td>r = -.050, p = .834</td>
<td>r = -.428, p = .060</td>
<td>r = -.619, p = .004**</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>r = -.126, p = .596</td>
<td>r = -.071, p = .767</td>
<td>r = -.418, p = .067</td>
</tr>
<tr>
<td>Borderline</td>
<td>r = .424, p = .063</td>
<td>r = .524, p = .018*</td>
<td>r = .695, p = .001**</td>
</tr>
<tr>
<td>Avoidant</td>
<td>r = .056, p = .815</td>
<td>r = .244, p = .299</td>
<td>r = .581, p = .007**</td>
</tr>
<tr>
<td>Dependent</td>
<td>r = .632, p = .003**</td>
<td>r = .608, p = .004**</td>
<td>r = .649, p = .002**</td>
</tr>
<tr>
<td>Compulsive</td>
<td>r = -.414, p = .069</td>
<td>r = -.350, p = .131</td>
<td>r = -.566, p = .009**</td>
</tr>
<tr>
<td>Depressive</td>
<td>r = .170, p = .473</td>
<td>r = .230, p = .330</td>
<td>r = .452, p = .045*</td>
</tr>
<tr>
<td>Passive-aggressive</td>
<td>r = .188, p = .426</td>
<td>r = .241, p = .306</td>
<td>r = .534, p = .015*</td>
</tr>
<tr>
<td>Self-defeating</td>
<td>r = .136, p = .566</td>
<td>r = .323, p = .165</td>
<td>r = .494, p = .027*</td>
</tr>
<tr>
<td>Sadistic (aggressive)</td>
<td>r = .178, p = .452</td>
<td>r = .027, p = .909</td>
<td>r = .430, p = .059</td>
</tr>
</tbody>
</table>

Note: **. Correlation is significant at the .01 level (2-tailed). *. Correlation is significant at the .05 level (2-tailed)

7.10 Clinical syndromes

When comparing the two original groups: PTSD (n = 21) and Non-PTSD (n = 25), the PTSD group reported significantly more severe experiences of Axis-I symptomatology for anxiety, somatoform, dysthymia and thought disorder than the Non-PTSD group. The PTSD group was not significantly more likely to abuse alcohol or experience major depression than the Non-PTSD group (Table 26, p. 305).
### Table 26: Mean, standard deviation (SD) and Mann-Whitney U for clinical syndromes

<table>
<thead>
<tr>
<th>Axis-I clinical syndromes</th>
<th>PTSD (n = 21)</th>
<th>Non-PTSD (n = 25)</th>
<th>Mann-Whitney U (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Anxiety</td>
<td>88.05</td>
<td>16.50</td>
<td>70.32</td>
</tr>
<tr>
<td>Somatoform</td>
<td>71.52</td>
<td>9.75</td>
<td>52.60</td>
</tr>
<tr>
<td>Bipolar Manic</td>
<td>58.57</td>
<td>15.02</td>
<td>52.36</td>
</tr>
<tr>
<td>Dysthymia</td>
<td>80.67</td>
<td>7.37</td>
<td>62.84</td>
</tr>
<tr>
<td>Alcohol dependence</td>
<td>58.67</td>
<td>24.55</td>
<td>40.04</td>
</tr>
<tr>
<td>Drug dependence</td>
<td>46.14</td>
<td>17.44</td>
<td>43.08</td>
</tr>
<tr>
<td>PTSD</td>
<td>74.00</td>
<td>12.92</td>
<td>50.08</td>
</tr>
<tr>
<td>Thought disorder</td>
<td>70.19</td>
<td>11.19</td>
<td>58.64</td>
</tr>
<tr>
<td>Major depression</td>
<td>73.81</td>
<td>13.45</td>
<td>55.36</td>
</tr>
<tr>
<td>Delusional disorder</td>
<td>46.05</td>
<td>30.00</td>
<td>40.36</td>
</tr>
</tbody>
</table>

Note: Those marked with † are significant at p = 0.05 level

The line graph (figure 6) provides a visual representation of the clinical syndromes profiles based on the two groups mean BR scores. As one would expect, the PTSD group significantly differed from the Non-PTSD group on the clinical syndrome PTSD.

**Clinical syndromes based on BR scores for the PTSD and Non-PTSD groups**

![Graph showing mean BR scores for each clinical syndrome for the PTSD and Non-PTSD groups](Figure 6: Mean BR scores for each clinical syndrome for the PTSD and Non-PTSD groups)
7.11 One criterion short (OCS) of full PTSD diagnosis

The OCS (n = 9) group were compared with the remaining Non-PTSD group (n = 16) on the MCMI-III and SCID-II PD scales. Table 27 shows the number and types of PDs identified.

<table>
<thead>
<tr>
<th>Personality Disorder</th>
<th>OCS (n=9)</th>
<th>Non-PTSD (n=16)</th>
<th>OCS (n=9)</th>
<th>Non-PTSD (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MCMI</td>
<td>MCMI</td>
<td>SCID</td>
<td>SCID</td>
</tr>
<tr>
<td>Paranoid</td>
<td>1 (6.3%)</td>
<td>2 (12.5%)</td>
<td>2 (12.5%)</td>
<td>1 (6.3%)</td>
</tr>
<tr>
<td>Schizoid</td>
<td>1 (6.3%)</td>
<td>2 (12.5%)</td>
<td>1 (6.3%)</td>
<td>2 (12.5%)</td>
</tr>
<tr>
<td>Antisocial</td>
<td>2 (22.2%)</td>
<td>2 (12.5%)</td>
<td>2 (22.2%)</td>
<td>1 (6.3%)</td>
</tr>
<tr>
<td>Borderline</td>
<td>3 (33.3%)</td>
<td>2 (12.5%)</td>
<td>3 (33.3%)</td>
<td>1 (6.3%)</td>
</tr>
<tr>
<td>Avoidant</td>
<td>1 (11.1%)</td>
<td>3 (33.3%)</td>
<td>1 (11.1%)</td>
<td>2 (12.5%)</td>
</tr>
<tr>
<td>Dependent</td>
<td>1 (6.3%)</td>
<td>2 (12.5%)</td>
<td>1 (6.3%)</td>
<td>2 (12.5%)</td>
</tr>
<tr>
<td>Passive-aggressive</td>
<td>3 (33.3%)</td>
<td>2 (12.5%)</td>
<td>1 (11.1%)</td>
<td>2 (12.5%)</td>
</tr>
<tr>
<td>Depressive</td>
<td>4 (44.4%)</td>
<td>1 (6.3%)</td>
<td>1 (11.1%)</td>
<td>2 (12.5%)</td>
</tr>
<tr>
<td>Any personality disorder</td>
<td>6 (66.7%)</td>
<td>4 (25%)</td>
<td>5 (55.5%)</td>
<td>3 (33.3%)</td>
</tr>
<tr>
<td>Total personality disorder</td>
<td>13</td>
<td>8</td>
<td>9</td>
<td>7</td>
</tr>
</tbody>
</table>

The personality disorder profiles (based on BR scores >85) of participants who fell one criterion short of a PTSD diagnosis (n = 9; OCS) were compared with the Non-PTSD group (n = 16) and the PTSD group (n = 21) using the Kruskal Wallis Test. There was a significant difference between the three groups for borderline PD ($\chi^2 = 7.111, df = 2, p = .029$). Schizoid and depressive PD just failed statistical significance (see Table 28, p. 307 for means, standard deviations and statistical levels).

Unplanned post-hoc comparisons using Mann-Whitney U with Bonferroni adjustment ($p = .02$) performed on the three groups found a significant difference between the OCS group (MR = 17.56, SR = 158.00) and Non-PTSD group (MR = 10.44, SR =167.00) on borderline PD ($z = -2.323, p = .02$). No other significant differences were found.
### Table 28: Mean, standard deviation and Kruskal Wallis Test for the PDs

<table>
<thead>
<tr>
<th>Personality Disorders</th>
<th>PTSD (n = 21)</th>
<th>OCS (n = 9)</th>
<th>Non-PTSD (n = 16)</th>
<th>Kruskal Wallis Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Paranoid</td>
<td>58.52</td>
<td>31.13</td>
<td>65.56</td>
<td>8.16</td>
</tr>
<tr>
<td>Schizoid</td>
<td>69.90</td>
<td>16.78</td>
<td>73.11</td>
<td>3.48</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>65.95</td>
<td>18.64</td>
<td>63.44</td>
<td>11.11</td>
</tr>
<tr>
<td>Antisocial</td>
<td>56.62</td>
<td>20.46</td>
<td>66.67</td>
<td>21.57</td>
</tr>
<tr>
<td>Borderline</td>
<td>71.29</td>
<td>16.33</td>
<td>78.33</td>
<td>14.01</td>
</tr>
<tr>
<td>Histrionic</td>
<td>38.62</td>
<td>17.40</td>
<td>32.67</td>
<td>14.43</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>43.14</td>
<td>15.78</td>
<td>41.11</td>
<td>19.30</td>
</tr>
<tr>
<td>Avoidant</td>
<td>63.57</td>
<td>25.36</td>
<td>73.22</td>
<td>16.21</td>
</tr>
<tr>
<td>Dependent</td>
<td>71.43</td>
<td>21.18</td>
<td>72.00</td>
<td>7.35</td>
</tr>
<tr>
<td>Compulsive</td>
<td>37.62</td>
<td>16.29</td>
<td>37.89</td>
<td>18.30</td>
</tr>
<tr>
<td>Depressive</td>
<td>73.10</td>
<td>19.14</td>
<td>73.33</td>
<td>13.53</td>
</tr>
<tr>
<td>Passive-aggressive</td>
<td>72.86</td>
<td>24.12</td>
<td>81.56</td>
<td>11.19</td>
</tr>
<tr>
<td>Self-defeating</td>
<td>62.52</td>
<td>19.62</td>
<td>71.67</td>
<td>7.75</td>
</tr>
<tr>
<td>Sadistic (aggressive)</td>
<td>56.43</td>
<td>20.00</td>
<td>66.11</td>
<td>10.61</td>
</tr>
</tbody>
</table>

*Note: those marked with † are significant at p < .05 level*

The mean BR scores for the PDs are illustrated on the line graph (figure 7). The line graph shows how similar the OCS group and PTSD group are on a number of PDs. The OCS group have more elevations in their BR scores on nine of the 14 PD scales, compared with the PTSD group.
Kruskal-Wallis Test was performed on the three groups to ascertain differences in their BR scores on the clinical syndromes. Significant differences were found for anxiety, somatoform, dysthymia, thought disorder and PTSD (see Table 29 for means, standard deviations and statistical levels).

<table>
<thead>
<tr>
<th>Clinical syndromes</th>
<th>PTSD (n = 21)</th>
<th>OCS (n = 9)</th>
<th>Non-PTSD (n = 16)</th>
<th>Kruskal Wallis Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>Mean 88.05 SD 16.50</td>
<td>Mean 83.67 SD 18.80</td>
<td>Mean 63.13 SD 28.29</td>
<td>$\chi^2 = 10.19$, df.2, $p = .006^+$</td>
</tr>
<tr>
<td>Somatoform</td>
<td>Mean 71.52 SD 9.75</td>
<td>Mean 65.11 SD 4.23</td>
<td>Mean 45.65 SD 28.69</td>
<td>$\chi^2 = 11.89$, df.2, $p = .003^+$</td>
</tr>
<tr>
<td>Bipolar Manic</td>
<td>Mean 58.57 SD 15.02</td>
<td>Mean 63.44 SD 5.53</td>
<td>Mean 46.13 SD 24.31</td>
<td>$\chi^2 = 2.38$, df.2, $p = .305$</td>
</tr>
<tr>
<td>Dysthymia</td>
<td>Mean 80.67 SD 7.37</td>
<td>Mean 77.67 SD 12.93</td>
<td>Mean 54.50 SD 26.96</td>
<td>$\chi^2 = 17.40$, df.2, $p = .00016^+$</td>
</tr>
<tr>
<td>Alcohol dependence</td>
<td>Mean 58.67 SD 24.55</td>
<td>Mean 70.44 SD 11.45</td>
<td>Mean 54.19 SD 36.59</td>
<td>$\chi^2 = 1.46$, df.2, $p = .482$</td>
</tr>
<tr>
<td>Drug dependence</td>
<td>Mean 46.14 SD 17.44</td>
<td>Mean 51.56 SD 20.41</td>
<td>Mean 38.31 SD 20.68</td>
<td>$\chi^2 = 2.72$, df.2, $p = .256$</td>
</tr>
<tr>
<td>PTSD</td>
<td>Mean 70.19 SD 12.92</td>
<td>Mean 67.00 SD 9.30</td>
<td>Mean 40.56 SD 27.98</td>
<td>$\chi^2 = 18.58$, df.2, $p = .00091^+$</td>
</tr>
<tr>
<td>Thought disorder</td>
<td>Mean 70.19 SD 11.19</td>
<td>Mean 70.11 SD 9.88</td>
<td>Mean 52.19 SD 20.82</td>
<td>$\chi^2 = 10.84$, df.2, $p = .004^+$</td>
</tr>
<tr>
<td>Major depression</td>
<td>Mean 73.81 SD 13.45</td>
<td>Mean 73.22 SD 19.60</td>
<td>Mean 45.31 SD 32.39</td>
<td>$\chi^2 = 5.73$, df.2, $p = .057$</td>
</tr>
<tr>
<td>Delusional disorder</td>
<td>Mean 46.05 SD 30.00</td>
<td>Mean 48.11 SD 17.89</td>
<td>Mean 36.00 SD 30.48</td>
<td>$\chi^2 = .312$, df.2, $p = .855$</td>
</tr>
</tbody>
</table>

Note: those marked with $^+$ are significant at $p = < .05$ level

Unplanned post-hoc comparisons using Mann-Whitney U with Bonferroni adjustment ($p = .02$) found that the OCS group (MR = 18.50, SR = 166.50) significantly differed from the Non-PTSD group (MR = 9.91, SR = 158.50) on the PTSD scale ($z = 2.807$, $p = .004$) and for thought disorder (OCS; MR = 18.00, SR = 162.00; Non-PTSD; MR = 10.19, SR = 163.00; $z = 2.557$, $p = .01$). No significant differences were found between the OCS group and PTSD group.

However, a number of significant differences were found between the Non-PTSD group ($n = 16$) and PTSD group for anxiety, somatoform, dysthymia and thought disorder. PTSD also significantly differentiated the two groups, although this finding would be expected given the group inclusion criteria. Major depression just failed to reach statistical significance. See Table 30 (p. 309) for the statistical levels regarding the significant differences between the PTSD group and Non-PTSD group.
Table 30: Man Whitney U statistical levels for the PTSD and Non-PTSD group

<table>
<thead>
<tr>
<th>Clinical syndromes</th>
<th>Mann-Whitney U</th>
<th>Clinical syndromes</th>
<th>Mann-Whitney U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>$\chi^2 = -3.010$, $p = .003^+$</td>
<td>Drug dependence</td>
<td>$\chi^2 = -1.254$, $p = .210$</td>
</tr>
<tr>
<td>Somatoform</td>
<td>$\chi^2 = -3.211$, $p = .001^+$</td>
<td>PTSD</td>
<td>$\chi^2 = -3.990$, $p = .0006^+$</td>
</tr>
<tr>
<td>Bipolar: Manic</td>
<td>$\chi^2 = -1.445$, $p = .148$</td>
<td>Thought disorder</td>
<td>$\chi^2 = -2.985$, $p = .003^+$</td>
</tr>
<tr>
<td>Dysthymia</td>
<td>$\chi^2 = -4.043$, $p = .00052^+$</td>
<td>Major depression</td>
<td>$\chi^2 = -2.242$, $p = .025$</td>
</tr>
<tr>
<td>Alcohol dependence</td>
<td>$\chi^2 = -0.61$, $p = .951$</td>
<td>Delusional disorder</td>
<td>$\chi^2 = -0.340$, $p = .734$</td>
</tr>
</tbody>
</table>

Note: those marked with $^+$ are significant at $p < .02$ level.

Lastly, the line graph (figure 8) provides a visual representation of the mean BR scores for the clinical syndromes. The line graph shows how similar the OCS group and PTSD group are on a number of clinical syndromes, compared with the Non-PTSD group.

Figure 8: Comparisons of the OCS group, with the PTSD group and remaining non-PTSD group.
8. Discussion

Previous studies of combat veteran populations have demonstrated that following experiences of trauma, veterans not only present with a range of Axis-I disorders, but have also been found to have a high prevalence of comorbid PD (e.g. Bollinger et al., 2000; Southwick et al., 1993; Richman & Frueh, 1996). However, what appears to have been neglected in the US literature and is non-existent in the UK literature is the study of comorbid PTSD and PD in active duty personnel. The present study aimed at extending the existing literature by examining the relationship between comorbid PTSD and PD, and DSM-IV (APA, 1994) Axis-I disorders in a UK population of active duty armed forces personnel. The research hypotheses, further analysis and statistical findings are presented in Table 31.

Table 31: Research hypotheses and statistical findings regarding comorbid PTSD and PD

<table>
<thead>
<tr>
<th>Research Hypotheses/Further analysis</th>
<th>Statistical Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hypothesis 1:</strong> There will be no difference with respect to the presence of PD within the two groups: PTSD and Non-PTSD</td>
<td>Significant</td>
</tr>
<tr>
<td><strong>Hypothesis 2:</strong> There will be a difference in the prevalence of particular PDs between the two groups. Borderline, avoidant, paranoid and obsessive-compulsive PD will be more prevalent in the PTSD group</td>
<td>No significant result observed</td>
</tr>
<tr>
<td><strong>Further analysis</strong> The PTSD group will have higher frequency of PD within the three PD Clusters</td>
<td>Significant: for Cluster A using MCMI-III</td>
</tr>
<tr>
<td><strong>Hypothesis 3:</strong> Increased PTSD symptom severity will be related to diagnosis of PD</td>
<td>No significant result observed</td>
</tr>
<tr>
<td><strong>Hypothesis 4:</strong> Other comorbid Axis I type disorders, such as alcohol dependence and depression will be more prevalent in the co-morbid PTSD-PD group compared with those identified in the other groups.</td>
<td>No significant result observed for alcohol dependence. Significant result for major depression</td>
</tr>
<tr>
<td><strong>Further analysis</strong> PTSD-PD group will show prevalence of other clinical syndromes compared with the other comorbid groups</td>
<td>Significant result for anxiety, thought disorder, dysthymia, somatoform, delusional disorder and PTSD</td>
</tr>
<tr>
<td><strong>Hypothesis 5:</strong> The type of trauma (e.g. combat, road traffic accident) will be associated with particular PD features</td>
<td>Analysis abandoned due to low numbers in traumatic events, overall sample and participants with comorbid PTSD-PD</td>
</tr>
</tbody>
</table>
8.1 Research hypotheses

8.1.1 PD identified using the MCMI-III and SCID-II (Hypothesis 1)

Research literature has suggested that PD is a ubiquitous disorder and often present in a variety of populations, such as military/combat veteran (Bollinger et al., 2000), forensic (Blackburn et al., in press) and community (Moran et al., 2000). It was therefore unsurprising that a small percentage of individuals were identified with having a PD in the current study’s active duty sample population. Furthermore, consistent with Lauterbach (2001), this study also found that PD symptomatology is not necessarily more severe among individuals with PTSD compared with individuals without PTSD.

In the current study, 45.7% of the entire sample was found with at least one PD, using the MCMI-III (Millon, 1994) and 32.6% using the SCID-II (First et al., 1997). In addition, 30% of participants met criteria for two or more PDs based on the MCMI-III and 32.6% based on the SCID-II. However, the rates of PDs identified in the current study were considerably lower compared with rates cited in previous studies. Specifically, Bollinger et al. (2000) reported that 79.4% of combat veterans met diagnostic criteria for at least one PD based on SCID-II interviews and that over 50% of this sample population met criteria for two or more PDs. Similarly, Southwick et al. (1993) reported that more than one third of their sample had multiple PDs diagnoses. However, the discrepancy regarding the identification of PDs between the current study and Bollinger’s and Southwick’s studies may be due to differences in sample populations (i.e. active duty and combat veterans) or the diagnostic measures used.

The statistically significant finding that the MCMI-III yielded a higher frequency of PDs compared with the SCID-II supports previous research regarding inherent differences between self-report measures and structured clinical interviews (e.g. Kennedy et al., 1995; Blackburn et al., in press). A tentative explanation for the discrepancy may be linked to the relationship between PD and Axis-I disorders (Noyes et al., 1990). Firstly, in the current study, participants completed the MCMI-III when they first presented to the DCP. Therefore, it may be possible that participants’ responses were influenced by their mind set at that time. Thus, the higher number of PDs identified with the MCMI-III compared with the SCID-II may have been affected by the presence of comorbid PTSD symptoms or other
comorbid Axis-I disorders. Secondly, the SCID-II clinical interview was conducted a week or two following the initial psychiatric appointment and the participant’s presenting symptom (i.e. PTSD, anxiety, depression etc) may have abated following initial contact with the treating clinician, thus reducing PD symptomatology (Gunderson et al., 1999). However, because participants were not given post-treatment measures, this hypothesis was not explored. Thirdly, differences in the outcome measures may have a consequence of participants under-reporting during the clinical interview or over-reporting during completion of the MCMI-III. However, this was not investigated during the study.

8.1.2 Types of PDs and personality traits (Hypothesis 2)
An unexpected finding was that the number of borderline, passive-aggressive, depressive, avoidant, dependent and paranoid PDs was similar among participants with and without a PTSD diagnosis. Furthermore, the rates of comorbid PTSD-PD and PD per se identified among active duty personnel was considerably lower compared with PTSD-PD comorbidity among combat veterans (Bollinger et al., 2000; Southwick et al., 1993; Richman & Frueh, 1996). The current study partly supports the latter studies in the types of PDs found among a military population, although differences were also apparent among active duty personnel; specifically, dependent and depressive PDs were frequently identified, but obsessive-compulsive PD was not present at all. In addition, active duty personnel, with and without PTSD, had less severe PD symptomatology for histrionic, narcissistic, self-defeating and sadistic PDs, thus partly supporting findings cited by Bollinger, et al. (2000), Southwick et al. (1993) and Richman and Frueh (1996).

Studies using versions of the MCMI have reported high (>90) mean BR scores for passive aggressive and avoidant PDs in combat veterans with PTSD, and that a PTSD personality profile existed (i.e. 8-2; Munley et al., 1995). However, the 8-2 PTSD profile was not apparent among active duty personnel, and none of the MCMI-III BR scores for each PD in this study exceeded a mean of 74 (see Table 14, p. 289). The 8-2 profile may therefore be unique to combat veterans, and perhaps reflects the chronicity of their problems.
The statistically significant result that participants with comorbid PTSD-PD had more PDs in Cluster A (odd; paranoid, schizotypal, schizoid) supports Lauterbach’s (2001) and Richman and Frueh’s (1996) findings. However, given that PTSD is considered to be an anxiety disorder, one would have anticipated prevalence to be in Cluster C (anxious; avoidant, dependent, compulsive). The elevations in Cluster A among the PTSD group may impact on the course of PTSD and military duties. Individuals with a Cluster A PD are often considered having pervasive difficulties with social and close relationships. This may be in part due to the nature of military training and duties where high level of suspiciousness and distrust (consistent with features of paranoid PD) may be necessary; for example during peacekeeping operations where there is danger of sniper fire (Litz, 1996). However, the lack of trust in others and detachment from peer support (consistent with schizoid and schizotypal PD features) can impact on PTSD recovery, particularly as lack of social/peer support has been cited as a PTSD risk factor (King et al., 1996).

8.1.3 PD and PTSD symptom severity (Hypothesis 3)
The finding that the severity of PTSD symptomatology was unaffected by the presence of PD was surprising because existing literature suggests that individuals with comorbid PTSD-PD are at an increased risk of experiencing a more severe course of trauma symptomatology compared with traumatised individuals without PD (Horowitz et al., 1980; Richman & Frueh, 1996). Although this finding does not support the trauma literature, it maybe that the active duty personnel in the current study were a less traumatised group, or that they under-reported their symptoms when completing the PDS.

8.1.4 Axis I disorders and PD (Hypothesis 4)
The statistically significant findings that the comorbid PTSD-PD group had higher mean BR scores for the clinical syndromes anxiety, dysthymia and major depression was comparable to earlier studies that have used the MCMI with a military (PTSD) population (e.g. Munley et al., 1995; Hyer et al., 1990; Sherwood et al., 1990). Yet, the very low incidence of alcohol dependence and antisocial PD among active duty personnel was surprising because the relationship is frequently reported among combat veteran populations (Sutker et al., 1996; Sherwood et al., 1990). In addition, the current study in part supports Gunderson et al.’s
assertion that dysthymia and depression are commonly comorbid with avoidant, dependent and borderline PD.

Participants with comorbid PTSD-PD having significantly higher mean BR scores for thought disorder, major depression, somatoform and delusional disorder, compared with participants who did not have either PTSD or a PD but had an other Axis-I disorder was an interesting finding. The difference between the groups possibly demonstrates PD, and indeed comorbid PTSD-PD as being a potential exacerbating factor on the course and expression of other psychiatric disorders (Horowitz et al., 1980). Furthermore, the difference between the comorbid PTSD-PD group and PTSD-noPD group on the delusional disorder scale may also reflect the role of PD in the expression of an Axis-I disorder or represent a diagnostic overlap between Cluster A PDs and delusional disorder. For example, participants with delusional disorder are considered paranoid and suspicious (paranoid personality), may demonstrate delusional and disturbed thinking (schizotypal personality) and often show fluctuations in mood state (PTSD, angry, depressed, anxious).

It was having a diagnosis of PTSD that appeared to differentiate between the PTSD-PD group and the Non-PTSD-PD. This finding does not support existing literature (e.g. Richman & Frueh, 1996) that a greater degree of personality dysfunction is found among individuals with PTSD compared with individuals with PD and another Axis-I disorder.

8.2 Methodological considerations on comorbidity data

The disparities found between this study and earlier studies on comorbid PTSD-PD in military personnel may be a consequence of the study’s design and other methodological issues (discussed below).

8.2.1 Sample

The majority of earlier studies examined comorbidity among war veterans who were considered to have PTSD as a consequence of their combat experiences. The discrepancy in findings between active duty personnel and combat veterans with PTSD regarding increased character pathology may reflect the differences in experiences, longevity and chronicity of
symptoms. Combat veterans may have also presented for treatment with a whole host of other problems (e.g. substance and alcohol dependency), that were not found among active duty personnel. In addition, the sample in this study was drawn from outpatient DCPs, who were likely to be 'functioning' to a sufficient degree to maintain their military duties. Thus, they may not have been as severely afflicted by their problems compared with the combat veterans cited in earlier studies. Furthermore, trying to compare this study with those studies that have used active duty personnel is difficult because they have either focussed only on PTSD (e.g. Stretch et al., 1998) or on the relationship between PTSD and one or two PDs (e.g. Barrett et al., 1996).

8.2.2 Measures used to identify PD
The reported low rates of PD may be an artefact of the measures used, or may be a reflection of active duty personnel per se having less character pathology compared with combat veterans. The design of this study was quite stringent because where early studies had used either a self report measure (e.g. Lauterbach, 2001; Richman & Frueh, 1996; Southwick et al, 1993) or a clinical interview (e.g. Bollinger et al., 2000), this study used both. Where the MCMI-III may have been influenced by the mind set of the participant when completing the questionnaire, the clinical interview allowed for a more objective judgement to be made of the presence or absence of PD. However, interviewer influence on clinical interview (i.e. the participant not wanting to appear 'pathological') and over- and under-reporting on the MCMI-III, although not explored, are considered as important factors in the differences between the studies.

Furthermore, the discrepancy between the number of PDs identified, and the low agreement between the MCMI-III and SCID-II may have been a limitation of the study's design. Specifically, the SCID-II interviews were based upon the outcome of the MCMI-III, i.e. any participant who obtained a BR score of 75 and above on the MCMI-III were assessed with the SCID-II. Hence, participants who did not obtained BR scores of 75 and above on any PDs were not assessed for PD using the SCID-II. It may have been possible that more PDs would have been identified if each participant was given the complete SCID-II rather than basing the decision on the outcome of the MCMI-III.
8.3 Further analysis

The lack of significant findings between the two groups regarding the comorbidity of PTSD and PD was rather unexpected. Therefore, a number of analyses were undertaken on the data to determine differences in traumatic experiences in an active duty population. Table 32 shows the questions considered in the further analysis and the statistical findings.

<table>
<thead>
<tr>
<th>Further analysis</th>
<th>Statistical Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PDS criterion and MCMI-III PTSD scale</strong></td>
<td>There will be a positive correlation between the number of PDS criterion met and the MCMI-III PTSD BR scores</td>
</tr>
<tr>
<td><strong>Number of traumas experienced</strong></td>
<td>Are there any differences between the PTSD group and Trauma-no-PTSD group regarding the number of traumas experienced?</td>
</tr>
<tr>
<td><strong>Range of traumas</strong></td>
<td>Are there differences in the range of traumas?</td>
</tr>
<tr>
<td><strong>Types of trauma</strong></td>
<td>Are there differences between the PTSD and Trauma-no-PTSD group in the types of trauma experienced</td>
</tr>
<tr>
<td><strong>Most distressing trauma</strong></td>
<td>Are there differences between the two groups in the most distressing trauma</td>
</tr>
<tr>
<td><strong>PTSD symptom severity</strong></td>
<td>Are there differences in PTSD symptom severity and chronicity between the PTSD and Trauma-no-PTSD groups</td>
</tr>
<tr>
<td><strong>PDS clusters and MCMI-III PD BR scores</strong></td>
<td>Are particular PDs correlated with PTSD clusters: reexperiencing, avoidance and arousal</td>
</tr>
<tr>
<td><strong>One criterion short of PTSD diagnosis</strong></td>
<td>Does the OCS group differ from the PTSD and Non-PTSD groups in PD profiles</td>
</tr>
<tr>
<td></td>
<td>Does the OCS group differ from the PTSD and Non-PTSD groups on clinical syndromes</td>
</tr>
</tbody>
</table>
8.3.1 Trauma experienced
PTSD is frequently found within military populations (e.g. Kulka et al., 1990; O'Brien & Hughes, 1991; Orner et al., 1994), and just under 90% of active duty personnel in the current study were found to have experienced a number of traumas when screened using the PDS (Foa, 1995); with 45.7% meeting diagnostic criteria. This supports the PTSD literature that not everyone who has experienced a traumatic event develops PTSD (Breslau et al., 1998). The study in part supports findings from earlier studies that have examined pre-military trauma in active duty personnel (e.g. Stretch et al., 1998). Approximately 33% of the PTSD group had experienced pre-military traumas, and although not explored in the current study, pre-military traumas may have been a risk factor for PTSD development (Barrett et al., 1996; Davidson et al., 1991; Bolton et al., 2001).

A crucial finding was that not all participants in the PTSD group were referred to the DCP with PTSD as the obvious presenting problem (see Table 10, p.278). Indeed, 57% (n = 12) were referred for PTSD and/or trauma-related experiences, but approximately 42% (n = 9) were only found to have PTSD following scoring of the PDS (Foa, 1995). This finding highlights the importance of screening for PTSD during routine psychiatric interviews (Sheeran & Zimmerman, 2002). This is particularly pertinent within a military environment where active duty personnel may be at risk of experiencing a range of potentially traumatic events during their career. Moreover, the implications of not screening for PTSD is that the disorder may be under diagnosed, especially when the presenting problem appears to be another Axis-I disorder, such as anger, depression, and anxiety (Sheeran & Zimmerman, 2002; Bolton et al., 2001). This may lead to ineffective treatment and prolonged psychiatric problems.

8.3.2 Number of traumas experienced
Although no significant differences were found between the two groups regarding the number of traumas experienced, the finding that some participants with PTSD were more likely to have experienced multiple traumas in part supports Lauterbach’s (2001) study. Although Lauterbach reported that participants who had experienced multiple traumas had higher elevations in their personality profiles, this was not apparent in the current study.
because of the inherent similarities regarding the types of PDs found among the two groups and also the absence of participants who had experienced a number of traumas per se (i.e. only one participant in the entire sample had experienced seven traumas and two had five traumas).

8.3.3 Types of trauma and most distressing trauma
The current study supports previous research that a variety of events can be perceived as traumatic, in any given population (Lauterbach, 2001; Stretch et al., 1998). An interesting finding was that three participants considered ‘life-threatening illness’ as their most distressing experience and the cause of their PTSD. Closer inspection of these responses implied that the events were not ‘life-threatening’ per se, but following a major medical procedure, the aftermath (e.g. loss of military career, feeling disempowered and having no control) was perceived as traumatic. A few participants perceived their partner having a miscarriage as traumatic which in part supports Helzer et al. (1987), who reported this as being traumatic for women. The current study therefore also supports existing literature that suggests an event does not have to be extremely traumatic, that personal meaning and perceived consequences placed on the event may also play a vital role in determining whether an individual does or does not develop PTSD (Scott & Stradling, 1994; McFarlane, 1988; Janoff-Bulman, 1985).

8.3.4 Relationship between PDS clusters and MCMI-III PD BR scores
A remarkable and unexpected finding was that the PTSD groups’ BR scores for each PD did not significantly correlate with the three PDS clusters, but the Trauma-no-PTSD groups did. Specifically, all the PDs apart from sadistic and narcissistic PD were significant at either the .01 or .05 level on the ‘arousal’ cluster. The arousal cluster includes syndromes such as having trouble falling asleep, recent irritability and anger outbursts and reduced concentration. However, as the PDS (Foa, 1995) was self-report, it was unclear whether the participants’ responses actually related to the traumatic event experienced or whether they reflected the Axis-I disorder for which they were referred.
8.3.5 One criterion short (OCS) group

Further exploration of the data on trauma experiences revealed that 19.6% (n = 9) of participants in the entire sample failed to reach caseness for PTSD by one criterion on the PDS. Because the two groups being explored was defined by PTSD diagnosis (presence or absence), the OCS group formed part of the Non-PTSD group. However, it was hypothesised that the OCS group may have influenced the results when comparisons were being made between the PTSD and Non-PTSD groups (Lauterbach, 2001).

Examining the line graph (figure 7, p. 307) suggests that the current study is consistent with previous literature that PD scores are more elevated among participants with a PTSD diagnosis (Shea et al., 2000), and indeed among a sub-threshold group (Lauterbach, 2001). Of interest however, is that the OCS group appears to have more character pathology than the PTSD group based on the mean BR scores, although this finding was not statistically significant. The similarities in personality profiles between the PTSD group and OCS group highlight the limitations of measures that stipulate a cut-off score for diagnosis. Furthermore, comparing the OCS group with the remaining Non-PTSD group shows how distinctly different the two groups are, and indeed when combined, why no significant differences were found between the PTSD group and Non-PTSD group (see figure 1, p 291). Moreover, the finding that the PTSD group and remaining Non-PTSD group differed significantly on a number of clinical syndromes supports early studies regarding the comorbidity of PTSD with other Axis-I disorders in a variety of populations (e.g. Deering et al., 1996; Stretch et al., 1998).

8.4 Methodological considerations on trauma data

8.4.1 Measures used to identify PTSD

An advantage of using the PDS was its relative ease and quickness to complete and, as it was self-report, did not require a clinical interview. However, as with all self-report instruments, whether the participant over reported their symptoms, thus leading to a PTSD diagnosis, or under-reported their symptoms, thus failing to reach diagnosis, was not explored and therefore difficult to determine. This may have lead to a number of false positive and false negative problems when considering the rate of PTSD within active duty personnel.
Furthermore, although participants may have reported numerous traumas on the PDS, only the trauma perceived as the ‘worst’ was examined regarding the responses to the PDS items. Hence, the ability to tease out the effect of accumulative traumas or other risk factors cannot be explored using this measure.

8.5 Overall methodological considerations

Although the current study did not have many statistically significant findings, the results were nevertheless extremely interesting and food for thought regarding active duty military personnel and comorbid Axis-I and Axis-II disorders. Furthermore, the study was novel in that no literature has yet been published in the US or UK regarding comorbid PTSD and PD in an active duty population. However, the study had a number of limitations, discussed below.

8.5.1 Sample

At the time of conducting this research, military personnel were preparing for deployment to the Gulf (Gulf War II, 2003) which severely impacted on their availability for the research. Such preparations meant that many participants who had completed the questionnaires could not be followed up because they had been deployed or were on exercise and unable to honour the appointment. However, there were a small number who had gone AWOL, were discharged from the service between completing the questionnaires and the clinical interview or simply did not attend the appointment. An active duty population are a difficult population to study because they may be called away for military duties at any time. This has to be taken into consideration when using the population for future research. Further limitations were the small sample size, limited time scale and being unable to reassess the participants following treatment. Although the results were interesting, generalising beyond the sample population is unwise until further research has been conducted.

8.5.2 Setting

The very nature of outpatient services (compared with inpatient settings) means that the population is not easily accessible, and naturally people can only be seen if they attend their appointment. Furthermore, because the sample was not drawn from one DCP and the
Trainee Clinical Psychologist relied extensively on the cooperation of Community Psychiatric Nurses for appropriate research participants, both time and logistical constraints were placed on the Trainee Clinical Psychologist throughout the entirety of the study.

8.5.3 Design
The design of the study was retrospective and so subject to recall bias when completing the trauma questionnaire. Therefore, it was difficult to ascertain cause and effect between PTSD and PD and other co-occurring disorders (i.e. whether the PTSD/Axis-I disorder caused increased character pathology or vice versa). A further limitation of the design was that participants were categorised as being 'PTSD' or 'Non-PTSD' (Kessler et al., 1999). Imposing this design may have resulted in the groups being more similar than dissimilar, particularly as 80% of the Non-PTSD group had experienced a trauma. If the design included more qualitative information, or adopted a dimensional approach towards both trauma experiences and personality traits, the findings may have been quite different; an area for further research, perhaps.

8.6 Clinical implications
The assessment of comorbidity between PD and other Axis-I disorders may be helpful if integrated into routine clinical assessment for information about the relationship between co-occurring disorders. Consequently, this may impact on the type of treatment choice, and also to ensure that underlying causes are not missed.

8.7 Service implications
PTSD may be underdiagnosed when trauma is not the obvious presenting problem; therefore the disorder should be screened for during routine psychiatric interviews. Furthermore, relying on cut-off scores on PTSD diagnostic tools may result in those individuals with sub-threshold levels of PTSD being misdiagnosed. Therefore, it is imperative that diagnostic measures are supplemented by other clarifying information.
8.8 Further research

This study could be extended by examining comorbidity of PTSD and PD among active duty personnel from inpatient services. If the sample size was more representative of the active duty population from the Army, Navy and RAF, a study of the prevalence of comorbid PTSD and PD could be determined. Moreover, this would extend the existing literature from the US and provide useful information about the apparent similarities and differences between active duty personnel and combat veterans; and also about military personnel from the UK.

Because of the low numbers and nature of the sample in the current study, it would be cautionary to generalise the findings beyond a military and/or psychiatric population. In an attempt to extend this research therefore, future research could include active duty personnel who; i) have PTSD and ii) have comorbid PTSD and PD, but were not presenting to psychiatric services for treatment. Having access to an active duty military population has many advantages when considering PTSD research. This is because it is very likely many personnel will encounter an event that they will perceive as traumatic. Although this research was retrospective in design, an active duty sample allows prospective and longitudinal research to be designed. Personality and trauma risk factors may be determined prior to exposure to traumatic situations (e.g. peacekeeping, war) and re-assessed on return.

Furthermore, an exploration of individuals among populations who have coped well with trauma, whose attributional styles towards traumatic experiences are positive and functional, or who have sub-threshold PTSD may shed light on the critical factors involved in the development, expression and course of PTSD. Future research should include male and female active duty populations from the UK to determine gender differences and to draw more meaningful comparisons with the US literature and with the findings from the current study.
9. References


APPENDICES I - XIII

SCID-II CRITERION FOR EACH DSM-IV PERSONALITY DISORDER
### SCID-II AVOIDANT PERSONALITY DISORDER

#### AVOIDANT PERSONALITY DISORDER

A pervasive pattern of social inhibition, feelings of inadequacy, and hypersensitivity to negative evaluation, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:

| 1. You've said that you have [Have you] avoided jobs or tasks that involved having to deal with a lot of people. Give me some examples. What was the reason that you avoided these [LIST JOBS OR TASKS]? | (1) avoids occupational activities that involve significant interpersonal contact because of fears of criticism, disapproval, or rejection |
| 2. You've said that [Do] you avoid getting involved with people unless you are certain they will like you. If you don't know whether someone likes you, would you ever make the first move? | (2) is unwilling to get involved with people unless certain of being liked |
| 3. You've said that [Do] you find it hard to be “open” even with people you are close to. Why is this? (Are you afraid of being made fun of or embarrassed?) | (3) shows restraint within intimate relationships because of the fear of being shamed or ridiculed |

? = inadequate information 1 = absent or false 2 = subthreshold 3 = threshold or true
4. You've said that /Do you often worry about being criticized or rejected in social situations.

Give me some examples.

Do you spend a lot of time worrying about this?

(4) is preoccupied with being criticized or rejected in social situations

3 = a lot of time spent worrying about social situations

5. You've said that you're /Are you usually quiet when you meet new people.

Why is that?

(Is it because you feel in some way inadequate, or not good enough?)

(5) is inhibited in new interpersonal situations because of feelings of inadequacy

3 = acknowledges trait and many examples

6. You've said that /Do you believe that you're not as good, as smart, or as attractive as most other people.

Tell me about that.

(6) views self as socially inept, personally unappealing, or inferior to others

3 = acknowledges belief

7. You've said that you're /Are you afraid to try new things.

Is that because you are afraid of being embarrassed?

Give me some examples.

(7) is unusually reluctant to take personal risks or to engage in any new activities because they may prove embarrassing

3 = several examples of avoiding activities because of fear of embarrassment

AT LEAST FOUR ITEMS ARE CODED “3” 1 3

AVOIDANT PERSONALITY DISORDER

28

29

30

31

32
<table>
<thead>
<tr>
<th>DEPENDENT PERSONALITY DISORDER CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A pervasive and excessive need to be taken care of that leads to submissive and clinging behavior and fears of separation, beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:</td>
</tr>
</tbody>
</table>

8. You've said that [Do you] need a lot of advice or reassurance from others before you can make everyday decisions—like what to wear or what to order in a restaurant.

Can you give me some examples of the kinds of decisions you would ask for advice or reassurance about?

(Does this happen most of the time?)

9. You've said that you [Do you] depend on other people to handle important areas in your life such as finances, child care, or living arrangements.

Give me some examples. (Is this more than just getting advice from people?)

(Has this happened with MOST important areas of your life?)

<table>
<thead>
<tr>
<th>1 = absent or false</th>
<th>2 = subthreshold</th>
<th>3 = threshold or true</th>
<th>? = inadequate information</th>
</tr>
</thead>
</table>

(1) has difficulty making everyday decisions without an excessive amount of advice and reassurance from others

3 = several examples

(2) needs others to assume responsibility for most major areas of his or her life

[Note: Do not include merely getting advice from others or subculturally expected behavior.]

3 = several examples
6

DEPENDENT PERSONALITY DISORDER

10. You've said [Do] you find it hard to disagree with people even when you think they are wrong. (3) has difficulty expressing disagreement with others because of fear of loss of support or approval (Note: Do not include realistic fears of retribution.)

Give me some examples of when you've found it hard to disagree.

What are you afraid will happen if you disagree?

3 = acknowledges trait or several examples

11. You've said [Do] you find it hard to start or work on tasks when there is no one to help you.

Give me some examples.

Why is that? (Is this because you are not sure you can do it right?)

3 = acknowledges trait

12. You've said [Have you] often volunteered to do things that are unpleasant.

Give me some examples of these kinds of things.

Why is that?

(5) goes to excessive lengths to obtain nurturance and support from others, to the point of volunteering to do things that are unpleasant

[Note: Do not include behavior intended to achieve goals other than being liked, such as job advancement.]

3 = acknowledges trait and at least one example

13. You've said [Do] you usually feel uncomfortable when you are by yourself. Why is that? (Is it because you need someone to take care of you?)

(6) feels uncomfortable or helpless when alone, because of exaggerated fears of being unable to care for himself or herself

3 = acknowledges trait

? = inadequate information  1 = absent or false  2 = subthreshold  3 = threshold or true
SCID-II

DEPENDENT PERSONALITY DISORDER

14. You've said that when a close relationship ends you [When a close relationship ends, do you] feel you immediately have to find someone else to take care of you.

(7) urgently seeks another relationship as a source of care and support when a close relationship ends

Tell me about that.

(Have you reacted this way almost always when close relationships have ended?)

15. You've said that [Do] you worry a lot about being left alone to take care of yourself.

(8) is unrealistically preoccupied with fears of being left to take care of himself or herself

Are there often times when you keep worrying about this?

Do you have periods when you worry about this all the time?

AT LEAST FIVE ITEMS ARE CODED "3"

DEPENDENT PERSONALITY DISORDER
**OBSESSIVE-COMPULSIVE PERSONALITY DISORDER CRITERIA**

A pervasive pattern of preoccupation with orderliness, perfectionism, and mental and interpersonal control, at the expense of flexibility, openness, and efficiency, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:

<table>
<thead>
<tr>
<th>Question</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
</table>
| 16. You've said that you are [Are you] the kind of person who focuses on details, order, and organization or likes to make lists and schedules. Give me some examples. Do you sometimes get so caught up with [EXAMPLES] that you lose sight of what you are trying to accomplish? (... Like you can't see the forest for the trees?) (Does this happen often?) | ? 1 2 3 | 1 = preoccupied with details, rules, lists, order, organization, or schedules to the extent that the major point of the activity is lost
3 = acknowledges trait and at least one example |
| 17. You've said that [Do] you have trouble finishing jobs because you spend so much time trying to get things exactly right. Give me some examples. (How often does this happen?) | ? 1 2 3 | 1 = unable to complete a project because his or her own overly strict standards are not met
3 = several examples of tasks not completed or significantly delayed because of perfectionism |

? = inadequate information  
1 = absent or false  
2 = subthreshold  
3 = threshold or true
## SCID-II - OBSESSIVE-COMPULSIVE PERSONALITY DISORDER

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. You've said that you or other people feel that you [Do you or other people feel that you] are so devoted to work (or school) that you have no time left for anyone else or for just having fun.</td>
<td>Tell me about it. (3) is excessively devoted to work and productivity to the exclusion of leisure activities and friendships (not accounted for by obvious economic necessity) [Note: Also not accounted for by temporary job requirements.] 3 = acknowledges trait or has been told by other people</td>
<td>44</td>
</tr>
<tr>
<td>19. You've said that [Do] you have very high standards about what is right and what is wrong.</td>
<td>Give me some examples of your high standards. (Do you follow rules to the letter of the law, no matter what?) (4) is overconscientious, scrupulous, and inflexible about matters of morality, ethics, or values (not accounted for by cultural or religious identification) 3 = several examples of holding self or others to rigidly high moral standards</td>
<td>45</td>
</tr>
<tr>
<td>20. You've said that [Do] you have trouble throwing things out because they might come in handy some day.</td>
<td>Give me some examples of things that you're unable to throw out. (5) is unable to discard worn-out or worthless objects even when they have no sentimental value 3 = results in a cluttered environment</td>
<td>46</td>
</tr>
</tbody>
</table>

? = inadequate information 1 = absent or false 2 = subthreshold 3 = threshold or true
21. You've said that it is \(Is it\) hard for you to let other people help you unless they agree to do things exactly the way you want.

Tell me about that. (Does this happen often?)

(Do you often end up doing things yourself to make sure they are done right?)

22. You've said that it is \(Is it\) hard for you to spend money on yourself and other people even when you have enough.

Why? (Is this because you're worried about not having enough in the future when you really need it?)

Tell me about some things you haven't spent money on because you have to save for the future.

23. You've said that you are \(Are you\) often so sure you are right that it doesn't matter what other people say.

Tell me about it.

24. You've said that other people have told you \(Have other people told you\) that you are stubborn or rigid.

Tell me about that.

**AT LEAST FOUR ITEMS ARE CODED “3”**
PASSIVE-AGGRESSIVE PERSONALITY DISORDER

A pervasive pattern of negativistic attitudes and passive resistance to demands for adequate performance, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:

25. You've said that when someone asks you to do something that you don't want to do, you say "yes" but then work slowly or do a bad job. Give me some examples of this.

26. You've said that if you don't want to do something you often just "forget" to do it. Give me some examples of this.

27. You've said that you often feel that other people don't understand you or don't appreciate how much you do. Tell me more about that. (Do you complain to other people about this?)

28. You've said that you're often grumpy and likely to get into arguments. Tell me when this happens.

? = inadequate information 1 = absent or false 2 = subthreshold 3 = threshold or true
PASSIVE-AGGRESSIVE PERSONALITY DISORDER

29. You’ve said that you’ve [Have you] found that most of your bosses, teachers, supervisors, doctors, and others who are supposed to know what they are doing really don’t.

Tell me about that.

(4) unreasonably criticizes and scorns authority

3 = several examples

30. You’ve said that [Do] you often think that it’s not fair that other people have more than you do.

Tell me more about that.

(5) expresses envy and resentment toward those apparently more fortunate

3 = examples of envy and resentment

31. You’ve said that [Do] you often complain that more than your share of bad things have happened to you.

Looking back on your life, do you feel that bad things are always happening to you?

(6) voices exaggerated and persistent complaints of personal misfortune

3 = says bad things always happen (not limited to particularly bad times in the person’s life)

32. You’ve said that [Do] you often angrily refuse to do what others want and then later feel bad and apologize.

Tell me more about this.

(7) alternates between hostile defiance and contrition

3 = acknowledges trait and at least one example

AT LEAST FOUR ITEMS ARE CODED “3”

? = inadequate information 1 = absent or false 2 = subthreshold 3 = threshold or true
### SCID-II DEPRESSIVE PERSONALITY DISORDER

#### DEPRESSIVE PERSONALITY DISORDER

Note: The DSM-IV criterion excludes a diagnosis of Depressive Personality Disorder if the behavior occurs only during Major Depressive Episodes or is better accounted for by Dysthmic Disorder. Refer to the User's Guide for a discussion of options for operationalizing this criterion.

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.</td>
<td>You've said that (Do you) you usually feel unhappy or that life is no fun.</td>
<td>(1) usual mood is dominated by depression, gloominess, cheerlessness, joylessness, unhappiness</td>
</tr>
<tr>
<td>34.</td>
<td>You've said that (Do you believe) that you are basically an inadequate person and often don't feel good about yourself.</td>
<td>(2) self-concept centers around beliefs of inadequacy, worthlessness, and low self-esteem</td>
</tr>
<tr>
<td>35.</td>
<td>You've said that (Do you) often put yourself down.</td>
<td>(3) is critical, blaming, and derogatory toward self</td>
</tr>
<tr>
<td>36.</td>
<td>You've said that (Do you) you keep thinking about bad things that have happened in the past or worry about bad things that might happen in the future.</td>
<td>(4) is brooding and given to worry</td>
</tr>
</tbody>
</table>

? = inadequate information  
1 = absent or false  
2 = subthreshold  
3 = threshold or true
37. You've said that you often judge others harshly and easily find fault with them.

Give me some examples of the kinds of things you are critical of.

38. You've said that you think that most people are basically no good.

Tell me about that.

39. You've said that you almost always expect things to turn out badly.

Tell me about that.

40. You've said that you often feel guilty about things you have or haven't done.

What kinds of things?

AT LEAST FIVE ITEMS ARE CODED “3”
<table>
<thead>
<tr>
<th>SCID-II</th>
<th>PARANOID PERSONALITY DISORDER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PARANOID PERSONALITY DISORDER</strong></td>
<td><strong>PARANOID PERSONALITY DISORDER CRITERIA</strong></td>
</tr>
<tr>
<td>Note: Behavior should NOT be considered characteristic of Paranoid Personality Disorder if it occurs exclusively during the course of Schizophrenia, a Mood Disorder With Psychotic Features, or another Psychotic Disorder or is due to the direct physiological effects of a general medical condition.</td>
<td>A pervasive distrust and suspiciousness of others such that their motives are interpreted as malevolent, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:</td>
</tr>
<tr>
<td>41. You’ve said that <em>Do</em> you often have to keep an eye out to stop people from using you or hurting you.</td>
<td>(1) suspects, without sufficient basis, that others are exploiting, harming, or deceiving him or her</td>
</tr>
<tr>
<td>Tell me about that.</td>
<td>? 1 2 3 67</td>
</tr>
<tr>
<td>42. You’ve said that you <em>Do you</em> spend a lot of time wondering if you can trust your friends or the people you work with.</td>
<td>(2) is preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates</td>
</tr>
<tr>
<td>Describe situations where you’ve gotten that feeling.</td>
<td>? 1 2 3 68</td>
</tr>
<tr>
<td>(Do you feel this way often?)</td>
<td>3 = acknowledges that this is characteristic of almost all relationships</td>
</tr>
<tr>
<td>43. You’ve said that <em>Do</em> you find that it is best not to let other people know much about you because they will use it against you.</td>
<td>(3) is reluctant to confide in others because of unwarranted fear that the information will be used maliciously against him or her</td>
</tr>
<tr>
<td>When has this happened? Tell me about it.</td>
<td>? 1 2 3 69</td>
</tr>
<tr>
<td>44. You’ve said that <em>Do</em> you often detect hidden threats or insults in things people say or do.</td>
<td>(4) reads hidden demeaning or threatening meanings into benign remarks or events</td>
</tr>
<tr>
<td>Give me some examples.</td>
<td>? = inadequate information 1 = absent or false 2 = subthreshold 3 = threshold or true</td>
</tr>
<tr>
<td>3 = acknowledges trait and at least one example</td>
<td>350</td>
</tr>
</tbody>
</table>
16. **PARANOID PERSONALITY DISORDER**

<table>
<thead>
<tr>
<th>Question</th>
<th>SCID-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>45. You’ve said that you’re /Are you/ the kind of person who holds grudges or takes a long time to forgive people who have insulted or slighted you.</td>
<td>3 = acknowledges trait and at least one example</td>
</tr>
<tr>
<td>Tell me about that.</td>
<td></td>
</tr>
<tr>
<td>46. You’ve said that there are /Are there/ many people you can’t forgive because they did or said something to you a long time ago.</td>
<td></td>
</tr>
<tr>
<td>Tell me about that.</td>
<td></td>
</tr>
<tr>
<td>47. You’ve said that /Do you/ often get angry or lash out when someone criticizes or insults you in some way.</td>
<td>3 = acknowledges trait and at least one example</td>
</tr>
<tr>
<td>Give me some examples.</td>
<td></td>
</tr>
<tr>
<td>(Do others believe that you often take offense too easily?)</td>
<td></td>
</tr>
<tr>
<td>48. You’ve said that you have /Have you/ often suspected that your spouse or partner has been unfaithful.</td>
<td>3 = examples of unjustified suspicions with several partners or on several occasions with the same partner OR acknowledges trait</td>
</tr>
<tr>
<td>Tell me about that.</td>
<td></td>
</tr>
<tr>
<td>(What clues did you have? What did you do about it? Were you right?)</td>
<td></td>
</tr>
</tbody>
</table>

**AT LEAST FOUR ITEMS ARE CODED “3”**

<table>
<thead>
<tr>
<th>? = inadequate information</th>
<th>1 = absent or false</th>
<th>2 = subthreshold</th>
<th>3 = threshold or true</th>
</tr>
</thead>
</table>

**PARANOID PERSONALITY DISORDER**
SCID-II

SCHIZOTYPAL PERSONALITY DISORDER

Note: Behavior should NOT be considered characteristic of Schizotypal Personality Disorder if it occurs exclusively during the course of Schizophrenia, a Mood Disorder With Psychotic Features, another Psychotic Disorder, or a Pervasive Developmental Disorder.

SCHIZOTYPAL PERSONALITY DISORDER CRITERIA

A pervasive pattern of social and interpersonal deficits marked by acute discomfort with, and reduced capacity for, close relationships as well as by cognitive or perceptual distortions and eccentricities of behavior, beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:

49. You’ve said that when you are out in public and see people talking [(When you are out in public and see people talking, do] you often feel that they are talking about you.

Tell me more about this.

50. You’ve said that you [Do you] often get the feeling that things that have no special meaning to most people are really meant to give you a message.

Tell me more about this.

51. You’ve said that when you are around people, you [(When you are around people, do you] often get the feeling that you are being watched or stared at.

Tell me more about this.

? = inadequate information  1 = absent or false  2 = subthreshold  3 = threshold or true
52. You've said that you have [Have you ever] felt that you could make things happen just by making a wish or thinking about them.

Tell me about that.

(How did it affect you?)

(2) odd beliefs or magical thinking that influences behavior and is inconsistent with subcultural norms (e.g., superstitiousness, belief in clairvoyance, telepathy, or "sixth sense"; in children and adolescents, bizarre fantasies or preoccupations)

3 = several examples of such phenomena that influenced behavior and are inconsistent with subcultural norms

53. You've said that you have [Have you] had personal experiences with the supernatural.

Tell me about that.

(How did it affect you?)

54. You've said that you [Do you] believe that you have a "sixth sense" that allows you to know and predict things that others can't.

Tell me about that.

(How does it affect you?)

55. You've said that it often seems [Does it often seem] that objects or shadows are really people or animals or that noises are actually people's voices.

Give me some examples.

(Were you drinking or taking drugs at the time?)

(3) unusual perceptual experiences, including bodily illusions

3 = several examples of unusual perceptual experiences not due to drugs or a general medical condition

? = inadequate information 1 = absent or false 2 = subthreshold 3 = threshold or true
<table>
<thead>
<tr>
<th>SCID-II</th>
<th>SCHIZOTYPAL PERSONALITY DISORDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>56. You’ve said that you have <em>Have you/had the sense that some person or force is around you, even though you cannot see anyone.</em> Tell me more about that. (Were you drinking or taking drugs at the time?)</td>
<td></td>
</tr>
<tr>
<td>57. You’ve said that you <em>Do you</em> often see auras or energy fields around people. Tell me more about that. (Were you drinking or taking drugs at the time?)</td>
<td></td>
</tr>
</tbody>
</table>

| OBSERVED DURING INTERVIEW | (4) odd thinking and speech (e.g., vague, circumstantial, metaphorical, over-elaborate, or stereotyped) ? 1 2 3 |
| CODE "3" IF ANY OF PARANOID CRITERIA (1), (2), (3), (4), OR (7) ARE CODED "3" | (5) suspiciousness or paranoid ideation ? 1 3 |
| OBSERVED DURING INTERVIEW | (6) inappropriate or constricted affect ? 1 2 3 |
| OBSERVED DURING INTERVIEW | (7) behavior or appearance that is odd, eccentric, or peculiar ? 1 2 3 |
| 58. You’ve said that there are *Are there/very few people that you’re really close to outside of your immediate family.* How many close friends do you have? | (8) lack of close friends or confidants other than first-degree relatives ? 1 2 3 3 = no close friends (other than first-degree relatives) |

? = inadequate information  1 = absent or false  2 = subthreshold  3 = threshold or true
<table>
<thead>
<tr>
<th>Question</th>
<th>SCID-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>59. You've said that [Do] you often feel nervous when you are with other people.</td>
<td></td>
</tr>
<tr>
<td>What are you nervous about?</td>
<td></td>
</tr>
<tr>
<td>(Are you still anxious even after you've known them for awhile?)</td>
<td></td>
</tr>
<tr>
<td>(9) excessive social anxiety that does not diminish with familiarity and tends to be associated with paranoid fears rather than negative judgments about self</td>
<td></td>
</tr>
<tr>
<td>3 = acknowledges excessive anxiety related to suspiciousness about other people’s motives</td>
<td></td>
</tr>
</tbody>
</table>

AT LEAST FIVE ITEMS ARE CODED “3”

SCHIZOTYPAL PERSONALITY DISORDER
<table>
<thead>
<tr>
<th>SCID-II</th>
<th>SCHIZOID PERSONALITY DISORDER</th>
<th>SCHIZOID PERSONALITY DISORDER CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: Behavior should NOT be considered characteristic of Schizoid Personality Disorder if it occurs exclusively during the course of Schizophrenia, a Mood Disorder With Psychotic Features, another Psychotic Disorder, or a Pervasive Developmental Disorder or is due to the direct physiological effects of a general medical condition.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A pervasive pattern of detachment from social relationships and a restricted range of expression of emotions in interpersonal settings, beginning by early adulthood and present in a variety of contexts, as indicated by four (or more) of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60. You've said that it is NOT important to you whether you have any close relationships.</td>
<td>(1) neither desires nor enjoys close relationships, including being part of a family</td>
<td></td>
</tr>
<tr>
<td>Tell me more about that.</td>
<td>? 1 2 3</td>
<td></td>
</tr>
<tr>
<td>(What about your family?)</td>
<td>3 = acknowledges trait</td>
<td></td>
</tr>
<tr>
<td>61. You've said that you would almost always rather do things alone than with other people.</td>
<td>(2) almost always chooses solitary activities</td>
<td></td>
</tr>
<tr>
<td>(Is that true both at work and during your free time?)</td>
<td>? 1 2 3</td>
<td></td>
</tr>
<tr>
<td>62. You've said that you could be content without ever being sexually involved with anyone.</td>
<td>(3) has little, if any, interest in having sexual experiences with another person</td>
<td></td>
</tr>
<tr>
<td>Tell me more about that.</td>
<td>? 1 2 3</td>
<td></td>
</tr>
<tr>
<td>(Have you always had little interest in having sex?)</td>
<td>3 = acknowledges trait</td>
<td></td>
</tr>
</tbody>
</table>

? = inadequate information 1 = absent or false 2 = subthreshold 3 = threshold or true
63. You've said that there are [Are there] really very few things that give you pleasure. (4) takes pleasure in few, if any, activities  
Tell me about that.  
(What about physical things like eating a good meal or having sex?)  
3 = acknowledges trait  
[Note: Absence of pleasure especially applies to sensory, bodily, and interpersonal experiences.]

64. You've said that it doesn't [Does it NOT] matter to you what people think of you. (6) appears indifferent to the praise or criticism of others  
How do you feel when people praise you or criticize you?  
3 = claims indifference to praise or criticism

65. You've said that [Do] you find that nothing makes you very happy or very sad. (7) shows emotional coldness, detachment, or flattened affectivity  
Tell me more about that. (ALSO CONSIDER BEHAVIOR DURING INTERVIEW)  
3 = occurring not exclusively during a Mood Disorder

AT LEAST FOUR ITEMS ARE CODED "3"
**SCID-II**

<table>
<thead>
<tr>
<th>HISTRIONIC PERSONALITY DISORDER</th>
<th>HISTRIONIC PERSONALITY DISORDER CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>66. You've said that [Do] you like to be the center of attention.</strong>&lt;br&gt;How do you feel when you're not?</td>
<td>(1) is uncomfortable in situations in which he or she is not the center of attention&lt;br&gt;3 = feels uncomfortable when not the center of attention</td>
</tr>
<tr>
<td><strong>67. You've said that [Do] you flirt a lot.</strong>&lt;br&gt;Has anyone complained about this? (ALSO CONSIDER BEHAVIOR DURING INTERVIEW)</td>
<td>(2) interaction with others is often characterized by inappropriate sexually seductive or provocative behavior&lt;br&gt;3 = acknowledges complaints, describes inappropriate behavior, or observed to be inappropriately seductive</td>
</tr>
<tr>
<td><strong>68. You've said that you [Do you] often find yourself &quot;coming on&quot; to people.</strong>&lt;br&gt;Tell me about it. (ALSO CONSIDER BEHAVIOR DURING INTERVIEW)</td>
<td>(3) displays rapidly shifting and shallow expression of emotions&lt;br&gt;3 = threshold or true</td>
</tr>
</tbody>
</table>

? = inadequate information  1 = absent or false  2 = subthreshold  3 = threshold or true
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>SCID-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>69.</td>
<td>You’ve said that you [Do you] try to draw attention to yourself by the way you dress or look. (4) consistently uses physical appearance to draw attention to self.</td>
<td>? 1 2 3</td>
</tr>
<tr>
<td></td>
<td>How do you do that?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Do you do that all the time?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OBSERVED DURING INTERVIEW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(5) has a style of speech that is excessively impressionistic and lacking in detail</td>
<td>? 1 2 3</td>
</tr>
<tr>
<td>70.</td>
<td>You’ve said that you [Do you] often make a point of being dramatic and colorful. (6) shows self-dramatization, theatricality, and exaggerated expression of emotion.</td>
<td>? 1 2 3</td>
</tr>
<tr>
<td></td>
<td>Tell me about that. (ALSO CONSIDER BEHAVIOR DURING INTERVIEW)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Do you like to show your emotions—for example, hugging people even if you don’t know them very well or crying very easily?)</td>
<td></td>
</tr>
<tr>
<td>71.</td>
<td>You’ve said that you [Do you] often change your mind about things depending on the people you’re with or what you have just read or seen on TV. (7) is suggestible (i.e., easily influenced by others or circumstances)</td>
<td>? 1 2 3</td>
</tr>
<tr>
<td></td>
<td>Tell me more about that.</td>
<td></td>
</tr>
<tr>
<td>72.</td>
<td>You’ve said that you [Do you] have lots of friends that you are very close to. (8) considers relationships to be more intimate than they actually are.</td>
<td>? 1 2 3</td>
</tr>
<tr>
<td></td>
<td>How many? Who are they?</td>
<td></td>
</tr>
</tbody>
</table>

**AT LEAST FIVE ITEMS ARE CODED “3”**

? = inadequate information  1 = absent or false  2 = subthreshold  3 = threshold or true
**SCID-II**  

**NARCISSISTIC PERSONALITY DISORDER**  

<table>
<thead>
<tr>
<th>NARCISSISTIC PERSONALITY DISORDER CRITERIA</th>
<th>?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>102</th>
</tr>
</thead>
<tbody>
<tr>
<td>A pervasive pattern of grandiosity (in fantasy or behavior), need for admiration, and lack of empathy, beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

73. You've said that [Do] people often fail to appreciate your very special talents or accomplishments.

Give me an example.

74. You've said that people have [Have people] told you that you have too high an opinion of yourself.

Give me some examples of this.

75. You've said that [Do] you think a lot about the power, fame, or recognition that will be yours someday.

Tell me more about this.

(How much time do you spend thinking about these things?)

76. You've said that [Do] you think a lot about the perfect romance that will be yours someday.

Tell me more about this.

(How much time do you spend thinking about this?)

? = inadequate information  
1 = absent or false  
2 = subthreshold  
3 = threshold or true

360
<table>
<thead>
<tr>
<th>Question</th>
<th>SCID-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>77. You've said that when you have a problem [(When you have a problem, do you] you almost always insist on seeing the top person.</td>
<td>(3) believes that he or she is &quot;special&quot; and unique and can only be understood by, or should associate with, other special or high-status people (or institutions)</td>
</tr>
<tr>
<td>Give me some examples.</td>
<td>3 = acknowledges trait and at least one example</td>
</tr>
<tr>
<td>(Why do you have to see the top person?)</td>
<td></td>
</tr>
<tr>
<td>78. You've said that [(Do] you feel it is important to spend time with people who are special or influential.</td>
<td></td>
</tr>
<tr>
<td>Why is that?</td>
<td></td>
</tr>
<tr>
<td>79. You've said that it is [(Is it] very important to you that people pay attention to you or admire you in some way.</td>
<td>(4) requires excessive admiration</td>
</tr>
<tr>
<td>Tell me more about this.</td>
<td>3 = acknowledges trait and at least one example</td>
</tr>
<tr>
<td>80. You've said that [(Do] you think that it's not necessary to follow certain rules or social conventions when they get in your way.</td>
<td>(5) has a sense of entitlement (i.e., unreasonable expectations of especially favorable treatment or automatic compliance with his or her expectations)</td>
</tr>
<tr>
<td>Give me some examples.</td>
<td>3 = several examples</td>
</tr>
<tr>
<td>Why do you feel that way?</td>
<td></td>
</tr>
<tr>
<td>81. You've said that [(Do] you feel that you are the kind of person who deserves special treatment.</td>
<td></td>
</tr>
<tr>
<td>Tell me more about this.</td>
<td></td>
</tr>
<tr>
<td>82. You've said that [(Do] you often find it necessary to step on a few toes to get what you want.</td>
<td>(6) is interpersonally exploitative (i.e., takes advantage of others to achieve his or her own ends)</td>
</tr>
<tr>
<td>Tell me some instances of that. (Does that happen often?)</td>
<td>3 = several examples in which another person is exploited</td>
</tr>
</tbody>
</table>

? = inadequate information  1 = absent or false  2 = subthreshold  3 = threshold or true
SCID-II NARCISSISTIC PERSONALITY DISORDER

83. You've said that [Do] you often have to put your needs above other people's.

Give me some examples of when that happens.

84. You've said that [Do] you often expect other people to do what you ask without question because of who you are.

(Does this happen often?)

85. You've said that you're [Are you] NOT really interested in other people's problems or feelings.

Tell me about that. (7) lacks empathy: is unwilling to recognize or identify with the feelings and needs of others

? 1 2 3 108

3 = acknowledges trait OR several examples

86. You've said that people have [Have people] complained to you that you don't listen to them or care about their feelings.

Tell me about that.

87. You've said that you are [Are you] often envious of others.

Tell me about it. (How often do you feel that way?) (8) is often envious of others or believes that others are envious of him or her

? 1 2 3 109

3 = acknowledges trait and at least one example

88. You've said that [Do] you feel that others are often envious of you.

What do they envy about you?

? = inadequate information 1 = absent or false 2 = subthreshold 3 = threshold or true
89. You've said that you [Do you] find that there are very few people that are worth your time and attention.

Tell me about that. (9) shows arrogant, haughty behaviors or attitudes

3 = acknowledges trait or observed during interview

(ALSO CONSIDER BEHAVIOR DURING INTERVIEW)

AT LEAST FIVE ITEMS ARE CODED "3"

NARCISSISTIC PERSONALITY DISORDER

SCID-II
SCID-II

BORDERLINE PERSONALITY DISORDER

BORDERLINE PERSONALITY DISORDER CRITERIA

A pervasive pattern of instability of interpersonal relationships, self-image, and affects and marked impulsivity, beginning by early adulthood and present in a variety of contexts, as indicated by five (or more) of the following:

90. You've said that you have [Have you often become frantic when you thought that someone you really cared about was going to leave you.]

What have you done?

(Have you threatened or pleaded with him/her?)

91. You've said that [Do your relationships with people you really care about have lots of extreme ups and downs.]

Tell me about them.

(Were there times when you thought they were everything you wanted and other times when you thought they were terrible? How many relationships were like this?)

? = inadequate information 1 = absent or false 2 = subthreshold 3 = threshold or true
### BORDERLINE PERSONALITY DISORDER

<table>
<thead>
<tr>
<th>Question</th>
<th>SCID-II</th>
</tr>
</thead>
<tbody>
<tr>
<td>92. You've said that you have [Have you] all of a sudden changed your</td>
<td>(3) identity disturbance: markedly</td>
</tr>
<tr>
<td>sense of who you are and where you are headed.</td>
<td>and persistently unstable self-image or sense of self</td>
</tr>
<tr>
<td>Give me some examples of this.</td>
<td>[Note: Do not include normal adolescent uncertainty.]</td>
</tr>
<tr>
<td>93. You've said that your sense of who you are often changes [Does your</td>
<td>3 = acknowledges trait</td>
</tr>
<tr>
<td>sense of who you are often change] dramatically.</td>
<td></td>
</tr>
<tr>
<td>Tell me more about that.</td>
<td></td>
</tr>
<tr>
<td>94. You've said that you are [Are you] different with different people</td>
<td>(4) impulsivity in at least two areas that are potentially self-damaging</td>
</tr>
<tr>
<td>or in different situations so that you sometimes don't know who you</td>
<td>(e.g., spending, sex, substance abuse, reckless driving, binge eating).</td>
</tr>
<tr>
<td>really are.</td>
<td>(Note: Do not include suicidal or self-mutilating behavior covered</td>
</tr>
<tr>
<td>Give me some examples of this.</td>
<td>in item (5).)</td>
</tr>
<tr>
<td>(Do you feel this way a lot?)</td>
<td></td>
</tr>
<tr>
<td>95. You've said that there have been [Have there been] lots of sudden</td>
<td>(3) = several examples indicating a pattern of impulsive behavior (not</td>
</tr>
<tr>
<td>changes in your goals, career plans, religious beliefs, and so on.</td>
<td>necessarily limited to examples given above)</td>
</tr>
<tr>
<td>Tell me more about that.</td>
<td></td>
</tr>
<tr>
<td>96. You've said that you've [Have you] often done things impulsively.</td>
<td></td>
</tr>
<tr>
<td>What kinds of things?</td>
<td></td>
</tr>
<tr>
<td>(How about . . .</td>
<td></td>
</tr>
<tr>
<td>. . . buying things you really couldn't afford?</td>
<td></td>
</tr>
<tr>
<td>. . . having sex with people you hardly know, or &quot;unsafe sex&quot;?</td>
<td></td>
</tr>
<tr>
<td>. . . drinking too much or taking drugs?</td>
<td></td>
</tr>
<tr>
<td>. . . driving recklessly?</td>
<td></td>
</tr>
<tr>
<td>. . . uncontrollable eating?)</td>
<td></td>
</tr>
</tbody>
</table>

? = inadequate information  1 = absent or false  2 = subthreshold  3 = threshold or true
### SCID-II  
#### BORDERLINE PERSONALITY DISORDER

<table>
<thead>
<tr>
<th>Question</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF YES TO ANY OF ABOVE: Tell me about that. How often does it happen? What kinds of problems has it caused?</td>
<td></td>
</tr>
<tr>
<td>97. You’ve said that you have [Have you/tried to hurt or kill yourself or threatened to do so.</td>
<td>(5) recurrent suicidal behavior, gestures, or threats, or self-mutilating behavior</td>
</tr>
<tr>
<td>98. You’ve said that you have [Have you ever cut, burned, or scratched yourself on purpose.</td>
<td>3 = two or more events (when not in a Major Depressive Episode)</td>
</tr>
<tr>
<td>99. You’ve said that [Do you have a lot of sudden mood changes.</td>
<td>(6) affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days)</td>
</tr>
<tr>
<td>100. You’ve said that [Do you often feel empty inside.</td>
<td>(7) chronic feelings of emptiness</td>
</tr>
<tr>
<td>101. You’ve said that [Do you often have temper outbursts or get so angry that you lose control.</td>
<td>(8) inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights)</td>
</tr>
</tbody>
</table>

? = inadequate information  
1 = absent or false  
2 = subthreshold  
3 = threshold or true

---
32. You've said that you hit people or throw things when you get angry.

Tell me about this.

(Does this happen often?)

103. You've said that even little things get you very angry.

When does this happen?

(Does this happen often?)

104. You've said that when you are under a lot of stress, you get suspicious of other people or feel especially spaced out.

Tell me about that.

(9) transient, stress-related paranoid ideation or severe dissociative symptoms

3 = several examples that do not occur exclusively during a Psychotic Disorder or a Mood Disorder With Psychotic Features

AT LEAST FIVE ITEMS ARE CODED “3”
# SCID-II ANTISOCIAL PERSONALITY DISORDER

## ANTISOCIAL PERSONALITY DISORDER

### ANTISOCIAL PERSONALITY DISORDER CRITERIA

Note: Behavior should NOT be considered characteristic of Antisocial Personality Disorder if it occurs exclusively during the course of Schizophrenia or a Manic Episode.

<table>
<thead>
<tr>
<th>Code</th>
<th>Criterion</th>
<th>Description</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.</td>
<td>The individual is at least age 18 years.</td>
<td>? 1 2 3</td>
<td>122</td>
</tr>
<tr>
<td>C.</td>
<td>There is evidence of Conduct Disorder with onset before age 15 years [as evidenced by at least two of the following:]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>105.</td>
<td>You’ve said that before you were 15, you would /Before you were 15, would you bully or threaten other kids.</td>
<td>? 1 2 3</td>
<td>123</td>
</tr>
<tr>
<td>106.</td>
<td>You’ve said that before you were 15, you would /Before you were 15, would you start fights.</td>
<td>? 1 2 3</td>
<td>124</td>
</tr>
<tr>
<td>107.</td>
<td>You’ve said that before you were 15, you hurt or threatened someone /Before you were 15, did you hurt or threaten someone? with a weapon, like a bat, brick, broken bottle, knife, or gun.</td>
<td>? 1 2 3</td>
<td>125</td>
</tr>
<tr>
<td>108.</td>
<td>You’ve said that before you were 15, you deliberately tortured someone or caused someone physical pain and suffering. /Before you were 15, did you deliberately torture someone or cause someone physical pain and suffering?</td>
<td>? 1 2 3</td>
<td>126</td>
</tr>
</tbody>
</table>

Tell me about that.

How often?

Tell me about that.

What did you do?

? = inadequate information  
1 = absent or false  
2 = subthreshold  
3 = threshold or true
### ANTISOCIAL PERSONALITY DISORDER

#### SCID-II

<table>
<thead>
<tr>
<th>Q</th>
<th>Question</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>109</td>
<td>You've said that before you were 15 you tortured or hurt animals on purpose. <em>(Before you were 15, did you torture or hurt animals on purpose?)</em></td>
<td>? 1 2 3</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>What did you do?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>You've said that before you were 15, you robbed, mugged, or forcibly took something from someone by threatening him or her. <em>(Before you were 15, did you rob, mug, or forcibly take something from someone by threatening him or her?)</em></td>
<td>? 1 2 3</td>
<td>128</td>
</tr>
<tr>
<td></td>
<td>Tell me about that.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111</td>
<td>You've said that before you were 15, you forced someone into sexual activity <em>(Before you were 15, did you force someone into sexual activity?)</em></td>
<td>? 1 2 3</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>Tell me about it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>112</td>
<td>You've said that before you were 15 you set fires. <em>(Before you were 15, did you set fires?)</em></td>
<td>? 1 2 3</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>Tell me about that.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>113</td>
<td>You've said that before you were 15, you deliberately destroyed someone's property <em>(Before you were 15, did you deliberately destroy someone's property?)</em></td>
<td>? 1 2 3</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>What did you do?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>114</td>
<td>You've said that before you were 15, you broke into someone else's house, building, or car <em>(Before you were 15, did you break into houses, other buildings, or cars?)</em></td>
<td>? 1 2 3</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>Tell me about that.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- ? = inadequate information
- 1 = absent or false
- 2 = subthreshold
- 3 = threshold or true
### SCID-II ANTISOCIAL PERSONALITY DISORDER

115. You've said that before you were 15, you lied a lot or “conned” [Before you were 15, did you lie a lot or “con” other people.]

What would you lie about?

116. You've said that before you were 15, you sometimes stole or shoplifted things or forged someone's signature. [Before you were 15, did you sometimes steal or shoplift things or forge someone's signature?]

Tell me about it.

117. You've said that before you were 15, you ran away from home and stayed [Before you were 15, did you run away and stay away overnight.]

Was that more than once?

(With whom were you living at the time?)

118. You've said that before you were 13, you would [Before you were 13, did you often stay out very late after the time you were supposed to be home.

How often?

---

? = inadequate information  
1 = absent or false  
2 = subthreshold  
3 = threshold or true 

---
119. You've said that before you were 13, you often skipped school. Did you often skip school?

How often?

**AT LEAST TWO ITEMS ARE CODED “3” (i.e., “some” evidence of Conduct Disorder)**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>137</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CRITERION C OF ANTISOCIAL PERSONALITY DISORDER MET; CONTINUE ON NEXT PAGE**

**GO TO PERSONALITY DISORDER NOT OTHERWISE SPECIFIED, PAGE 41**
SCID-II

ANTISOCIAL PERSONALITY DISORDER

Now, since you were 15...

A. There is a pervasive pattern of disregard for and violation of the rights of others occurring since age 15 years, as indicated by three (or more) of the following:

Have you done things that are against the law—even if you weren’t caught—like stealing, using or selling drugs, writing bad checks, or having sex for money?

(1) failure to conform to social norms with respect to lawful behaviors as indicated by repeatedly performing acts that are grounds for arrest

3 = several examples

IF NO: Have you ever been arrested for anything?

Do you often find that you have to lie to get what you want?

(2) deceitfulness, as indicated by repeated lying, use of aliases, or “conning” others for personal profit or pleasure

3 = several examples

(Have you ever used an alias or pretended you were someone else?)

(Have you often “conned” others to get what you want?)

Do you often do things on the spur of the moment without thinking about how it will affect you or other people?

(3) impulsivity or failure to plan ahead

3 = several examples

What kinds of things?

Was there ever a time when you had no regular place to live?

(For how long?)

? = inadequate information 1 = absent or false 2 = subthreshold 3 = threshold or true
(Since you were 15) have you been in any fights?
(How often?)

Have you ever hit or thrown things at your spouse or partner?
(How often?)

Have you ever hit a child, yours or someone else's—so hard that he or she had bruises or had to stay in bed or see a doctor?

Tell me about that.

Have you physically threatened or hurt anyone else?

Tell me about that. (How often?)

Did you ever drive a car when you were drunk or high?

How many speeding tickets have you gotten or car accidents have you been in?

Do you always use protection if you have sex with someone you don't know well?

(Has anyone ever said that you allowed a child that you were taking care of to be in a dangerous situation?)

? = inadequate information
1 = absent or false
2 = subthreshold
3 = threshold or true
<table>
<thead>
<tr>
<th>SCID-II</th>
<th>ANTISOCIAL PERSONALITY DISORDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much of the time in the last 5 years were you not working?</td>
<td></td>
</tr>
<tr>
<td>(6) consistent irresponsibility, as indicated by repeated failure to sustain consistent work behavior or honor financial obligations</td>
<td></td>
</tr>
<tr>
<td>IF FOR A PROLONGED PERIOD: Why? (Was there work available?)</td>
<td></td>
</tr>
<tr>
<td>? 1 2 3</td>
<td></td>
</tr>
<tr>
<td>When you were working, did you miss a lot of work?</td>
<td></td>
</tr>
<tr>
<td>IF YES: Why?</td>
<td></td>
</tr>
<tr>
<td>Did you ever walk off a job without having another one to go to?</td>
<td></td>
</tr>
<tr>
<td>IF YES: How many times did this happen?</td>
<td></td>
</tr>
<tr>
<td>Have you ever owed people money and not paid them back? (How often?)</td>
<td></td>
</tr>
<tr>
<td>What about not paying child support, or not giving money to children or someone else who depended on you?</td>
<td></td>
</tr>
<tr>
<td>IF THERE IS EVIDENCE OF ANTISOCIAL ACTS AND IT IS UNCLEAR WHETHER THERE IS ANY REMORSE: How do you feel about [LIST ANTISOCIAL ACTS]? (Do you think what you did was wrong in any way?)</td>
<td></td>
</tr>
<tr>
<td>(7) lacks remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another</td>
<td></td>
</tr>
<tr>
<td>? 1 2 3</td>
<td></td>
</tr>
</tbody>
</table>

? = inadequate information  
1 = absent or false  
2 = subthreshold  
3 = threshold or true
ANTISOCIAL PERSONALITY DISORDER

AT LEAST THREE ITEMS ARE CODED "3"

CRITERIA A, B, AND C ARE CODED "3"

SCID-II

CRITERION A OF ANTISOCIAL PERSONALITY DISORDER MET

ANTISOCIAL PERSONALITY DISORDER
This category is for disorders of personality functioning that do not meet criteria for any specific personality disorder. An example is the presence of features of more than one specific personality disorder that do not meet the full criteria for any one personality disorder ("mixed personality") but that together cause clinically significant distress or impairment in one or more important areas of functioning (e.g., social or occupational). This category can also be used when the clinician judges that a specific personality disorder that is not included in the classification (e.g., self-defeating personality disorder) is appropriate.
McMCI-III™

Hand-Scoring Test Booklet

Millon™ Clinical Multiaxial Inventory—III
Theodore Millon, PhD, DSc

Product Number
33011
TEST DIRECTIONS:
The following pages contain a list of statements that people use to describe themselves. They are printed here to help you describe your feelings and attitudes. Try to be as honest and serious as you can in marking the statements.

Do not be concerned if a few statements seem unusual; they are included to describe people with many types of problems. If you agree with a statement or decide that it describes you, fill in the © on the separate answer sheet to mark it True (©). If you disagree with a statement or decide that it does not describe you, fill in the © to mark it False (©). Try to mark every statement, even if you are not sure of your choice. If you have tried your best and still cannot decide, mark the © for False.

Use a No. 2 pencil and make a heavy, dark mark when filling in the circles. If you make a mistake or change your mind, erase the mark fully and then fill in the correct circle. Do not make any marks in this booklet.

There is no time limit for completing the inventory, but it is best to work as rapidly as is comfortable for you.
1. Lately, my strength seems to be draining out of me, even in the morning.
2. I think highly of rules because they are a good guide to follow.
3. I enjoy doing so many different things that I can't make up my mind what to do first.
4. I feel weak and tired much of the time.
5. I know I'm a superior person, so I don't care what people think.
6. People have never given me enough recognition for the things I've done.
7. If my family puts pressure on me, I'm likely to feel angry and resist doing what they want.
8. People make fun of me behind my back, talking about the way I act or look.
9. I often criticize people strongly if they annoy me.
10. What few feelings I seem to have I rarely show to the outside world.
11. I have a hard time keeping my balance when walking.
12. I show my feelings easily and quickly.
13. My drug habits have often gotten me into a good deal of trouble in the past.
14. Sometimes I can be pretty rough and mean in my relations with my family.
15. Things that are going well today won't last very long.
16. I am a very agreeable and submissive person.
17. As a teenager, I got into lots of trouble because of bad school behavior.
18. I'm afraid to get really close to another person because it may end up with my being ridiculed or shamed.
19. I seem to choose friends who end up mistreating me.
20. I've had sad thoughts much of my life since I was a child.
21. I like to flirt with members of the opposite sex.
22. I'm a very erratic person, changing my mind and feelings all the time.
23. Drinking alcohol has never caused me any real problems in my work.
24. I began to feel like a failure some years ago.
25. I feel guilty much of the time for no reason that I know.
26. Other people envy my abilities.
27. When I have a choice, I prefer to do things alone.
28. I think it's necessary to place strict controls on the behavior of members of my family.
29. People usually think of me as a reserved and serious-minded person.
30. Lately, I have begun to feel like smashing things.
31. I think I'm a special person who deserves special attention from others.
32. I am always looking to make new friends and meet new people.
33. If someone criticized me for making a mistake, I would quickly point out some of that person's mistakes.
34. Lately, I have gone all to pieces.
35. I often give up doing things because I'm afraid I won't do them well.
36. I often let my angry feelings out and then feel terribly guilty about it.
37. I very often lose my ability to feel any sensations in parts of my body.
38. I do what I want without worrying about its effect on others.
39. Taking so-called illegal drugs may be unwise, but in the past I found I needed them.
40. I guess I'm a fearful and inhibited person.

Go on to the next page
41. I've done a number of stupid things on impulse that ended up causing me great trouble.

42. I never forgive an insult or forget an embarrassment that someone caused me.

43. I often feel sad or tense right after something good has happened to me.

44. I feel terribly depressed and sad much of the time now.

45. I always try hard to please others, even when I dislike them.

46. I've always had less interest in sex than most people do.

47. I tend to always blame myself when things go wrong.

48. A long time ago, I decided it's best to have little to do with people.

49. Since I was a child, I have always had to watch out for people who were trying to cheat me.

50. I strongly resent "big shots" who always think they can do things better than I can.

51. When things get boring, I like to stir up some excitement.

52. I have an alcohol problem that has made difficulties for me and my family.

53. Punishment never stopped me from doing what I wanted.

54. There are many times, when for no reason, I feel very cheerful and full of excitement.

55. In recent weeks I feel worn out for no special reason.

56. For some time now I've been feeling very guilty because I can't do things right anymore.

57. I think I am a very sociable and outgoing person.

58. I've become very jumpy in the last few weeks.

59. I keep very close track of my money so I am prepared if a need comes up.

60. I just haven't had the luck in life that others have had.

61. Ideas keep turning over and over in my mind and they won't go away.

62. I've become quite discouraged and sad about life in the past year or two.

63. Many people have been spying into my private life for years.

64. I don't know why, but I sometimes say cruel things just to make others unhappy.

65. I flew across the Atlantic 30 times last year.

66. My habit of abusing drugs has caused me to miss work in the past.

67. I have many ideas that are ahead of the times.

68. Lately, I have to think things over and over again for no good reason.

69. I avoid most social situations because I expect people to criticize or reject me.

70. I often think that I don't deserve the good things that happen to me.

71. When I'm alone, I often feel the strong presence of someone nearby who can't be seen.

72. I feel pretty aimless and don't know where I'm going in life.

73. I often allow others to make important decisions for me.

74. I can't seem to sleep, and wake up just as tired as when I went to bed.

75. Lately, I've been sweating a great deal and feel very tense.

76. I keep having strange thoughts that I wish I could get rid of.

77. I have a great deal of trouble trying to control an impulse to drink to excess.

78. Even when I'm awake, I don't seem to notice people who are near me.

79. I am often cross and grouchy.

80. It is very easy for me to make many friends.

Go on to the next page
81. I'm ashamed of some of the abuses I suffered when I was young.
82. I always make sure that my work is well planned and organized.
83. My moods seem to change a great deal from one day to the next.
84. I'm too unsure of myself to risk trying something new.
85. I don't blame anyone who takes advantage of someone who allows it.
86. For some time now I've been feeling sad and blue and can't seem to snap out of it.
87. I often get angry with people who do things slowly.
88. I never sit on the sidelines when I'm at a party.
89. I watch my family closely so I'll know who can and who can't be trusted.
90. I sometimes get confused and feel upset when people are kind to me.
91. My use of so-called illegal drugs has led to family arguments.
92. I'm alone most of the time and I prefer it that way.
93. There are members of my family who say I'm selfish and think only of myself.
94. People can easily change my ideas, even if I thought my mind was made up.
95. I often make people angry by bossing them.
96. People have said in the past that I became too interested and too excited about too many things.
97. I believe in the saying, "early to bed and early to rise..."
98. My feelings toward important people in my life often swing from loving them to hating them.
99. In social groups I am almost always very self-conscious and tense.
100. I guess I'm no different from my parents in becoming somewhat of an alcoholic.
101. I guess I don't take many of my family responsibilities as seriously as I should.
102. Ever since I was a child, I have been losing touch with the real world.
103. Sneaky people often try to get the credit for things I have done or thought of.
104. I can't experience much pleasure because I don't feel I deserve it.
105. I have little desire for close friendships.
106. I've had many periods in my life when I was so cheerful and used up so much energy that I fell into a low mood.
107. I have completely lost my appetite and have trouble sleeping most nights.
108. I worry a great deal about being left alone and having to take care of myself.
109. The memory of a very upsetting experience in my past keeps coming back to haunt my thoughts.
110. I was on the front cover of several magazines last year.
111. I seem to have lost interest in most things that I used to find pleasurable, such as sex.
112. I have been downhearted and sad much of my life since I was quite young.
113. I've gotten into trouble with the law a couple of times.
114. A good way to avoid mistakes is to have a routine for doing things.
115. Other people often blame me for things I didn't do.
116. I have had to be really rough with some people to keep them in line.
117. People think I sometimes talk about strange or different things than they do.
118. There have been times when I couldn't get through the day without some street drugs.
119. People are trying to make me believe that I'm crazy.
120. I'll do something desperate to prevent a person I love from abandoning me.

**Go on to the next page**
121. I go on eating binges a couple of times a week.
122. I seem to make a mess of good opportunities that come my way.
123. I've always had a hard time stopping myself from feeling blue and unhappy.
124. When I'm alone and away from home, I often begin to feel tense and panicky.
125. People sometimes get annoyed with me because they say I talk too much or too fast for them.
126. Most successful people today have been either lucky or dishonest.
127. I won't get involved with people unless I'm sure they'll like me.
128. I feel deeply depressed for no reason I can figure out.
129. Years later I still have nightmares about an event that was a real threat to my life.
130. I don't have the energy to concentrate on my everyday responsibilities anymore.
131. Drinking alcohol helps when I'm feeling down.
132. I hate to think about some of the ways I was abused as a child.
133. Even in good times, I've always been afraid that things would soon go bad.
134. I sometimes feel crazy-like or unreal when things start to go badly in my life.
135. Being alone, without the help of someone close to depend on, really frightens me.
136. I know I've spent more money than I should buying illegal drugs.
137. I always see it so that my work is finished before taking time out for leisure activities.
138. I can tell that people are talking about me when I pass by them.
139. I'm very good at making up excuses when I get into trouble.
140. I believe I'm being plotted against.
141. I feel that most people think poorly of me.
142. I frequently feel there's nothing inside me, like I'm empty and hollow.
143. I sometimes force myself to vomit after eating.
144. I guess I go out of my way to encourage people to admire the things I say or do.
145. I spend my life worrying over one thing or another.
146. I always wonder what the real reason is when someone is acting especially nice to me.
147. There are certain thoughts that keep coming back again and again in my mind.
148. Few things in life give me pleasure.
149. I feel shaky and have difficulty falling asleep because painful memories of a past event keep running through my mind.
150. Looking ahead as each day begins makes me feel terribly depressed.
151. I've never been able to shake the feeling that I'm worthless to others.
152. I have a drinking problem that I've tried unsuccessfully to end.
153. Someone has been trying to control my mind.
154. I have tried to commit suicide.
155. I'm willing to starve myself to be even thinner than I am.
156. I don't understand why some people smile at me.
157. I haven't seen a car in the last ten years.
158. I get very tense with people I don't know well because they may want to harm me.
159. Someone would have to be pretty exceptional to understand my special abilities.
160. My current life is still upset by flashbacks of something terrible that happened to me.
161. I seem to create situations with others in which I get hurt or feel rejected.
162. I often get lost in my thoughts and forget what’s going on around me.
163. People say I’m a thin person, but I feel that my thighs and backside are much too big.
164. There are terrible events from my past that come back repeatedly to haunt my thoughts and dreams.
165. Other than my family, I have no close friends.
166. I act quickly much of the time and don’t think things through as I should.
167. I take great care to keep my life a private matter so no one can take advantage of me.
168. I very often hear things so well that it bothers me.

169. I’m always willing to give in to others in a disagreement because I fear their anger or rejection.
170. I repeat certain behaviors again and again, sometimes to reduce my anxiety and sometimes to stop something bad from happening.
171. I have given serious thought recently to doing away with myself.
172. People tell me that I’m a very proper and moral person.
173. I still feel terrified when I think of a traumatic experience I had years ago.
174. Although I’m afraid to make friendships, I wish I had more than I do.
175. There are people who are supposed to be my friends who would like to do me harm.
APPENDICIES XIX & XX

UNIVERSITY OF SURREY AND MINISTRY OF DEFENCE
ETHICS APPROVAL LETTERS
Dear Ms

Incidence and comorbidity of personality disorders and post traumatic stress disorder in a sample of active duty armed forces personnel (ACE/2002/42/Psy)

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

This letter of approval relates only to the study specified in your research protocol (ACE/2002/42/Psy). The Committee should be notified of any changes to the proposal, any adverse reactions, and if the study is terminated earlier than expected, with reasons.

Date of approval by the Advisory Committee on Ethics: 01 August 2002
Date of expiry of approval by the Advisory Committee on Ethics: 31 July 2007

Please inform me when the research has been completed.

Yours sincerely

(Mrs)
Secretary, University Advisory Committee on Ethics

cc: Chairman, ACE
    Dr Supervisor, Dept of Psychology
    Dr Field Supervisor, DCP Aldershot
DMSCRC RESEARCH PROTOCOL – AN INVESTIGATION INTO THE RELATIONSHIP BETWEEN POST-TRAUMATIC STRESS DISORDER, PERSONALITY DISORDERS AND AXIS-I DISORDERS IN ACTIVE DUTY ARMED FORCES PERSONNEL

1. The above protocol has been approved by the DMSCRC committees. The unique project number is 059A.

2. It would be appreciated if you could inform this office of the start and end dates of the project. The final report should be copied to the Secretary DMSCRC for the committees’ perusal.

3. Please do not hesitate to contact this office should you require any assistance.

WO1
Secretary DMSCRC
APPENDIX XXI

TABLE 33: AGREEMENT BETWEEN MCMI-III AND SCID-II
AND
TABLE 34: CORRELATIONS FOR THE PTSD GROUP
Table 33: Agreement between the MCMI-III and SCID-II in identifying PDs

<table>
<thead>
<tr>
<th>Personality disorder</th>
<th>MCMI-III</th>
<th>SCID-II agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PD &gt;85</td>
<td>Yes</td>
</tr>
<tr>
<td>Paranoid</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Schizoid</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Antisocial</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Histrionic</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Borderline</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Avoidant</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Dependent</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Compulsive</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Depressive</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Passive-aggressive</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Self-defeating</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Sadistic (aggressive)</td>
<td>1</td>
<td>Not in SCID-II</td>
</tr>
</tbody>
</table>

Note: **. Correlation is significant at the .01 level (2-tailed); *. Correlation is significant at the .05 level (2-tailed)

Table 34: Correlations for the PTSD group (n = 21) on the PDS clusters and PD BR scores

<table>
<thead>
<tr>
<th>Personality disorder</th>
<th>Re-experiencing (Spearman’s rho)</th>
<th>Avoidance (Spearman’s rho)</th>
<th>Arousal (Spearman’s rho)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paranoid</td>
<td>$r = .188, p = .416$</td>
<td>$r = .210, p = .360$</td>
<td>$r = .068, p = .770$</td>
</tr>
<tr>
<td>Schizotypal</td>
<td>$r = .151, p = .573$</td>
<td>$r = .203, p = .377$</td>
<td>$r = .129, p = .577$</td>
</tr>
<tr>
<td>Schizoid</td>
<td>$r = .316, p = .162$</td>
<td>$r = .397, p = .075$</td>
<td>$r = .031, p = .894$</td>
</tr>
<tr>
<td>Antisocial</td>
<td>$r = -.169, p = .465$</td>
<td>$r = -.411, p = .064$</td>
<td>$r = -.022, p = .925$</td>
</tr>
<tr>
<td>Histrionic</td>
<td>$r = -.170, p = .462$</td>
<td>$r = -.183, p = .428$</td>
<td>$r = -.064, p = .783$</td>
</tr>
<tr>
<td>Narcissistic</td>
<td>$r = -.039, p = .867$</td>
<td>$r = -.036, p = .878$</td>
<td>$r = -.042, p = .855$</td>
</tr>
<tr>
<td>Borderline</td>
<td>$r = .028, p = .904$</td>
<td>$r = -.123, p = .597$</td>
<td>$r = -.033, p = .888$</td>
</tr>
<tr>
<td>Avoidant</td>
<td>$r = .106, p = .649$</td>
<td>$r = .245, p = .285$</td>
<td>$r = .167, p = .468$</td>
</tr>
<tr>
<td>Dependent</td>
<td>$r = .144, p = .532$</td>
<td>$r = .127, p = .584$</td>
<td>$r = -.086, p = .710$</td>
</tr>
<tr>
<td>Compulsive</td>
<td>$r = -.099, p = .969$</td>
<td>$r = .183, p = .427$</td>
<td>$r = -.168, p = .467$</td>
</tr>
<tr>
<td>Depressive</td>
<td>$r = -.067, p = .772$</td>
<td>$r = -.091, p = .694$</td>
<td>$r = -.296, p = .192$</td>
</tr>
<tr>
<td>Passive-aggressive</td>
<td>$r = -.072, p = .755$</td>
<td>$r = -.235, p = .306$</td>
<td>$r = -.007, p = .977$</td>
</tr>
<tr>
<td>Self-defeating</td>
<td>$r = -.000, p = 1.000$</td>
<td>$r = -.013, p = .954$</td>
<td>$r = -.102, p = .662$</td>
</tr>
<tr>
<td>Sadistic (aggressive)</td>
<td>$r = .045, p = .848$</td>
<td>$r = -.228, p = .319$</td>
<td>$r = .178, p = .439$</td>
</tr>
</tbody>
</table>

Note: **. Correlation is significant at the .01 level (2-tailed); *. Correlation is significant at the .05 level (2-tailed)
# LOG OF RESEARCH EXPERIENCE

<table>
<thead>
<tr>
<th>Research Skill/Experience</th>
<th>Description of how research skill/experience acquired</th>
<th>Date research skill/experience acquired</th>
</tr>
</thead>
</table>
| Conduct a literature search              | 1. Conducted a computerised literature search for “anxiety management” to form basis of introduction for the service related research project in year 1  
2. Conducted a computerised literature search for “perceptions of schizophrenia” and “mental health” for qualitative research project in year 2 using psychinfo, Ovid.  
3. Conducted a computerised literature search on the topic of “personality disorders and post-traumatic stress disorder in the military” using Psychinfo (on CD rom), Pubmed (form of Medline on the internet), Ovid, NCPTSD website and through the search engine Google.com. The keywords used were “personality”, “personality disorders”, “PTSD”, “post-traumatic stress disorder”, “military”, “active duty” “trauma” “comorbidity” “comorbid” for major research project. This was enjoyable and interesting to learn about the subject area in more detail. | December 2000 (year 1)  
February/March 2002 (year 2)  
October 2001 – July 2002 (years 1 & 2) |
| Critically review the literature         | The information from the numerous journals collected were organised into three parts; i) PTSD, ii) personality disorders and iii) comorbidity studies. These were then critically reviewed in the MRP introduction.  
The introduction was reviewed by placement and field supervisors and changes made accordingly!                                                                                                             | July 2002 - July 2003 (year 3)  
July 2003 |
| Formulate a specific research question   | Discussions with supervisors during October/November 2001 regarding MRP. Considered measures used and how to scale the research down into a less ambitious project  
Findings from the US literature on comorbid PTSD and personality disorder in combat veterans and discussions with supervisors lead to curiosity about the comorbidity/relationship between PTSD and personality disorders in active duty personnel. The research question was whether comorbidity of PTSD and personality disorders was prevalent in active duty armed forces personnel. | October / November: 2001                     |
<p>| Write a brief research proposal          | Prepared a brief research proposal for the University to determine problem areas and issues to consider prior to writing a more detailed proposal for the MoD and University ethics committees. This was submitted in January 2002 to clinical team. Based on the feedback from the team the proposal was amended. | January 2002                                   |
| Write a detailed proposal/protocol       | Two detailed proposals were written – one for Surrey University ethics committee (submitted June 2002) and one for the MoD ethics committee (submitted July 2002).                                                                                       | June/July 2002                                 |
| Obtain appropriate supervision/collaboration for research | Throughout the entirety of the MRP, both University and Field supervisors have been involved in the planning of the research and to offer advice and support.                                                | October 2001 – July 2003                      |
| Write a participant information sheet and consent form | The participant information sheet and consent form for the MRP were devised prior to the submission to the ethics committee. The construction of both were taken from the MoD’s format for research protocol               | May 2002                                      |
| Judge ethical issues in research and     | Based on the feedback from the field and University supervisors, ethical issues that may arise during the research were considered and incorporated into the proposal. The research proposals were therefore amended to reflect procedure | May 2002                                      |</p>
<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amend plans accordingly</td>
<td>The University of Surrey's ethics committee were very quick to approve the research (submitted June 2002 approved August 2002). The MoD required numerous prompting and phone-calls to receive confirmation of ethical approval. Although the ethics committee confirmed approval over the telephone in October 2002, and approved that data collection could commence from October 2002, a letter of confirmation was not received until January 2003. This was quite anxiety provoking and equally frustrating!</td>
<td>July 2002 and January 2003</td>
</tr>
<tr>
<td>Obtain approval from a research ethics committee</td>
<td>Data collection started from October 2002 and finished June 2003. This process was incredibly stressful and frustrating. Although it appeared that I had a period of eight months in which data was collected — due to the military ethos participants were not available for the majority of November, all of December and some of January. This was because military personnel tend to go on block leave. Furthermore, during the data collection period, military personnel were preparing for deployment to the Gulf (Gulf War 2003) which severely impacted on the number of participants available. In addition, a vast number of personnel did not attend their appointment, due to one of the following reasons: DNA, deployed, discharged from service, or AWOL. Data collection required me to travel up and down the country and my stress levels and frustration were increased by the many DNA's; despite being booked in to see me. Many a time I wished for a 'sitting' population!</td>
<td>October 2002 – June 2003</td>
</tr>
<tr>
<td>Collect data from research participants</td>
<td>The data file was set up using SPSS for Windows version 11.0 to reflect the items within each measure used and demographic information. Each item in the data set was primarily dichotomous. The data set evolved as analysis was conducted.</td>
<td>January – July 2003</td>
</tr>
<tr>
<td>Set up a data file</td>
<td>Analysis of all the data was started in June 2003. Analysis was aimed to reflect the research hypotheses and other information deemed pertinent to the research.</td>
<td>June – July 2003</td>
</tr>
<tr>
<td>Analyse qualitative data</td>
<td>Analysis for the QRP was undertaken in the second year. This was good experience of using IPA and how time consuming qualitative research can be — one of the reasons I decided to use quantitative data for my MRP. However, qualitative data provides richness in the data that I believe is missed when analysing quantitatively.</td>
<td>June/July 2003</td>
</tr>
<tr>
<td>Summarise results in figures/graphs</td>
<td>The results for the MRP were eventually summarised during in Tables and a few line graphs. The results were 'disappointing' and this may have been a reflection of the low numbers or the design of the study. A draft of the results section was sent to research supervisors in July to await feedback.</td>
<td>June/July 2003</td>
</tr>
<tr>
<td>Interpret results from data analysis</td>
<td>A draft discussion of the results was completed in July. Because there was no UK based literature for active duty personnel and PTSD-PD comorbidity, it was 'difficult' for me to determine the meaning of the results — or whether this was unique to active duty (i.e. little difference) compared with the US findings of comorbidity in combat veterans.</td>
<td>July 2003</td>
</tr>
<tr>
<td>Present research findings/plans to an audience</td>
<td>No plans to present research as yet</td>
<td></td>
</tr>
<tr>
<td>Produce a written report project</td>
<td>Defend research project at an oral examination September 2003 in Viva!</td>
<td></td>
</tr>
<tr>
<td>Submit research report for publication in a journal/book</td>
<td>No plans to do this</td>
<td></td>
</tr>
</tbody>
</table>