An Investigation into Inflated Responsibility, Thought Action Fusion and the Role of Unacceptability in Obsessive Compulsive Disorder

Susan J. Ferrier Ph.D

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University College London

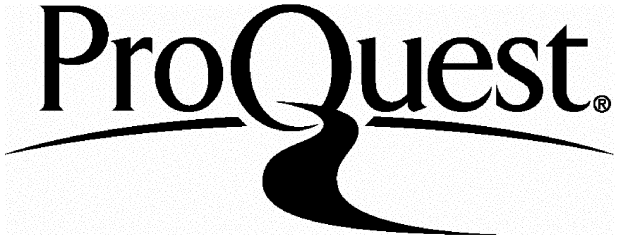

Table of Contents

CHAPTER 1: INTRODUCTION ..... Page 12

Overview ..... Page 12

Definition of obsessive compulsive disorder ..... Page 12

Theoretical understanding of obsessive compulsive disorder ..... Page 14

Behavioural explanation for OCD ..... Page 14

Outcome studies ..... Page 15

The cognitive behavioural explanation of OCD ..... Page 16

Summary ..... Page 20

Evidence for the constructs relevant to the CBT model ..... Page 21

Personal significance of intrusions – evidence for their importance in OCD ..... Page 21

Summary ..... Page 22

Inflated responsibility - evidence for its importance in OCD ..... Page 23

Summary ..... Page 30

Thought Action fusion – for its importance in OCD ..... Page 30

Summary ..... Page 33

Self Guides ..... Page 33

Summary ..... Page 37

Conclusions and Aims ..... Page 38

Research Hypotheses ..... Page 41
Section 1: Constructs relevant to the CBT Model of OCD ..... Page 41
Hypothesis 1: The importance of Responsibility in OCD . Page 41
Hypothesis 2: The importance of TAF in OCD ..... Page 41
Hypothesis 3: The importance of Negative Appraisals of Intrusions ..... Page 42
Hypothesis 4: The association between Responsibility, TAF and the Intrusion Related Self Inference Scale ..... Page 42
Section 2: Value of Self Discrepancy Theory ..... Page 42
Hypothesis 5: Self Discrepancies ..... Page 42
Section 3: Qualitative analysis of feared self traits ..... Page 43

CHAPTER 2: METHOD ..... Page 44
Procedure ..... Page 44
Recruitment at a Hospital based Psychology Department ..... Page 44
Recruitment with the help of Obsessive Action ..... Page 45
Recruitment with the help of No Panic ..... Page 46
Recruitment of Non anxious controls ..... Page 47
Participants ..... Page 47
Design and analysis ..... Page 48
Materials ..... Page 49
Beck Depression Inventory (BDI) ..... Page 49
Beck Anxiety Inventory (BAI) ..... Page 49
The Padua Inventory ..... Page 49
The Thought Action Fusion Scale Revised ..... Page 50
Responsibility Attitude Scale (RAS) ..... Page 50
Responsibility Interpretations Questionnaire (RIQ) ..... Page 50
The Intrusion Related Self Inference Scale ..... Page 51
Selves questionnaire ..... Page 52

CHAPTER 3: RESULTS ..... **Page 53**
Data Analysis ..... Page 53
Participants ..... Page 53
Section 1: Constructs relevant to the CBT Model of OCD ..... Page 55
Hypothesis 1: The importance of responsibility in OCD .. Page 55
Hypothesis 2: The importance of TAF in OCD ..... Page 58
Hypothesis 3: The importance of negative appraisals of intrusions in relation to the self in OCD ... Page 60
Hypothesis 4: The association between responsibility, TAF and the Intrusion Related Self Inference Scale ..... Page 63
Section 2: The value of self discrepancy theory ..... Page 69
Hypothesis 5: Self discrepancies ..... Page 69
Section 3: Qualitative analysis of feared self traits ..... Page 71

CHAPTER 4: DISCUSSION ..... **Page 73**
Overview ..... Page 73
Findings according to research hypotheses ..... Page 73
Section 1: Constructs relevant to the CBT model of OCD ..... Page 73
Hypothesis 1: The importance of responsibility in OCD . Page 73
Summary ..... Page 75
Hypothesis 2: The importance of TAF in OCD ..... Page 76
Summary ..... Page 78
Hypothesis 3: The importance of Negative appraisals of intrusions in relation to the self in OCD .. Page 78
Summary ..... Page 81
Hypothesis 4: The association between responsibility, TAF and the Intrusion Related Self Inference Scale ..... Page 81

Section 2: The value of self discrepancy theory ..... Page 83
Hypothesis 5: Self discrepancies ..... Page 83
Section 3: Qualitative analysis of feared self traits ..... Page 84
Critique of the research ..... Page 86
Sample ..... Page 86
Design and procedure ..... Page 86
Generalisability of findings ..... Page 87
Measures used ..... Page 88
Overall summary of findings and clinical implications ..... Page 88
Further Research ..... Page 90
REFERENCES ..... Page 92

LIST OF APPENDICES

Appendix A: Letter of ethical approval ..... Page 103
Appendix B: Advertisement in No Panic newsletter ..... Page 104
Appendix C: Patient Information Sheet ..... Page 105
Appendix D: Healthy Volunteer Information Sheet ..... Page 106
Appendix E: Consent form ..... Page 107
Appendix F: Covering letter and questionnaire ..... Page 108
Appendix G: Coding manual ..... Page 109

LIST OF FIGURES

Figure 1 CBT model of obsessive-complusive disorder ..... Page 18

List of Tables

Table 1 ..... Page 54

Mean and standard deviations (in brackets) of the scores of Obsessional participants (Ocs) and control groups for Age, Education on the Padua Inventory, BDI and BAI.

Table 2 ..... Page 55

Mean and standard deviations (brackets) of the scores of Obsessional participants and control groups for the RAS and RIQ.

Table 3 ..... Page 56

Pearson correlations between reponsibility scores as measured by the RAS and RIQ and obsessive symptoms as measured by the Padua Inventory.

Table 4 ..... Page 58

Mean and standard deviations (in brackets) of the scores of Obsessional participants and control groups for the TAF scales.

Table 5 ..... Page 59

Correlations between TAF, Padua Inventory, BAI, and BDI.

Table 6 ..... Page 61

Mean and standard deviations (in brackets) of the scores of Obsessional participants and control groups for the Intrusion Related Self Inference Scale.

Table 7 ..... Page 62

Correlations between Intrusion Related Self Inference Scale, Padua Inventory, BBI and BAI.

Table 8 ..... Page 64

Correlations between TAF and RAS. Correlations whilst controlling for BAI and BDI are also included.

Table 9 ..... Page 65

Correlations between TAF and High responsibility subscales of the RIQ. Correlations also included for controlling for BAI and BDI.

Table 10 ..... Page 66

Correlations between Thought Action Fusion and the Intrusion Related Self Inference Scale. Correlations whilst controlling for BAI and BDI are also included.

Table 11 ..... Page 67

Correlations between RAS and the Intrusion Related Self Inference Scale. Correlations whilst controlling for BAI and BDI also included.

Table 12 ..... Page 68

Correlations between High responsibility RIQ subscales and the Intrusion Related Self Inference Scale. Correlations whilst controlling for BAI and BDI also included.

Table 13 ..... Page 69

Mean and standard deviations (in brackets) of the scores of Obsessional participants and control groups for scores on the ought self, ideal self and feared self.

Table 14 ..... Page 71

Mean and standard deviations (in brackets) of the scores on themes across the three groups.

Abstract

BACKGROUND

The cognitive behavioural models of Obsessive Compulsive Disorder (OCD) suggest that the misinterpretation of the meaning of intrusive thoughts plays a key role in influencing obsessional behaviour (Salkovskis, 1985, 1989; Rachman, 1997, 1998). The constructs Responsibility, Thought Action Fusion and negative appraisals of intrusions have been linked to predisposing individuals to OCD. The present study reports an investigation into the specificity of these constructs with respect to OCD symptomatology. Although theoretically the role of these constructs have been accepted the ideas have yet to be empirically validated (Wilson, 1999).
The value of the application of self –discrepancy theory (Higgins, 1987,1996; Carver, Lawrence, Scheier, 1999) to OCD is also explored. That is the role of the ought, ideal and feared selves were examined as to their potential to predict agitation and dejection-related affects.

METHOD

The Research is questionnaire based and employed a number of measures within the OCD field. Responsibility beliefs were examined using the Responsibility Attitude Scale (RAS) and the Responsibility Interpretations Questionnaire (RIQ) both developed by Salkovskis, Wroe, Gledhill, Morrison et al (2000). Thought Action Fusion was examined using Shafran, Thordarson and Rachman's (1996) Thought Action Fusion Scale. However, the negative appraisals of intrusions was measured using a questionnaire specifically designed for this study, the Intrusion Related Self Inference Scale.

Finally the Selves Questionnaire developed by Carver et al (1999) enabled the examination of the discrepancies between various self guides and the actual self. This method also enabled the examination of beliefs about the unacceptability of the self by exploring actual-feared discrepancies.

RESULTS

Comparisons between Obsessive Compulsive individuals and Anxious and Non-Anxious Controls indicated the specificity of both responsibility assumptions and appraisals with respect to OCD. There was also good evidence for an association between responsibility cognitions and OCD symptomatology. With regard to TAF the findings cast some doubt on the specificity of this construct to individuals with OCD. The findings suggest that TAF may be a pervasive bias that may occur in a variety of anxiety disorders. Turning to negative appraisals of intrusions there was evidence that these appraisals were significantly elevated in obsessional participants compared to Controls. However there was no association between the Intrusion Related Self Inference Scale and OCD symptomatology for Obsessional individuals. However this scale was found to have questionable reliability, which may explain this finding.

With regard to self –discrepancy theory the hypotheses that actual-ought discrepancies and actual-ideal discrepancies lead to agitation and dejection related affects respectively were partially supported. A content analysis of the feared self traits revealed that individuals with OCD have different parameters for evaluating their feared self as compared to controls and that they are more likely to generate moralistic traits in defining their feared selves.

CONCLUSION

The findings reported in this study largely support the cognitive behavioural models of OCD (Salkovskis, 1985, 1989; Rachman, 1997, 1998).

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CHAPTER 1

INTRODUCTION

OVERVIEW

This study firstly concerns the evaluation of the cognitive behavioural theory of Obsessive Compulsive Disorder (OCD) and secondly explores the value of the application of self-discrepancy theory to this disorder. In this chapter OCD will first be defined before describing the cognitive behavioural perspective of OCD outlined by Salkovskis (Salkovskis, 1985; Salkovskis, 1989; Rachman, 1997). The evidence for the constructs relevant to the cognitive behavioural model will then be reviewed. The value of the application of Self-discrepancy theory (Higgins, 1987, 1996; Carver, Lawrence, Scheier, 1999) to OCD will then be discussed.

DEFINITION OF OBSESSIVE COMPULSIVE DISORDER

Obsessive Compulsive Disorder (OCD) is a very common anxiety disorder. The prevalence rates reported vary but it is estimated that the lifetime prevalence is 2.5% of the population (Karno et al, 1988). DSM IV (American Pyschiatric Association, 1994) defines OCD as the occurrence of recurrent obsessions or compulsions that are time consuming and or cause marked distress or impairment. Obsessions are described as persistent thoughts, impulses or images that are experienced as unwanted and intrusive and difficult to control. Most of the obsessions concern moral systems and include themes of aggression, blasphemy and sexual impulses or imagery.

These thoughts can be differentiated from other types of intrusive thoughts concerned with worry because they are ego-dystonic. That is, they are at odds with the individual's character and they are resisted (Wells, 1997). Obsessions are frequently accompanied by compulsions which are performed to reduce the anxiety associated with the occurrence of the obsessions (DSM IV: American Pyschiatric Association, 1994). The obsession is recognised as a manifestation of the individual's mind and not viewed as imposed from without. The compulsion is viewed by the individual as excessive and unreasonable. Depression and anxiety are commonly associated with OCD, together with avoidance of situations that trigger the content of the obsession (such as dirt and contamination).

The majority of individuals with OCD who present clinically have both obsessions and compulsions. A compulsion can be defined as a repetitive overt or covert act. Overt compulsions, for example, include hand washing, checking, ordering or alignment of objects. Covert or mental compulsions, for example, include praying, counting, or the repeating of words. The aim of the compulsion is two fold, firstly to prevent a feared catastrophe and secondly to reduce anxiety or distress. In other words the individual has a strong urge to perform the compulsion to prevent a feared event or to atone for the obsession. The most common examples of compulsive behaviour concern checking and washing. For instance an individual with OCD may have the unwanted obsessional thought he will spread disease and illness. In response to this intrusion he may wash his hands if he comes into contact with any thing that he perceives as suspicious. This may interfere so much with outside activities that he may eventually stop going outside.

Frequently individuals also have to follow idiosyncratic rules in order that this neutralisation process is successful. This process can be frustrating and distressing due to the time taken to carry out the compulsion correctly.

Consequently compulsions can have a profound effect on social and occupational functioning and has great ramifications for family members that often find themselves colluding with the neutralisation process so as to reduce the individual's distress (Roberts, Yeager, Siegel, 2003).

THEORETICAL UNDERSTANDING OF OBSESSIVE COMPULSIVE DISORDER

Behavioural explanation for OCD

Rachman and Hodgson (1980) provided the first behavioural explanation of the maintenance of OCD. In their classic experiments they showed that obsessions elicited anxiety and compulsions alleviated it. According to Rachman and Hodgson (1980) following traumatic conditioning experiences (ie. associating a certain obsession with anxiety) anxiety is thought to reduce as obsessions recur unless the individual engages in some kind of escape behaviour (eg. hand washing). According to the theory when such behaviours are used it leads to a reduction in anxiety but prevents exposure and therefore habituation. The anxiety relief is negatively reinforcing and increases the probability of future behaviour. As the compulsions are continually used they become more stereotyped and an obsessional ritual is established. This results in the prevention of the extinction of the conditioned anxiety associated with the obsession. In short, avoidance prevents exposure to the feared thoughts and compulsions terminate exposure. Both types of behaviour therefore prevent the individual with obsessive compulsive disorder from confronting their feared thoughts.

The behavioural treatment espoused on the basis of these principles is exposure to the feared stimulus that elicited the obsession and preventing any behaviours which prevent or terminate exposure. For example a man with OCD who had the unwanted obsessional thought that he might contract an illness (eg. AIDs) repeatedly washed his hands whenever he came in contact

with what he thought were 'contaminated' objects or people. He also continually checked around him for potentially 'contaminated' people or objects. The repeated hand washing became so time consuming that he stayed in doors much of the time so as to avoid the feared stimulus. The man's treatment therefore included touching 'contaminated' tissues (exposure) and not washing his hands (response prevention). It also involved him not avoiding exposure to feared stimuli outside his home.

Outcome studies

Meta-analytic studies of exposure and response prevention (eg. Christensen et al, 1987; Van Balkom et al, 1994) treatments suggest that these treatments are helpful, bringing about a 30-50% improvement in 75% of patients with OCD (Roth and Fonaghy, 1996). Indeed, the value of exposure and response prevention is well recognised (see Rowa, Antony, Swinson, 2003) and it is seen as the first line in psychological treatment (Maltby and Tolin, 2003; Whittal and O'Neil, 2003). However, treatment failure with exposure and response prevention has been linked to patients' attitudes and beliefs about their symptoms. Foa (1979), for example found that poor responders were those whose beliefs concerned over valued ideas about the likelihood of their obsessive fears coming true. In another study Lelliott et al (1998) found that a third of 49 compulsive ritualisers viewed their obsessive thoughts as rational and believed that their rituals successfully averted a feared event. They also found evidence that patients who did respond to treatment altered their beliefs about the necessity to perform their rituals. They concluded therefore that if beliefs remain unaltered outcome is likely to be poor. Such findings alone lend support for cognitive behavioural interventions. Outcome studies comparing the efficacy of behavioural and cognitive behavioural interventions in OCD have also shown patients in receipt of cognitive-behaviour therapy had better outcomes than those receiving behaviour therapy alone (eg. Van Oppen et al, 1995). In other words, combining

cognitive and behavioural techniques is argued to maximise treatment outcomes and patient satisfaction (Roth and Fonaghy, 1996; Salkovskis, Forrester, Candida, 1998; Whittal and O'Neil, 2003).

The cognitive behavioural explanation of OCD

However the interest in a cognitive behavioural explanation of OCD was spurred by the finding that unwanted intrusive thoughts are not unique to individuals with OCD but are virtually a universal phenomenon (Rachman and de Silva, 1978; Salkovskis and Harrison, 1984). It caused researchers to specifically question why in some individuals they develop into abnormal and persistent obsessions.

Normal obsessions are similar in content to abnormal obsessions but abnormal obsessions are more intense, longer lasting, more distressing and perceived as uncontrollable (Rachman and de Silva, 1978). The cognitive behavioural perspective explained by Salkovskis and others (Salkovskis, 1985; Salkovskis, 1989; Salkovskis et al, 2000; Freeston, Rheaume and Ladouceur, 1996; Rachman, 1997; 1998) attempts to explain why normal intrusions develop into obsessions. It proposes that what is unique to someone with OCD is the way the content and occurrence of the intrusion is interpreted/ appraised. That is, it is the significance that individuals attach to an intrusion, that influences mood and urge to neutralise.

Significance of the intrusion in terms of unacceptability

Rachman (1997) emphasises that it is the interpretation of the occurrence of the intrusion as revealing important but often hidden aspects of the character that is important. The obsessional patient is argued to see the intrusion as significant in terms of the beliefs about themselves, which in turn gives rise to anxiety provoking negative automatic thoughts. Rachman (1997) notes that within existing case histories various patients have described

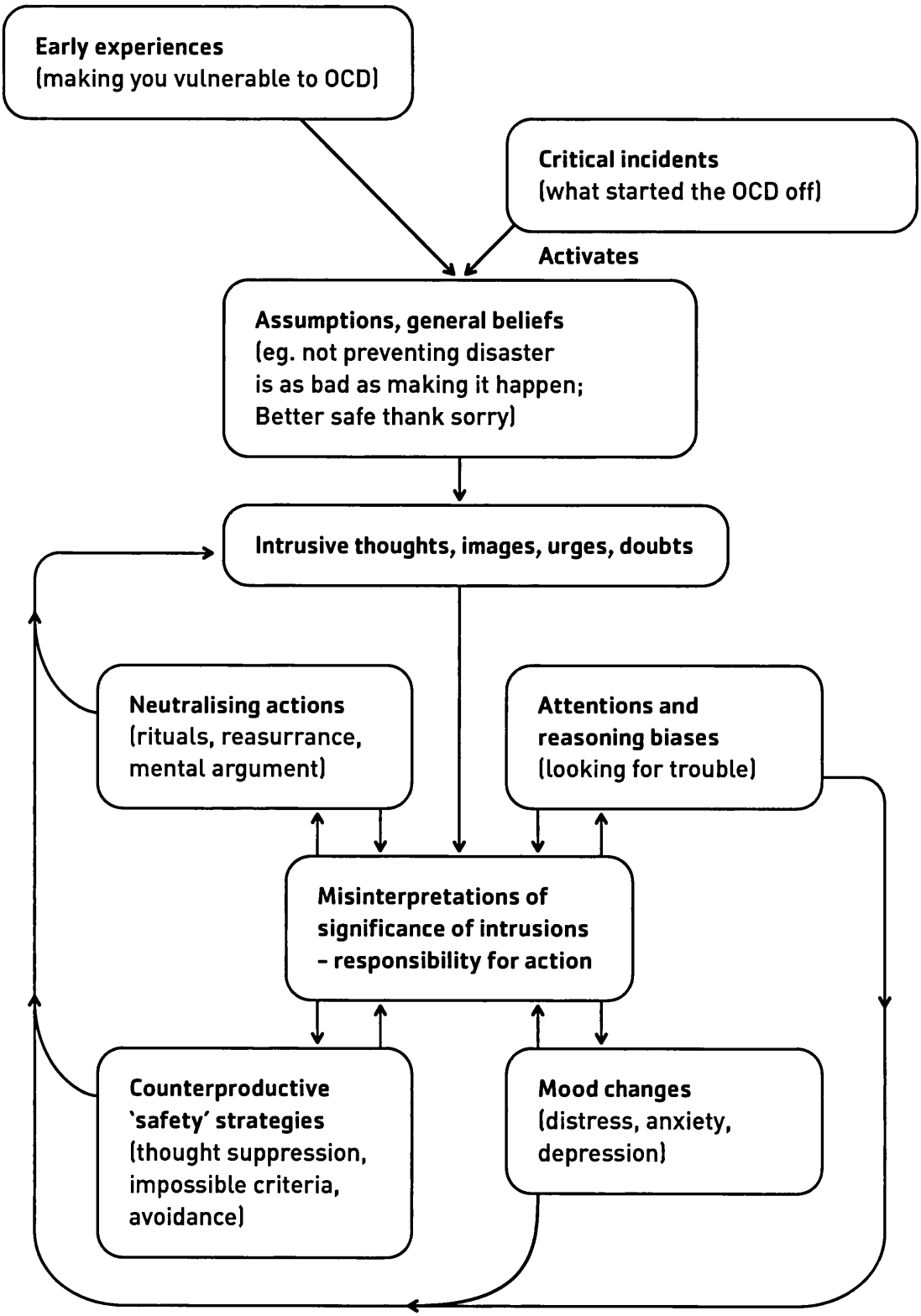
their obsessional thoughts, impulses, images as, amongst others, immoral, dangerous, insane and criminal. At a meta-level they have perceived these intrusions as revealing important and hidden elements to their character. For example, these obsessions mean that deep down I am evil, dangerous, weird, insane and immoral (see Purdon and Clark, 1994). Rachman (1997) argues that some of the interpretations lead them to fear what they would be capable of in the future. For example, one day I will cause serious harm to someone (that is act on an immoral impulse). Whilst other interpretations concern being rejected by others or being sent to Hell. Rachman (1997) notes that the main themes to the obsessions concern moral systems such as sex, religiosity, and aggression and are hence vulnerable to personal significance.

Significance of the intrusion in terms of responsibility

According to Salkovskis (Salkovskis, 1985, 1989; Salkovskis et al, 2000) negative automatic thoughts related to the intrusion incorporate excessive personal responsibility and reflect an underlying cognitive distortion for responsibility for harm, that is, to themselves or others. Individuals with OCD, are thought then, to have an 'inflated sense' of responsibility for intrusive thoughts and anticipated negative consequences. They interpret the intrusion as evidence that they may be responsible for harm to themselves or others, which leads to both adverse mood and neutralising behaviour. Adverse mood combined with neutralising behaviours are argued to increase the likelihood of further intrusions, and increase the perceived threat and the perception of responsibility, leading to a cycle of negative thinking and neutralising.

Salkovskis cognitive behavioural model of OCD (see figure 1), draws from Beck's theory of emotional disorders (Beck, 1967, 1976), and specifies that the origin of particular negative appraisals lie in learned assumptions.

Figure 1. Cognitive behavioural model of Obsessive-Compulsive Disorder



The model suggests that individuals develop particular assumptions as a result of early experience. These assumptions can be understood as beliefs that help individuals deal with early experience. They may include beliefs about harm and responsibility, but are also appraisals about the nature of the thinking process (eg. thinking something wicked is as bad as doing it). At some point in an individual's life a critical incident activates these assumptions. The occurrence of an unacceptable intrusion or impulse thus results in appraisals linked to responsibility and harm. Such appraisals also trigger other reactions such as selective attention, hyper vigilance, thought suppression and reassurance seeking which can play a further role in the maintenance of obsessional beliefs and the recurrence of intrusions. In other words, Salkovskis (1985, 1989) emphasises that general beliefs and attitudes about responsibility as well as appraisals about the occurrence of the intrusion are central to an individual developing OCD. Furthermore Salkovskis (1996) argues that the level of anxiety created is determined by the interaction between the perceived likelihood of danger and the perceived level of how awful such an event would be, if it actually happened (Salkovskis, 1996). Salkovskis et al (1998) argue that inflated awfulness estimates are likely to predispose individuals to obsessional problems.

The role of TAF in the cognitive model of OCD

Linked to the notion of responsibility is the phenomenon coined Thought Action Fusion (TAF) which concerns a thinking process that can be understood as a cognitive bias (Rachman, 1993). It takes two forms, firstly the belief that having an unacceptable thought may increase the chances of a feared event from occurring (Likelihood TAF) and secondly the belief that having an unacceptable thought is morally equivalent to carrying out the action (Moral TAF). With regard to Likelihood TAF, an example could be an individual believes that having a thought about his/her partner having an accident on the way home increases the chances of this occurring.

As a result he/she feels it is his/her responsibility to prevent harm and he/she prays to neutralise the thought so as to prevent the feared catastrophe. With regard to the Moral TAF, an example could be an individual who has an image about cheating in a relationship might perceive this intrusion as morally equivalent to carrying out this act.

These cognitive biases have been suggested to be linked to an individuals perceived responsibility for negative events (Rachman, 1993). Both TAF biases are thought to increase distress and urge to neutralise in response to unwanted intrusions (Rachman, 1998; Shafran, Thordarson and Rachman, 1996).

Salkovskis (1985) also emphasises the role of pre-existing mood disturbance in OCD. Although not central to the model he argues that mood can act at a number of different points. For example he argues severe depression can trigger specific cognitions relating to responsibility (Teasdale, 1983). He also argues that mood disturbance widens the range of stimuli which stimulate intrusions, and that mood disturbance will increase the accessibility of negative automatic thoughts about intrusions. Specifically he suggests that anxiety will result in an increase in intrusions while depression will result in an increase in the probability of negative automatic thoughts and hence discomfort. The associations between OCD and mood disturbance has been well documented in the research literature (eg. Rachman, 1971; Roberts, Yeager, Seigel, 2003; Overbeek, Schruers, Vermetten, Griez, 2002; Tuekel, Polat, Oezdemir, Aksuet et al, 2002).

Summary

In summary, it is the significance of the intrusion, in terms of inflated responsibility, the belief in thought action fusion as well as the intrusion being appraised as indicating unacceptable aspects of the self that leads to

the experience of distress and in turn the motivation to engage in neutralising behaviour (for example compulsive checking, washing, and covert ritualising which are used to prevent or stop the feared consequence from happening) and thought suppression. As a result of the compulsion, anxiety is alleviated, but only temporarily, which reinforces the continued use of the neutralisation process and suppression techniques leading to a cycle of negative thinking and neutralising (Salkovskis, 1985, 1989).

EVIDENCE FOR THE CONSTRUCTS RELEVANT TO THE CBT MODEL

Theoretically the role of catastrophic misinterpretations and the personal significance of the intrusions have been accepted as central to OCD symptomatology. However the ideas have yet to be fully empirically validated (Wilson et al, 1999).

Personal significance of intrusions - evidence for their importance in OCD

The unacceptability of intrusions has been noted in clinical observation (eg. Rachman, 1997, 1998). Rachman (1998) notes that the thoughts that are most likely to become obsessions are those that have significance for the individual's value system. However there has been very little research on the relationship between OCD symptoms and the negative appraisals of the intrusions in relation to the self.

Research to date has suggested that evaluative appraisals of intrusions, such as unacceptability, unpleasantness, disapproval and guilt are associated to a greater or lesser extent with increased frequency and/or reduced control of unwanted thoughts (Clark, 1992; Clark and de Silva, 1985; Edwards and Dickerson, 1987; Freeston, Ladouceur, Thibodeau and Gagnon, 1992; Reynolds and Salkovskis, 1991; Ehnolt, Salkovskis, Rimes, 1999).

In terms of moral systems such as personal religiosity, research examining varied obsessions has found little association between moral systems and varied obsessions (eg. Akhtar, Wig, Varma, Pershad, 1975; Higgins, Pollard and Merkel, 1992; Staebler, Pollard and Merkel, 1993). However particular personal values have been found to be associated with obsessive compulsive symptoms for individuals with specific kinds of obsessions. For example, Steketee, Quay and White (1991) found a relationship between levels of self reported religiosity and OCD symptoms in individuals who reported religious obsessions, but not for those who reported other kinds of obsessions. Purdon (2001) further found that appraisals of thoughts as inconsistent with one's moral system predicted greater distress over other thought intrusions. Purdon and Clark (1994) also found evidence to support Rachman's supposition that obsessions are interpreted as providing evidence of being immoral evil and dangerous. They found obsession prone individuals feared specific consequences related to the intrusion such as losing control, causing harm to others and being rejected by others.

Other work by Rowa and Purdon (2003) has supported Rachman's (1997, 1998) ideas. They randomly assigned non-clinical participants to report either the most or least upsetting thought they had experienced. They then filled in questionnaires on appraisals of these thoughts, valued aspects of the self and contradiction of the self. They found that participants reporting their more upsetting thoughts appraised these thoughts in a more negative way and reported that these thoughts contradicted valued aspects of the self to a greater degree than individuals in the least upsetting thought group.

Summary

However the majority of these studies have been carried out on non-clinical samples so the generalisability of the results to OCD are questionable. The research to date also fails to distinguish between unacceptable appraisals

of intrusions and unacceptable beliefs about the self. This distinction is important because it has implications for treatment. The former may only require the individual to be educated as to the universality of intrusive thoughts. Indeed Rachman (1997) emphasises that in the treatment of OCD, changing catastrophic misinterpretations about the significance of intrusive thoughts may be all that is required. However unacceptable beliefs about the self may require modification at a core belief level. More consideration also needs to be given to how these constructs are measured. As yet no reliable and valid measures exist within the Obsessive-Compulsive field. Further investigation is also required to examine whether these constructs are specific to OCD by comparing individuals with OCD with both Anxious and Non-Anxious Controls.

Inflated responsibility – evidence for its importance in OCD

With regard to excessive responsibility clinical observations support the idea that individuals with OCD display this cognitive bias (Rachman, 1993). However the studies to date provide conflicting evidence for the relationship between responsibility and OCD symptoms (eg. Freeston al, 1992; Rheaume et al, 1995.) For example, Freeston Ladouceur, Thibodeau and Gagnon (1992) in their work on college students found an association between inflated responsibility and compulsive behaviour. They factor analysed college student responses to the Cognitive Intrusion Questionnaire and found of the five factors yielded the factor relating to responsibility and guilt concerning the evaluation of their intrusions was significantly related to compulsive activity.

However other studies have shown little evidence for an association between responsibility and obsessional symptoms (Ladouceur et al, 1995; Rachman et al, 1995; Rheaume et al, 1992; Frost et al, 1994). Ladouceur et al (1995), for example, carried out 2 experiments in which they manipulated degree of

responsibility in college students and found little evidence for an association between responsibility and OCD symptoms. In the first experiment participants were asked whether they heard a particular sound before. They were permitted to listen to the sound as many times as they wanted (ie. check) before responding. The manipulation produced greater feelings of responsibility in the high responsibility group, but they did not exhibit more checking behaviour than participants in the low responsibility group. In the second experiment participants in the high responsibility group were asked to sort pills that could directly influence the manufacture of a medication for a virus in South East Asia, whereas participants in the low responsibility group were told the pill sorting task was a colour perception test. However no group differences were found in terms of doubting, urges to check or time taken to complete the task. However the high responsibility group did show significantly more preoccupations with making errors than in the low responsibility group.

Similarly Rachman, Thordarson, Shafran and Woody (1995) employing their own questionnaire, the Responsibility Appraisal Questionnaire, which measures four aspects of responsibility: responsibility for harm, responsibility in social contexts, and a positive outlook towards responsibility and Thought Action Fusion found no significant association between responsibility and obsessional triggers as measured by the Maudsley Obsessive-Compulsive Inventory (MOCI: Hodgson and Rachman, 1977) on a sample of college students. Moreover the measure of responsibility was unassociated with obsessional triggers.

However, the main problem with the studies outlined above is that they were conducted on non-clinical populations and therefore the generalisability to individuals with OCD is unclear. To date only a few studies have examined responsibility with individuals with OCD (eg. Lopatka and Rachman, 1995;

Shafran, 1997; Foa et al, 2001; Salkovskis et al, 2000). For example, Lopatka and Rachman (1995) in an experimental study manipulated responsibility in thirty individuals with checking compulsions. All participants were exposed to their feared stimulus under three conditions: high responsibility (HR), low responsibility (LR) and the control condition. Responsibility was manipulated using contracts in which the experimenter took on complete responsibility for all negative events following exposure (LR) or the participant assumed entire responsibility (HR). In the control condition there was no change in responsibility. The HR condition produced a higher degree of responsibility compared to the controlled condition but it did not produce a significantly stronger urge to check, higher discomfort, or higher estimated probability for harm. In the LR condition the participants' urges to check and discomfort and estimated probability of harm were reduced. The authors suggested that the weaker and non significant effects of inflated responsibility in the high risk condition, in terms of OCD, may be explained by the fact that participants in the low levels of responsibility were already high so there was little room for further inflation by the experimental test. They found however that both distress and urges to perform compulsions decreased when responsibility was reduced.

Shafran (1997) carried out a similar study to Lopatka and Rachman (1995) on a sample of 40 individuals with varied compulsions. However Shafran manipulated responsibility by varying the presence or absence of the experimenter during a task. The HR condition involved the participant undergoing exposure in vivo with response prevention when alone. The low responsibility condition involved the participant undergoing exposure in vivo with response prevention in the presence of the experimenter. The responsibility manipulation did produce higher ratings of perceived responsibility for threat when the experimenter was absent than with the experimenter present. In the high responsibility condition there was also

greater urge to neutralise, discomfort/anxiety and estimations of the probability of threat as compared to the low responsibility condition.

Foa, Amir, Bogert, Molnar and Przeworski (2001) in their study went a stage further as they explored whether inflated responsibility was a specific characteristic of individuals with OCD. For the purposes of this study they devised their own Obsessive Compulsive Responsibility Scale (OCRS) which includes 27 situations that they categorised into three categories: low risk (LR), OC relevant and high risk (HR). Their sample included fifteen individuals with OCD (OCs) with primary checking compulsions, fifteen individuals with generalised social phobia (GSP) and fifteen non-anxious controls (NACs). They found that OCs reported greater responsibility about low risk situations (eg. you see a piece of string on the ground) and OC relevant situations (eg. you see a sharp wire in a parking lot) than did NACs and GSPs. However GSPs also reported a greater sense of responsibility than did NACs on OC relevant but not on the low risk situations. The groups did not however differ on their ratings of responsibility for the high-risk situation. They concluded that the tendency for inflated responsibility varies with the content of the situation, that is degree of responsibility. They also drew parallels between their findings, that OCs differed from NACs more on low risk but not high risk situations with Lopatka and Rachman's (1995) results who found that low but not the high risk condition affected urge to check and discomfort. However another possible explanation for this pattern of results is that high-risk situations, by their very nature, stimulate understandably an increased sense of responsibility because of the estimated probability of threat. It is only when in low risk situations that individuals with OCD can be shown to have an inflated sense of responsibility as in low risk situations the potential for harm or damage is low and NACs will naturally assume low levels of responsibility. However in individuals with OCD this is disregarded. However this will need further research.

However Lopatka and Rachman (1995) also found that GSPs reported a greater sense of responsibility than did NACs on obsessive compulsive but not on the low risk situations which they argued questioned the uniqueness of inflated responsibility in individuals with OCD. They suggested that an elevated sense of responsibility may be common to all anxiety disorders but OCs may be high on the continuum. Their results also provided evidence that OCs as compared to NACs and GSPs have a higher degree of urge to rectify low risk and OC relevant situations and distress upon leaving these situations unrectified. They suggest that urges to rectify potentially harmful situations and distress upon not rectifying these situations may be more unique features of OCD than inflated responsibility.

Another factor that may explain the differences in the findings may be attributable to differences in the way responsibility has been defined and operationalised (Wilson et al, 1999). For example, Rachman et al (1995) administered the Responsibility Appraisal Questionnaire which defines responsibility not only in terms of causing harm to others, but also in terms of taking responsibility for social etiquette, and welcoming challenges for assuming responsibility over other people and things. Other studies have been criticised because items measuring responsibility have tapped into obsessional triggers (see Salkovskis et al, 2000). For example tapping responsibility for harm about being uncertain as to whether the stove was turned off.

Clearly the measurement of responsibility has been difficult because of the complex nature of the construct (see Rachman, 1993) and as such it is open to misunderstanding (Purdon and Clark, 1993). It is also evident that single rating scales of perceived responsibility (eg. CIQ or CII) have had little success in measuring the construct (Freeston et al, 1991; Purdon and Clark, 1994). Salkovskis (1996) has recently tried to address this issue by operationalising

a definition of responsibility. Salkovskis defined responsibility as:
'The belief that one has the power which is pivotal to bring about or prevent subjectively crucial negative outcomes. These outcomes may be actual, that is having consequences in the real world, and/or at a moral level (Salkovskis, 1996).

This conceptualisation appears promising in demonstrating a clear association with OCD symptomatology (see Rheaume et al, 1995; Salkovskis et al, 2000). For example, Rheaume et al (1995) carried out a study to evaluate Salkovskis' (1996) definition of responsibility. They devised a semi-idiographic task in order to examine responsibility across obsessional related scenarios, such as contamination, verification, somatic concerns, loss of control and magical thinking. Participants (all non-clinical) were required to describe a possible negative outcome and rate this on four dimensions: (1) Probability; (2) Severity; (3) Influence; (4) Pivotal influence. They were then required to rate their perceived responsibility and personal relevance. Regression analysis showed that influence and pivotal influence were better predictors of responsibility ratings than probability and severity, generally supporting Salkovskis (1996) definition of responsibility. However they emphasise that further research comparing OCD, clinical controls and non-clinical controls is needed to confirm the presence of a responsibility schema among obsessive compulsive individuals.

Salkovskis et al (2000) have developed a measure for tapping responsibility using the operational definition of responsibility proposed by Salkovskis (1996). They have developed two questionnaires to measure both general responsibility assumptions (Responsibility Attitude Scale) and responsibility appraisals about the intrusions (Responsibility Interpretations Questionnaire) which are explicitly specified in the cognitive theory of OCD (Salkovskis, 1985; Salkovskis, 1989).

The Responsibility Attitude Scale (RAS) was designed to assess general beliefs about responsibility. This scale taps into a generalised tendency to assume responsibility in a given situation. The Responsibility Interpretations Questionnaire (RIQ) was designed to assess the frequency (frequency subscale) of and belief (belief subscale) in specific interpretations about possible harm related to intrusive thoughts. This questionnaire measures both high and low responsibility interpretations (see Appendix F). Salkovskis et al (2000) tested the extent and specificity of both responsibility assumptions and appraisals by comparing individuals with OCD, with anxiety controls and non-clinical controls. Their study showed that obsessional individuals were more likely to endorse general responsibility beliefs and assumptions as well as high responsibility related appraisals of intrusive thoughts about harm compared to non-obsessionals. Anxious Controls also scored significantly higher than non-anxious controls on the measures of general responsibility and high responsibility appraisals. They argue these findings show the specificity of responsibility cognitions in OCD. They also found an association between responsibility cognitions and the occurrence of compulsive behaviour and neutralising which provides concurrent validity for their scales.

However differences in low responsibility interpretations (in terms of frequency interpretations and belief interpretations) across the three groups were not examined due to the unacceptably low-test retest reliability. This is unfortunate because in the cognitive behavioural treatment of OCD, emphasis is given to non-threatening interpretations of cognitive intrusions (Salkovskis, 1996). They suggest that the low-test re-test reliability of these items may have been because subjects misread them, being interspersed with high responsibility interpretations. This work is important because few studies have attempted to measure responsibility in obsessional patients and less have used anxious and controls. However more work needs to be conducted to demonstrate the utility of these scales within the clinical

population. The scales were found to have good reliability and internal consistency. The measures are particularly useful because care was taken to avoid using items that tapped into obsessional triggers or the intensity of OCD symptoms which has been a criticism of other research (Rheaume et al, 1995).

Summary

In summary the literature contains some evidence for a link between responsibility and OCD symptoms, particularly when responsibility is defined as belief in one's power to cause harm (Salkovskis, 1996). However few studies have examined responsibility assumptions and cognitive appraisals of intrusions, which are both, viewed as important within the cognitive behavioural conceptualisation of OCD. More work also needs to be done to ascertain whether inflated responsibility is a general characteristic of individuals with anxiety disorders or is specific to OCD, as comparison Anxious Controls and Non Anxious Controls have not always been used. It would also be of interest to explore further the findings by Lopatka and Rachman (1995) and Foa, Amir, Molnar and Przeworski (2001) who found that low responsibility interpretations are more able to distinguish obsessional individuals from clinical and non-clinical controls compared to high responsibility interpretations.

Thought Action Fusion – evidence for its importance in OCD

Thought Action Fusion (TAF) is a thinking process or a cognitive bias that may increase an individuals perceived responsibility for an intrusion (Rachman, 1993). According to the cognitive behavioural theory of OCD, TAF is a thinking process or cognitive bias that is thought to increase an individual's perceived responsibility for the intrusions. As such it has been suggested as a vulnerability factor for the development of obsessions (eg. Rachman, 1997). It was first coined by Rachman (1993) and clinical observations support its existence. Shafran, Thordarson, Rachman (1996)

developed a measure for tapping this cognitive bias which they called the Thought Action Fusion (TAF) Scale. The TAF measures two components: 1) TAF-Morality which concerns the belief that unacceptable thoughts are morally equivalent to overt actions and, 2) TAF-Likelihood which concerns the belief that thinking of an unacceptable situation will increase the chances that the situation will occur. The TAF likelihood scale breaks down into Likelihood Self and Likelihood other. A study by Shafran, Thordarson, Rachman (1996) indicates that the TAF scale possesses adequate psychometric qualities. That is internal consistency proved to be satisfactory (alphas > 0.85) and respondents who scored clinically high on a measure of OC symptoms also had higher TAF scores than normal controls. The authors concluded the scale is a highly reliable construct. Another study by Rassin, Merckelbach, Muris, Schmidt (2001) confirmed that the TAF scale has good levels of internal consistency. They found that subcomponents of the TAF scale correlated with self-reports of obsessional problems.

Preliminary evidence has provided support for the concept of TAF. For example, Rassin, Merckelbach, Muris and Spaan (1999) in an experimental design led participants to believe that thinking about the word 'apple' could result in an electrical shock given to another person. Experimental participants were connected to a bogus EEG that was introduced to them as an apparatus that could pick up their thoughts. They found experimentally inducing TAF (using non-clinical participants), increased self reported intrusive thinking, more discomfort and more resistance. The authors concluded that the results supported the proposal that TAF may contribute to the development of intrusive thoughts.

Similarly, Rassin, Muris, Schmidt and Merckelbach (2000) conclude in their study of undergraduate students, using structural equation modelling that TAF should be considered as important in the aetiology of OCD

symptoms. Coles, Douglas, Mennin, Heimberg's (2001) study also provides evidence for the usefulness of the construct of TAF. They found that TAF could distinguish between obsessive features and worry using a sample of undergraduate students.

Muris, Meesters, Rassin, Merckelbach, Campbell (2001) also found, (using a sample of normal adolescents), that TAF was associated with OCD symptoms, but also with symptoms of other anxiety disorders and depression. However they found that when levels of trait anxiety were controlled, most of the connections between TAF and anxiety symptoms disappeared. Symptoms of OCD and generalised anxiety, however, remained significantly related to TAF.

A criticism of the above studies is that they have all been carried out on non-clinical populations. A literature review found only a few studies that have examined TAF in individuals with OCD. For example Shafran, Thordarson and Rachman (1996) found that obsessionals had higher scores on the TAF, particularly on the TAF likelihood other subscale compared to non-obsessional samples. Correlational analysis found that within the OCD group the TAF-Likelihood other scores were positively correlated with severity of OCD symptoms as measured by the Maudsley Obsessional Compulsive Inventory (MOCI; Hodgson and Rachman, 1977). However, a weakness of this study is that a comparison group of anxious controls was not used.

Work using non-anxious and anxious control groups may be suggesting that TAF is not specific to OCD. For example, in Rassin, Merckelbach, Muris, Schmidt's (2001) work they found that TAF scores were higher for a clinical sample than for students and normal controls, but they found that OCD patients did not score significantly higher on TAF scales compared

to patients suffering from other anxiety disorders. They suggest that this finding casts some doubts that TAF is a highly specific feature of OCD. That is, they argue that TAF may be a general bias that may occur in a variety of anxiety disorders. However they emphasise that their finding does not rule out the possibility that TAF is more important in the development of OCD as compared to other anxiety disorders.

Rassin, Diepstraten, Merckelbach (2000) also found that OCD patients and patients with other anxiety disorders (eg. panic disorder, PTSD and social phobia) had similar TAF levels. However they did find that TAF was significantly associated with OCD symptoms but it was also associated with general levels of psychopathology as measured by the symptoms checklist (SCC-90; Derogatis, 1977).

Summary

In summary, the research has provided evidence for the support of the concept of TAF. However more work needs to be done to measure TAF in obsessional individuals and to compare their scores to anxious and normal controls. In this way the specificity to OCD can be examined. The link between TAF and OCD symptoms also needs further investigation.
The work by Shafran et al (1996) suggests that the TAF-Likelihood subscale may be more important in OCD symptomatology.

SELF GUIDES

How people represent the self and how these guides influence affect has been the subject of several recent theories (eg. Higgins, 1987; 1996; Markus and Nurius, 1986; Carver, Lawrence, Scheier, 1999). Self-discrepancy theory (Higgins, 1997; 1996) is particularly interesting because it provides a conceptual basis for differentiating dysphoric feelings from anxious feelings. It is argued that the application of the theory may help to expand upon

and test out Rachman's idea that individuals with OCD believe that deep down they have unacceptable aspects to their character. In other words it may enable the exploration of whether individuals with OCD do hold negative and repugnant beliefs about the self and enable the examination of whether these beliefs are specific to OCD.

The theory assumes that people hold several distinct self-guides which people use to compare themselves. The affective consequences of the comparisons are predicted to differ as a function of which self-guide is being used as a comparison. The theory distinguishes between the ideal self, the ought self and the actual self. The actual self concerns the attributes that someone feels he or she actually possesses. The ideal self are the attributes that they would like to possess and can be considered, partly, to relate to wishes hopes or aspirations. The ought self are the attributes that someone feels they have the duty or obligation to possess. The ought domain differs from the ideal domain in that it involves a sense of moral responsibility and obligation rather than some achievement for which the person might strive.

Self-discrepancy theory argues that people are motivated to reach a condition where their actual self matches their ideal or ought self, that is where their actual self-concept matches their self-guides. The type of discomfort experienced as a result of different kinds of self-discrepancies varies as described below (see Higgins, 1987).

The actual versus ideal discrepancy involves a discrepancy in which the current state of the person's actual attributes does not match up to the ideal state, which the person wishes to attain. This results in the experience of the non-attainment of goals or aspirations. The individual is predicted to be vulnerable to dejection-related emotions such as disappointment and depression. The actual versus ought discrepancy involves a discrepancy in

which the current state of the persons attributes does not match up to what the individual believes it his obligation or duty to fulfil. As failure to meet certain obligations or duties is associated with punishment of some kind, this discrepancy results in an expectation of negative outcomes. The person is therefore predicted to be vulnerable to agitation related emotions such as anxiety. Self-discrepancy theory is therefore a model of emotional vulnerability.

In the first test of the model Higgins, Klein and Strauman (1985) found support for the two major hypotheses. That is, that greater magnitude of self-discrepancy is associated with greater degree of emotional distress, and that different types of discrepancy are associated with different kinds of chronic negative emotions and symptoms. The model was specifically able to distinguish between depression and anxiety. The actual: ideal discrepancy was associated with depressive feelings, whereas the actual: ought discrepancies was associated with agitation related emotions. Laboratory studies involving contextual activation of subjects' self discrepancies (Higgins, Bond, Klein and Strauman, 1986) replicated the initial findings and supported a third hypothesis: When the accessibility of a discrepancy was momentarily increased by having the subject focus on either wishes or obligations the person was more likely to experience an increase in the negative emotions associated with the type of discrepancy that was activated (ie. Dejection-related emotions and agitation related emotions respectively).

In another study by Strauman (1989) on two diagnostic groups, that is Major Depressive Disorder and Social Anxiety, depressed patients manifested the greatest magnitude of chronic actual: ideal discrepancy. Whereas social phobics had the greatest magnitude of chronic actual: ought discrepancy. They concluded that it is possible to differentiate between vulnerability to depressive versus anxious affect on the basis of these distinctive cognitive structures or self-guides. They argue that the self discrepancy model provides

both a description of the underlying differences between the two diagnosed groups and a motivationally based rationale for the relation between the different mismatch structures and the symptoms they induce (Higgins, 1987).

More recently Carver, Lawrence, Scheier (1999) incorporated the role of the feared self within self-discrepancy theory. They drew from the work of Markus and Nurius (1986). In Markus and Nurius's (1986) discussion of possible selves they posit a working model of the actual self, which assumes an ideal and a feared self. The feared self refers to a set of qualities the person wants not to become but is concerned about possibly becoming (Oyserman and Markus, 1990). According to Ogilvie (1987) the feared self is likely to contain memories of socially unacceptable activities or dreaded memories, fearsome events and unwanted emotions. It is argued that this self structure is more experienced based and less conceptual than the ideal and ought self and is a more embedded standard against which one judges ones current level of well being. No specific hypotheses are emphasised regarding the consequences of being close to the feared self in terms of type of affect (that is dysphoria versus agitation) but it is theoretically understood to be related to unspecified negative affect and life dissatisfaction (Ogilvie, 1987). The notion of the feared self is particularly appealing because it relates to Rachman's (1997) idea that obsessional individuals believe that deep down they have unforgivable evil, dangerous, weird, insane and immoral aspects to their character.

This cognitive approach to emotional disorders, which predicts and demonstrates differences among diagnosed groups in cognitive mechanisms of emotional vulnerability is promising and may be useful in its application to OCD. It may also help explain why individuals with OCD also have high levels of depression (Foa, Grayson and Steketee, 1982; Rachman and Hodgson, 1980; Ricciardi and McNally, 1995; Roberts et al, 2003; Overbeek

et al, 2002). For example Black, Noyes, Goldstein and Blum (1992) reported that as many as 75% of adults with obsessions and compulsions have at some time experienced subclinical or clinical dysphoric states. Moreover Antony, Downie and Swinson (1998) found that 24% of patients with OCD had concurrent major depressive disorder, and an additional 13.8% dysthymic disorder. Concurrent depression not only compounds patients' distress, but may attenuate response to treatment (Abramowitz, Franklin, Steet, Kozak, Foa, 2000; Overbeek et al, 2002).

Higgins and colleagues (see Higgins, 1987; Higgins et al, 1986) have developed a questionnaire measure to examine different self-guides that are both idiographic and accessible. Subjects are asked to spontaneously list the attributes of who they actually are, that is their Actual Self as well as attributes of other self guides, that is ideal, and ought selves. Carver, Lawrence and Scheier (1999) have adapted this questionnaire to incorporate the feared self and called it the Selves Questionnaire. The Selves questionnaire has good face and construct validity (Carver et al, 1999). This method of tapping into the feared self enables the exploration of the traits that make up the feared self but also enables the discrepancy between the feared and actual self to be examined. This is particularly intriguing in relation to OCD because it enables the exploration of whether individuals with OCD actually believe they are unacceptable or fear that they may become unacceptable (see Rachman, 1997). It also enables the examination of how individuals with OCD vary with respect to the standards against which they evaluate themselves as compared to Anxious and Normal controls.

Summary

The examination of how individuals with OCD represent themselves in terms of their ideal and ought and feared selves may help explain why some individuals with OCD also have high levels of depression as well as anxiety.

More importantly the examination of how individuals with OCD represent themselves in terms of their feared self will enable the exploration of the validity of Rachman's (1997) idea that individuals with OCD hold negative beliefs about their character. As individuals are required to generate their feared self traits this measure also enables the examination of whether individuals with OCD spontaneously generate moralistic themes relating to sexuality, aggression and religion (see Rachman, 1997). More work also needs to be done to ascertain whether these beliefs about the self are specific to OCD.

CONCLUSIONS AND AIMS

To date the constructs of Responsibility, Thought Action Fusion and the unacceptability of intrusions has been linked to predisposing individuals to obsessive compulsive disorder. However it is as yet unclear whether these constructs are relevant and specific to OCD or are general to other anxiety disorders as little research has studied individuals with OCD or compared their scores to Anxious and Non-Anxious Controls.

With regard to how responsibility has been measured it seems that Salkovskis (1996) has provided the simplest and most coherent and testable definition of responsibility. Salkovskis and colleagues (Salkovskis et al, 2000) have also provided two measures for tapping both general responsibility attitudes (Responsibility Attitude Scale) and responsibility appraisals related to specific intrusions (Responsibility Intrusions Questionnaire). The latter measure may also be useful for exploring the importance of both high and low responsibility appraisals. The literature to date (see Lopatka and Rachman, 1995; Foa et al, 2001) suggests that low responsibility situations may be more important in distinguishing between individuals with OCD and other anxiety disorders. Turning to Thought Action Fusion, which is a relatively newer concept, Shafran, Thordarson and Rachman's (1996) definition has been most readily

accepted and their measure has shown promise. However it is noteworthy that the TAF subscales seem to vary according to their specificity to OCD and this will be explored in this study. The TAF Likelihood-Other subscale appears to be more important in OCD (Shafran et al, 1996).

With regard to Rachman's (1997) notion of the unacceptability of intrusions and the self it is clear that this is an under researched area. Research to date also fails to distinguish between generally held negative appraisals of intrusions and beliefs about the self. Furthermore no reliable or valid measure exists for tapping these constructs within the OCD field.
A measure for tapping negative appraisals about the occurrence of the intrusions has also been developed for the purpose of this study and has been called the Intrusion Related Self Inference Scale (see Appendix F and method section). The Selves Questionnaire (see Appendix F) developed by Carver, Lawrence and Scheier (1999) enables using the actual-feared self discrepancies the examination of whether individuals with OCD do hold the belief that they are unacceptable. In other words it enables the exploration of whether this belief is a fear or a true reflection of the self-concept. If negative beliefs about the self are important in OCD, then for therapy to be effective in the long term, the treatment may require more direct and specific modification in treatment.

The study here then proposes to provide further empirical support for the role of inflated responsibility and Thought Action Fusion in OCD. It also examines the role of the unacceptability of intrusions and the unacceptability of the self in OCD. More specifically it aims to provide empirical support for Rachman's (1997) idea that intrusions are interpreted as meaning that the self is unacceptable in individuals with OCD. It also explores the value of the application of self-discrepancy theory to OCD.

In short the study proposes to:

- Explore the degree to which these constructs are specific to OCD by comparing three groups of participants, that is individuals with OCD, Anxious Controls and Non-Anxious Controls.
- Explore the role of inflated responsibility, Thought Action Fusion, and the unacceptability of intrusions in terms of OCD symptomatology.
- Explore the relationships between unacceptability of intrusions, responsibility and Thought Action Fusion.
- Explore the value of the application of self-discrepancy theory to OCD.

The specific research hypotheses are presented in the next section.

RESEARCH HYPOTHESES

A number of research hypotheses were generated on the basis of the research literature, which can be divided into three sections. The first section examines the importance of the constructs, Responsibility, Thought Action Fusion and the negative appraisals of intrusions to OCD. The second section involves the study of the value of self-discrepancy theory to OCD and the last section concerns a qualitative analysis of the self generated feared traits.

SECTION 1: CONSTRUCTS RELEVANT TO THE CBT MODEL OF OCD

Hypothesis 1: The importance of Responsibility in OCD

Hypothesis 1a: concerns the specificity of responsibility to OCD. It is hypothesised that obsessive participants will show much higher scores on responsibility measures as compared to the Anxious Controls and Non-anxious controls (Salkovskis, 1985;Salkovskis, 1988; Salkovskis et al, 2000). Responsibility is measured using the Responsibility Attitude Scale (RAS: Salkovskis et al, 2000) and the Responsibility Intrusions Questionnaire (RIQ: Salkovskis et al, 2000), which measure responsibility assumptions and responsibility appraisals of intrusions respectively.

Hypothesis 1b: It is hypothesised that responsibility (as measured by the RAS and RIQ) will be positively correlated with obsessive symptoms as measured by the Padua Inventory. Anxiety and depression as measured by the BAI, BDI will be controlled for in this analysis so that any association can be attributed to obsessionality rather than psychopathology.

Hypothesis 2: The importance of TAF in OCD

Hypothesis 2a: examines whether TAF is unique to OCD. It is hypothesised that obsessive participants will show much higher scores on the TAF scale compared to the Anxious Controls and Non-anxious Controls.

Hypothesis 2b: It is hypothesised that scores on the Thought Action Fusion measure will be correlated with OCD symptomatology as measured by the Padua Inventory. Anxiety and depression as measured by the BAI and BDI respectively will be controlled for so that any association can be attributed to obsessionality rather than psychopathology.

Hypothesis 3: The importance of negative appraisals of intrusions

Hypothesis 3a: explores using the Intrusion Related Self Inference Scale (especially designed for this study) whether negative appraisals of intrusions are specific to OCD (Rachman, 1997). It is hypothesised that obsessive participants will be more likely than controls to make negative appraisals of their intrusions compared to Anxious and Non-Anxious Controls.

Hypothesis 3b: it is hypothesised that the Intrusion Related Self Inference Scale will be correlated with OCD symptomatology as measured by the Padua Inventory. Anxiety and depression (using BAI and BDI) will be controlled for so that any association can be attributed to obsessionality rather than psychopathology.

Hypothesis 4: The association between responsibility, TAF and the Intrusion Related Self Inference Scale.

It is hypothesised that these constructs will be positively correlated with each other within the OCD sample. Anxiety and depression (using BAI and BDI) will be controlled for so that any association can be attributed to obsessionality rather than psychopathology.

SECTION 2: VALUE OF SELF- DISCREPANCY THEORY

Hypothesis 5: Self-Discrepancies

It is hypothesised according to self discrepancy theory that Anxious Controls and Obsessive participants will have greater actual-ought discrepancies

(because they are experiencing agitation related affect) and greater actual-ideal discrepancies (because they are experiencing dejection-related affect) as compared to Non-Anxious Controls (Higgins, 1987; 1996; Carver et, 1999). It is also hypothesised that individuals with OCD will show smaller actual-feared discrepancies as compared to the other two groups.

SECTION 3: QUALITATIVE ANALYSIS OF FEARED SELF TRAITS

Hypothesis 6:

It is hypothesised that individuals with OCD will spontaneously generate moralistic traits relating to sexuality, aggression and religion as noted by Rachman (1997).

CHAPTER 2

METHOD

PROCEDURE

Individuals with Obsessive Compulsive Disorder and individuals with other Anxiety Disorders (ie. Social Anxiety, Generalised Anxiety Disorder, Post Traumatic Stress Disorder, Panic Disorder) were recruited from either self help organisations (Obsessive Action and No Panic) or a Hospital based Psychology Department, where they were receiving treatment. Only individuals eighteen years and over were included in the study. Non-Anxious Controls were either friends or family of the researcher. Non-Anxious Controls did not meet any DSM–IV Axis I disorder.

The research received ethical approval from Camden and Islington Ethics Committee. The letter of approval is presented in Appendix A.

Recruitment at a Hospital based Psychology Department

Individuals attending the hospital based Psychology Department meeting DSM IV criteria for Obsessive Compulsive Disorder (OCD) or another anxiety disorder (ie. Social Anxiety, Generalised Anxiety Disorder, Post Traumatic Stress Disorder, Panic Disorder) were told about the research by the Clinical Psychologist involved in their care. Individuals with suicidal planning were not told about the research. If they were interested in the research I introduced myself to them either by telephone or within the Psychology Department and explained the nature of the study. They were

then given written information about the study and a consent form (presented in Appendix E). If the individual chose to take part in the study they were asked to sign the consent form and complete a questionnaire. Individuals were given the option of either attending the hospital or completing the questionnaire at home. If the latter was chosen pre-paid envelopes were provided to enable participants to send back the completed questionnaires.

Of the eight who were invited to take part in the study five completed the questionnaire (four of these individuals had obsessive compulsive disorder and one panic disorder). Of the three who did not take part in the study, one said he was too busy to fill out the questionnaire, one did not respond to a couple of telephone calls despite expressing initial interest and one failed to attend the hospital to complete the questionnaire due to travel arrangements. All individuals were diagnosed using DSM IV criteria by the Clinical Psychologist involved in their care, that is within the Psychology Department.

Recruitment with the help of Obsessive Action

Obsessive Action is a self help organisation that was set up to help individuals with Obsessive compulsive symptoms (and members of their family) gain information about the condition, share ideas and gain access to relevant resources.

A stall was set up at one of Obsessive Action's conferences in order to recruit volunteers to the study. At the conference individuals interested in participating in the research enquired about the study. The nature of the study was explained and each individual was given an information sheet about the study. Names, addresses and telephone numbers were taken and every individual was subsequently contacted by telephone. Each individual

was asked whether they were still interested in participating. Individuals with suicidal planning were excluded from the study. If the individual chose to take part in the study they were asked to sign a consent form and fill in the questionnaire. They were given the option of either attending the hospital psychology department or completing the questionnaire at home. If the latter was chosen pre-paid envelopes were provided to enable participants to send back the completed questionnaires.

Of the sixteen individuals who agreed to take part in the study, four did not post back their questionnaires. Time was spent by the researcher, largely on the telephone, enquiring whether they had been given a formal diagnosis of OCD. If a formal diagnosis had not been given the researcher checked whether DSM IV criteria for OCD were met.

Recruitment with the help of No Panic

No Panic is a self help organisation which was set up to provide help to individuals with various anxiety disorders, in the form of information, social support and access to relevant resources.

No Panic allowed an advertisement about the research (see Appendix B) to be placed in the No Panic brochure asking for individuals to participate in the study. Volunteers telephoned or wrote a letter to express their interest in the research. Each individual was asked to sign a consent form and fill in a questionnaire. They were given the option of either attending the hospital based psychology department or completing the questionnaire at home. If the latter was chosen pre-paid envelopes were provided to enable participants to send back the completed questionnaires.

Of the 42 individuals who agreed to take part in the study eleven did not send back their completed questionnaires. Time was spent by the researcher,

on the telephone, enquiring about the nature of each individual's difficulties and checking whether they met DSM IV criteria for OCD or another anxiety disorder. This was not possible in twelve cases because they were not contactable by phone.

It should be noted that for the clinical sample an overall response rate of 72.73% (48166) was achieved.

Recruitment of Non-Anxious Controls

Non-Anxious controls were recruited by asking family and friends to complete the questionnaire. They were also asked to sign a consent form and given a pre-paid envelope to send back the completed questionnaire. Of the 19 individuals who agreed to take part in the study one did not send back his completed questionnaire saying he was too busy.

PARTICIPANTS

Sixty-six individuals participated in the study. However, three recruited for the Anxious Control group were excluded because they failed to match the Obsessive participants on Anxiety and Depression, leaving 63 individuals. Nineteen (30.16 %) were males and 44 (69.84 %) were females. The mean age of the participants was 44.34 years (SD = 12.83, Range = 21 to 75 years). The sample was made up of Twenty-four individuals with OCD (OCs) with varied phenomenology, twenty-one individuals with other anxiety disorders (including four with Generalised Anxiety disorder and Panic Disorder, four with Generalised Anxiety disorder, three with Panic Disorder, three with Social Anxiety. three with Panic Disorder and Agoraphobia, two with Social Anxiety and Panic disorder, one with Post-Traumatic Stress Disorder and one with Social Anxiety and Hypochondriasis) (ACs) and eighteen individuals without an anxiety disorder (NACs). The groups did not differ on gender age or years of education. Obsessive individuals scored significantly higher than

ACs and NACs on self report measures of OCD symptomatology as measured by the Padua Inventory. Anxious Controls did not differ significantly from OCs on depression or anxiety as measured by Beck's Depression Inventory (Beck, Ward, Mendelson and Erbaugh, 1961) and Beck's Anxiety Inventory (Beck, Epstein, Brown and Steer, 1988) respectively (see Table 1 in the Results Section).

DESIGN AND ANALYSIS

In order to investigate whether certain constructs were relevant to the cognitive behavioural model of OCD three criterion groups were examined: Obsessional participants (OCs), Non-Clinical controls (NACs) and Anxious controls (ACs). The constructs examined were Responsibility, Thought Action Fusion, and the Unacceptability of intrusions. The analysis was primarily with the use of ANOVAs and post hoc comparisons. The value of self-discrepancy theory in discriminating between agitation and dejection related affects in terms of discrepancies from various self-guides was also examined. The significance of the feared self to individuals with OCD was also explored.

A content analysis (see Barker, Pistrang and Elliot, 2001) of the self generated traits relating to the feared self (ie. responses to the Selves Questionnaire: Carver et al, 1999) was conducted. Five superordinate themes were created on the basis of the emergent traits. Definitions of these themes were prepared. These definitions were incorporated in a response coding manual (see Appendix G). The first twenty individuals traits were then coded by two researchers. An inter-reliability analysis was conducted and a Kappa of 0.76 was achieved. Disagreement between the two raters were identified and areas of ambiguity in the rating criteria were clarified in the manual. The next twenty individuals traits were then coded and a Kappa of 0.93 was achieved. One way ANOVA and Bonferroni comparisons were then conducted to examine whether there were any differences between the three groups.

MATERIALS

The questionnaire (see Appendix F) comprised seven standard measures and one measure called the Intrusion Related Self Reference Scale, which was especially devised for this study. Each measure will be discussed in turn:

- **Beck Depression Inventory (BDI):** (Beck, Ward, Mendelson and Erbaugh, 1961). This is a 21 item self-report instrument that measures various depressive symptoms (eg. Sadness, irritation, crying). Each item is rated on a 4-point likert scale (0 = not at all to 3 = very much). Higher scores indicate higher levels of depression. Widespread support for the BDI's validity and reliability has been demonstrated with samples from various populations (eg. Beck et al, 1988).
- **Beck Anxiety Inventory (BAI):** (Beck, Epstein, Brown and Steer, 1988). This is a 21 item self report instrument that measures various anxiety symptoms (eg. sweating, shaking, blushing). Each item is rated on a 4-point likert scale (0 = not at all to 3 = very much). Higher scores indicate higher levels of anxiety symptoms. Widespread support for the BAI's validity and reliability has been demonstrated with samples from various populations (eg. Steer and Beck, 1997).
- **The Padua Inventory** (Sanavio, 1988). This is a 60 item self report instrument that measures level of disturbance for various obsessions and compulsions. See Appendix x for items. Each item is rated on a 4-point likert scale. The higher the score the more obsessive-compulsive symptomatology. Internal consistency is excellent (alpha = 0.90-0.94). Test retest reliability is also good (r=0.78-0.88 eg. Sanavio, 1988). In support of convergent validity several investigations (eg. Van Oppan, 1992) have found high correlations between the Padua Inventory and other measures of OC symptoms such as the Maudsley Obsessional-Compulsive Inventory (r=0.68-0.74) and the OC subscale of the symptom checklist-90 (r=0.66-0.72).

Footnote; The BDI and BAI are not included in the appendix due to copyright.

- **The Thought Action Fusion Scale Revised** (TAF: Shafran et al, 1996). This is a 19 item self-report measure that is rated on a 5-point scale. It is made up of two constructs TAF Moral made up of twelve items, and TAF Likelihood (Others and Self) made up of seven items. The subscales can be combined into a total score. An example of an item making up the Morality subscale is 'having a blasphemous thought is almost as sinful to me as blasphemous action'. An example of the likelihood Other subscale is 'If I think of a relative/friend losing their job, this increases the risk that they will lose their job'. An example of Likelihood Self is 'If I think of myself being in a car accident, this increases the risk that I will have a car accident'. Each item is rated on a scale of 0 = disagree strongly to 4 = agree strongly. Total scores range from 0 to 76 with higher scores indicating stronger TAF. The internal consistency for the subscales are good with Cronbach's alpha ranging from 0.85-0.96 (Shafran et al, 1996).
- **Responsibility Attitude Scale** (RAS: Salkovskis et al, 2000). This is a 26 item questionnaire designed to assess general beliefs about responsibility. Participants are asked to rate the degree to which they agree or disagree with specific statements on a 7-point rating scale: totally agree, agree very much, agree slightly, neutral, disagree slightly, disagree, disagree very much, totally disagree. For example, 'I often feel responsible for things which go wrong, I must always think through the consequences of even the smallest actions.' A total score is derived by adding up the total score and dividing it by the number of items completed, in other words a mean score. Lower scores indicate a stronger sense of responsibility. Internal consistency of the items is good, Chronbach's alpha = 0.92 (Salkovskis et al, 2000).
- **Responsibility Interpretations Questionnaire** (RIQ: Salkovskis et al, 2000). This is a 22-item questionnaire designed to assess the frequency of and belief in specific interpretations of intrusive thought about possible harm. In other words it is made up of frequency and belief subscales. Prior to completing the questionnaire intrusive thoughts, impulses and

images are defined and it is emphasised that such thoughts are experienced by most people. Five examples of intrusions are also given. Participants are asked to write down the intrusions that they had experienced in the past two weeks. Participants are informed that the questionnaire specifically concerns ideas that go through their mind when they are bothered by worrying intrusive thoughts. They are then asked to rate the frequency with which they may have had particular interpretations using the following rating scale: 1) Idea rarely occurred, 2) Idea occurred during about half of times when I had worrying intrusive thoughts, 3) Idea usually occurred, 4) Idea always occurred when I had worrying intrusive thoughts. Having rated the frequency for each of the items, participants are then asked to rate the extent to which they believed these interpretations at that time, using the scale that ranges from zero, I did not believe this idea at all to one hundred percent, I was completely convinced this idea was true. Most items relate to high responsibility interpretations. For example, if I don't resist these thoughts it means I am being irresponsible. However the last six items are related to low responsibility interpretations. For example, there's nothing wrong with letting your thoughts come and go naturally. Four subscales are therefore derived from the RIQ. The Frequency subscale of high responsibility items is obtained by calculating the mean for 16 statements (where 'never occurred' = 0 and 'always occurred = 4). A Frequency subscale of low responsibility (LR) items is derived by calculating the mean of six items. The Belief subscale of high responsibility (HR) items is derived by calculating the mean percentage rating for each of the 16 items. The Belief subscale for low responsibility items is obtained by calculating the mean percentage rating for six statements. Internal consistency of the items is good, Chronbach's alphas = 0.86-0.93 (Salkovskis et al, 2000).

- **The Intrusion Related Self Inference Scale.** This is a 12-item scale especially designed for this study. Participants are asked to rate the degree

to which they agree with a number of statements on a 5-point likert scale where 0 = not at all and 4 = very much. The statements relate to Rachman's (1997) discussion that Obsessional Compulsive individuals appraise their intrusions as meaning that they are unacceptable in some way. Examples of the items include: some of my intrusive thoughts make me think that deep down I am a bad person; some of my intrusive thoughts make me worry that I may do something that would cause others to disown me; some of my intrusive thoughts make me fear what I might be capable of doing. The higher the score the stronger the sense of the unacceptability of the self. Prior to rating the items, individuals are provided with instructions based on Salkovskis et al's (2000) instructions for their Responsibility Interpretations Questionnaire (see Appendix F).

- **Selves Questionnaire** (Carver et al, 1999). In this questionnaire participants are given descriptions of the nature of three kinds of self-guides (ought, ideal and feared self). For each, they are requested to list seven of their own traits that fit the description for each of the self-guides. Participants are then asked to make ratings regarding discrepancies from their perceived actual self and their other self-guides on a 7-point likert scale. The scale ranges from 1 = I am just like this trait to 7 = I am the opposite of this trait. Participants' ratings are summed for each of the traits generated for each of the ought, ideal and feared selves. Three scores are therefore derived for the discrepancies from their ought, ideal and feared selves. Higher scores indicate a greater discrepancy from the actual self. Reliability data is not available but the questionnaire has good face validity. Construct validity is good, with several studies (eg. Strauman and Higgins: in press) yielding high correlations between self-discrepancies and psychopathology.

Footnote: The questionnaire also requested demographic information including diagnosis and whether they were taking medication.

CHAPTER 3

RESULTS

DATA ANALYSIS

The data was analysed using SPSS for windows Release 9. The data was checked to ensure that it complied with the assumptions of the relevant tests. Unfortunately the items making up the low responsibility frequency and belief subscales of the RIQ were not analysed because the item distributions were unsatisfactory. This finding reflects Salkovskis et al's (2001) finding that the Low responsibility Interpretation subscales of the RIQ had very low test re-test reliability. The statistical tests used include ANOVAs, correlation and scale analysis. In Section 3, content analysis was used to explore the data.

PARTICIPANTS

Sixty-three individuals participated in the study. Nineteen (30.16 %) were males and 44 (69.84 %) were females. The mean age of the participants was 44.34 (SD = 12.83, Range = 21 to 75 years).

One-way ANOVAs and Bonferroni multiple comparisons were used to compare the three groups, that is Obsessional participants (OCs) Anxious Controls (ACs) and Non-Clinical Controls (NACs) on a number of measures. Results of these comparisons are given in Table 1.

Table 1: Mean and standard deviations (in brackets) of the scores of Obsessional participants (OCs) and control groups for Age. Education, scores on the Padua Inventory, BDI and BAI.

	OCs	ACs	NACS	
Gender	8 male	4 male	7 male	$x^2(2)= 0.03$
	16 female	17 fem	11 fem	p=0.84
	Mean	Mean	Mean	
Age	43.20 (13.58)	47.33 (13.08)	41.72 (11.50)	F(2,60)= 1.01
Education	13.96 (3.45)	12.33 (2.87)	14.29 (3.06)	F(2,59)=2.23
Padua	83.83 (33.27)	27.95 (12.89)	11.67 (6.89)	F(2,60)=63.14***
BDI	20.65 (12.31)	20.33 (8.59)	4.94 (3.31)	F(2,59)=18.24***
BAI	18.95 (9.14)	23.61 (8.89)	2.94 (2.07)	F(2,60)=37.72***

Note: Padua: Padua Inventory; BDI: Becks Depression Inventory, BAI Becks Anxiety Inventory. *: P<0.05, **: P<0.01, ***:P<0.001

These results indicate that the groups did not differ on age, years of education, but the OCs scored significantly higher than ACs and NACs on self report measures of OCD severity (as measured by the Padua Inventory); the latter two of which did not significantly differ. The OCs did not differ from ACs on levels of anxiety or depression. This means that any differences found between OCs and ACs are likely to be due to obsessionailty and not to anxiety, depression or individuals labelling themselves as patients.

Footnote: The hospital OCD group did not differ significantly on measures of OCD symptomatology, depression or anxiety.

SECTION 1: CONSTRUCTS RELEVANT TO THE CBT MODEL OF OCD

Hypothesis 1:The importance of Responsibility in OCD

Hypothesis 1a

It was predicted that OCs would show much higher scores on responsibility measures as compared to the participants in the other two groups. This hypothesis was assessed by comparing the scores of participants with OCD with the scores of the control groups. The results of the comparisons between the control groups are given in Table 2.

Table 2: Mean and standard deviations (in square brackets) of the scores of Obsessional participants and control groups for the RAS.

	OCs Mean	ACs Mean	NACs Mean	
RAS	2.79 (0.95)	3.55 (0.68)	4.69 (0.97)	F(2,56) = 23.03 ***
RIQ: High				
Frequency	2.36 (0.77)	1.20 (0.80)	0.48 (6.13)	F(2,56)=32.50 ***
Belief	5.32 (2.49)	2.57 (2.32)	0.91 (1.40)	F(2,57)=21.12 ***

Note: RAS: Responsibility Attitude Questionnaire; RIQ: Responsibility Interpretations Questionnaire, Frequency: frequency of responsibility interpretations, Belief: belief in responsibility interpretations; *** p<0.001

Responsibility Attitude Questionnaire (RAS)

Please note on this scale high scores mean low responsibility attitudes. One way analysis of variance and Bonferroni multiple comparisons on the RAS showed that OCs (mean = 2.79, SD = 0.95) had significantly lower mean scores on the RAS compared to NACs (mean = 4.69, SD = 0.97 p<0.001) and ACs (mean = 3.55, SD = 0.68, p<0.02). In line with the hypothesis ACs also scored significantly lower than NACs (p<0.001).

Responsibility Interpretations Questionnaire (RIQ)

One way analysis of variance and Bonferroni multiple comparisons show that OCs had significantly higher scores on both Frequency ($p<0.001$) and Belief ($p<0.001$) of high responsibility interpretations compared to NACs and ACs on both subscales in line with the hypothesis. The ACs had significantly higher scores of frequency ($p<0.001$) but not belief of high responsibility interpretations ($p=0.07$) compared to NACs.

Hypothesis 1b:

It was predicted that responsibility (as measured by the RAS and RIQ) would be positively correlated with obsessive symptoms as measured by the Padua Inventory. The results of these correlations are given in Table 3.

Table 3: Pearson correlations between responsibility scores as measured by the RAS and RIQ and obsessive symptoms as measured by the Padua Inventory.

	RAS	RIQ	
		High Frequency	High Belief
Obsessionals			
Padua Inventory	-0.40*	0.43*	0.48*
BAI	-0.21	0.24	0.30
BDI	-0.38*	0.36	-0.09
Anxious Controls			
Padua Inventory	-0.28	0.21	0.19
BAI	-0.29	0.42	0.29
BDI	-0.37	0.36	0.27
Non Anxious Controls			
Padua Inventory	-0.50*	0.31	0.20
BAI	0.06	-0.06	0.06
BDI	-0.40*	0.55*	0.54*

Note: RAS: Responsibility Attitude Scale; RIQ High Frequency: frequency of high responsibility interpretations; RIQ High Belief: Belief in high responsibility interpretations. BAI: Beck's Anxiety Inventory; BDI: Beck's Depression Inventory*p<0.05, **p<0.01, ***p<0.001.

Correlations between the RAS and the Padua Inventory

It is clear from Table 3 that there were significant correlations between the RAS and the Padua Inventory within the OCs and NACs, but not in the ACs.

Within the OCs the Pearson product moment correlation between the Padua Inventory and the RAS was r=0.40 ($p<0.05$). However when scores of depression (BDI) and anxiety (BAI) were partialled out, correlations became non-significant (r=0.22, p=0.17). Within the NACs the Pearson correlation moment was r=-0.50 ($p<0.05$) and this figure remained essentially unchanged when depression and anxiety were controlled for (r=-0.49 $p<0.05$).

Correlations between the RIQ subscales and the Padua Inventory

From the Table 3 it is clear that there were significant associations between the High Responsibility frequency and belief subscales and the Padua Inventory within the OCs, but not for the ACs or NACs which supports Salkovskis et al's (2000) argument that these appraisals are more specific to OCD symptomatology as compared to general beliefs about responsibility as measured by the RAS.

Within the OCs the Pearson product moment correlation between the frequency score of high responsibility interpretations of the RIQ and the Padua Inventory was r=0.43 ($p<0.05$). When BDI and BAI scores were partialled out the association became non-significant r=0.30 (p=0.11). Similarly the RIQ belief score for the high responsibility interpretations was significantly associated with obsessive symptoms r=0.48 ($p<0.05$) in the OCs. However partialling out BDI and BAI scores made the association non-significant r=0.30 (p=0.10).

Hypothesis 2: The importance of TAF in OCD

Hypothesis 2a

It was predicted that OCs would show much higher scores on the TAF measure compared to the participants in the other two groups. One way analysis of variance and bonferroni comparisons were used to enable the comparison. The results of these comparisons are presented in Table 4.

Table 4: Mean and standard deviations (in brackets) of the scores of Obsessional participants and control groups for the TAF scales

	OCs Mean	ACs Mean	NACs Mean	
TAF: Total	52.25(16.82)	46.05 (14.34)	40.56 (12.85)	F(2,60)=3.19*
TAF: Moral	36.54 (12.18)	32.29 (11.82)	29.89 (11.00)	F(2,60)=1.75
TAF: Other	8.96 (4.34)	7.10 (3.43)	5.44 (1.82)	F(2,60)=5.26**
TAF: Self	6.75 (3.26)	6.67 (3.21)	5.22 (2.67)	F(2,60)=1.50

Note: Total TAF: Total Thought Action Fusion, TAF moral: Thought Action Fusion moral, TAF other: Thought Action Fusion Likelihood other, TAF self: Thought Action Fusion Likelihood self. * $p<0.05$, **$p<0.01$.

With regard to the Total TAF scores the OCs did differ significantly from NACs ($p<0.05$) but they did not differ significantly from ACs. The ACs did not differ significantly from NACs. No significant differences between the groups were found on the TAF Moral, and TAF Likelihood Self. However on the TAF Likelihood Others subscale the OCs did significantly differ from NACs ($p<0.01$) but not from ACs ($p=0.24$). These findings only provide partial support for the hypothesis. It is important to note also the high mean scores of the NACs on this measure.

Hypothesis 2b

It was hypothesised that high levels of TAF would be correlated with OCD symptomatology as measured by the Padua Inventory. The correlations between the Total TAF and Padua Inventory along with the subscales of the TAF scale are presented in Table 5. The correlations between TAF and depression and anxiety are also presented.

Table 5: Correlations between TAF scales, Padua Inventory, BAI and BDI

	Padua Inventory	BAI	BDI
Obsessionals			
Total TAF	0.35*	0.16	0.40*
TAF Moral	0.23	0.04	0.37*
TAF Other	0.36*	0.29	0.32
TAF Self	0.44*	0.29	0.28
Anxious Controls			
Total TAF	0.20	0.26	0.45*
TAF Moral	0.13	0.08	0.27
TAF Other	0.18	0.28	0.42*
TAF Self	0.21	0.57**	0.54**
Non Anxious Controls			
Total TAF	0.35*	-0.09	0.17
TAF Moral	0.45 *	0.04	0.18
TAF Other	-0.26	-0.35*	0.32
TAF Self	-0.02	-0.34	-0.15

Note: Total TAF: Total Thought Action Fusion, TAF moral: Thought Action Fusion moral, TAF other: Thought Action Fusion Likelihood other, TAF self: Thought Action Fusion Likelihood self, BAI: Beck's Anxiety inventory, BDI: Beck's Depression Inventory * $p<0.05$, ** $p<0.01$.

Within the OCs the Pearson product moment correlation between the Total TAF and the Padua Inventory was significant with figures of $r=0.35$ ($p<0.05$). However when BDI and BAI scores are partialled out, the figures become non-significant $r= 0.13$ ($p= 2.89$). With regard to the association between the TAF Likelihood Others and TAF Likelihood Self scales and the Padua Inventory, within OCs significant correlations were found ($r=0.36$ $p<0.05$; $r=0.44$ $p<0.05$ respectively). However these correlations become non-significant when levels of depression and anxiety are controlled for ($r=0.17$ $p=0.23$; $r=0.33$ $p=0.07$). There was no association between TAF Moral and obsessive symptoms.

No correlations between TAF scales and the Padua Inventory were found within the ACs. It is noteworthy that within the NACs the TAF Moral correlated with obsessive symptoms ($r=0.45$ $p<0.05$) and this remained after controlling for depression and anxiety ($r=0.48$ $p<0.05$).

Hypothesis 3: Negative appraisals of intrusions in relation to the self in OCD

Prior to examining the importance of the measure to individuals with OCD the internal consistency of the Intrusion Related Self Inference Scale was examined. The Cronbach's Alpha was 0.95 (mean = 25.83, SD = 11.68) suggesting that the measure may be taping a superficial construct.

Hypothesis 3a

It was predicted that OCs would show much higher scores on the Intrusion Related Self Inference Scale compared to the other two groups. One way analysis of variance and bonferroni comparisons were used to enable the comparison. The results are presented in Table 6.

Table 6: Mean and standard deviations (in brackets) of the scores of Obsessional participants and control groups for the Intrusion Related Self Inference Scale.

	OCs Mean	ACs Mean	NACs Mean	
Negative Appraisals	25.83 (11.68)	11.40 (10.53)	3.44 (3.33)	F(2,59)=29.72***

Note: Negative Appraisals: Intrusion Related Self Inference Scale. *** p<0.001

The results are consistent with the hypothesis, as they show that OCs were significantly elevated on this measure as compared to both NACs ($p<0.001$) and ACs ($p<0.001$). The ACs also differed significantly from the NACs ($p<0.05$).

Hypothesis 3b

The concurrent validity of the Intrusion Related Self Inference Scale was assessed by examining the association between scores on this measure and the obsessionaility measure. The correlations for the different groups are presented in Table 7.

Table 7 Correlations between the Intrusion Related Self Inference Scale, the Padua Inventory, BAI, BDI

	Padua Inventory	BDI	BAI
Obsessionals			
Negative Appraisals	0.14	0.31	0.07
Anxious Controls			
Negative Appraisals	0.58**	0.38	0.12
Non Anxious Controls			
Negative Appraisals	-0.03	0.45*	-0.07

Note: Negative Appraisals: Intrusion Related Self Inference Scale BAI: Beck's Anxiety inventory, BDI: Beck's Depression Inventory * $p<0.05$, ** $p<0.01$

Within the OCD group the Pearson product moment correlation between the Intrusion Related Self Inference Scale and the Padua Inventory was surprisingly non-significant ($r=0.14$ $p=0.52$). However it is noteworthy that the scale was just short of significance in correlating with the BDI ($r=0.31$ $p=0.07$). Moreover when anxiety was controlled for the correlation between the Intrusion Related Self Inference Scale became significant ($r=0.37$ $p<0.05$).

However within the ACs a significant association was found ($r=0.58$ $P<0.01$). When BDI and BAI were partialled out the correlation remained significant ($r=0.57$ $p<0.01$).

Hypothesis 4: The association between responsibility, TAF and the Intrusion Related Self Inference Scale

Hypothesis 4a

Correlations between TAF and RAS

It was hypothesised that the TAF would correlate with responsibility. As can be seen from Table 8 the Total TAF and all the subscales of the TAF correlated significantly with the RAS for both the OCs and ACs. All these correlations remained significant after controlling for depression and anxiety except for the association between the TAF Moral and the RAS in the OCs. Within the NACs the only significant correlations were between the RAS and the Total TAF and the TAF moral. These correlations remained significant after controlling for depression and anxiety.

Table 8: Correlations between TAF and RAS. Correlations whilst controlling for BAI and BDI are also included

	RAS	Controlled BAI BDI
Obsessionals		
TAF-Total	-0.58*	-0.42*
TAF-Moral	-0.40*	-0.31
TAF-Others	-0.55**	-0.46*
TAF-Self	-0.53*	-0.48*
Anxious Controls		
TAF-Total	-0.63**	-0.63**
TAF-Moral	-0.49*	-0.49*
TAF-Others	-0.44*	-0.44*
TAF-Self	-0.47*	-0.47*
Non Anxious Controls		
TAF-Total	-0.64**	-0.64**
TAF-Moral	-0.70**	-0.69**
TAF-Others	0.06	0.18
TAF-Self	-0.25	-0.44

Note: Total TAF: Total Thought Action Fusion; TAF Moral: Thought Action Fusion Moral; TAF Other : Thought Action Fusion Likelihood Other; TAF Self: Thought Action Fusion Likelihood Self; RAS: Responsibility Attitude Scale; RIQ frequency: frequency of high responsibility interpretations; RIQ Belief: belief in high responsibility interpretations, BAI: Beck's Anxiety inventory, BDI: Beck's Depression Inventory * $p<0.05$, ** $p<0.01$

Correlations between TAF and RIQ

It was hypothesised that the TAF would correlate with responsibility interpretations related to intrusions. As can be seen from Table 9 the Total TAF and all the subscales of the TAF correlated significantly with the Frequency of high responsibility interpretations subscale of the RIQ for the OCs. These correlations remained significant with the exception of the association between

the TAF Moral subscale after controlling for anxiety and depression. With regard to the associations between TAF and the belief in high responsibility interpretations within the OCs, only the TAF Likelihood Others and Self subscales correlated significantly with the belief in high responsibility interpretations, and this association disappeared after controlling for depression and anxiety. However, the association was approaching significance (p=0.08)

Table 9: Correlations between TAF and High responsibility subscales of the RIQ. Correlations also included for controlling for BAI and BDI

RIQ	High Frequency	Controlled BDI BAI	High Belief	Controlled BAI BDI
Obsessionals				
TAF-Total	0.53**	0.46*	0.33	0.20
TAF-Moral	0.42*	0.37	0.19	0.07
TAF-Others	0.58**	0.48*	0.45*	0.32
TAF-Self	0.48*	0.46 *	0.39*	0.37
Anxious Controls				
TAF-Total	0.28	0.19	0.39*	0.35
TAF-Moral	-0.005	-0.04	0.23	0.22
TAF-Others	0.52**	0.46*	0.32	0.24
TAF-Self	0.64**	0.52*	0.52**	0.43*
Non Anxious Controls				
TAF-Total	0.53**	0.55*	0.27	0.24
TAF-Moral	0.53*	0.52*	0.32	0.25
TAF-Others	0.11	-0.02	-0.08	-0.22
TAF-Self	0.28	0.60**	0.03	0.31

Note: Total TAF: Total Thought Action Fusion; TAF Moral: Thought Action Fusion Moral; TAF Other: Thought Action Fusion Likelihood Other; TAF Self: Thought Action Fusion Likelihood Self; RAS: Responsibility Attitude Scale; RIQ High Frequency: Frequency of high responsibility interpretations; RIQ High Belief: Belief in high responsibility interpretations, BAI: Beck's Anxiety inventory, BDI: Beck's Depression Inventory * $p<0.05$, ** $p<0.01$

Correlations between TAF and the Intrusion Related Self Inference Scale

It was hypothesised that there would be an association between the Intrusion Related Self Inference Scale and TAF. That is the individuals interpret intrusions as unacceptable the more the fear of acting on that intrusion (see Salkovskis et al, 2001). The hypothesis was not supported as Table 10 shows that within the OCs, the TAF measures did not correlate significantly with the Intrusion Related Self Inference Scale.

Table 10: Correlations between Thought Action Fusion and the Intrusion Related Self Inference Scale. Correlations whilst controlling for BAI and BDI are also included.

	Negative Appraisals	Controlled BAI, BDI
Obsessionals		
TAF- Total	0.15	-0.01
TAF- Moral	0.17	0.00
TAF- Others	0.14	0.02
TAF-Self	-0.00	-0.88
Anxious Controls		
TAF- Total	0.40*	0.29
TAF- Moral	0.19	0.10
TAF- Others	0.44*	0.35
TAF-Self	0.55**	0.54*
Non Anxious Controls		
TAF- Total	0.51*	0.50*
TAF- Moral	0.52*	0.49*
TAF- Others	0.43	-0.09
TAF-Self	0.31	0.53*

Note: Total TAF: Total Thought Action Fusion; TAF Moral: Thought Action Fusion Moral; TAF Other: Thought Action Fusion Likelihood Other; TAF Self: Thought Action Fusion Likelihood Self; Negative Appraisals: Intrusion Related Self Inference Scale BAI: Beck's Anxiety inventory, BDI: Beck's Depression Inventory * $p<0.05$, ** $p<0.01$

Correlations between the Intrusion Related Self Inference Scale and the RAS

It was hypothesised that there would be an association between the Intrusion Related Self Inference Scale and responsibility. Table 11 shows that within the OCs, in line with the hypothesis, that the Intrusion Related Self Inference Scale correlated significantly with responsibility attitudes as measured by the RAS. This correlation remained significant after controlling for depression and anxiety. This significant correlation was evident across the groups.

Table 11: Correlations between RAS and the Intrusion Related Self Inference Scale. Correlations whist controlling for BAI and BDI also included

	RAS	Controlled BDI, BAI
Obsessionals		
Negative Appraisals	-0.51**	-0.47*
Anxious Controls		
Negative Appraisals	-0.47*	-0.41*
Non Anxious Controls		
Negative Appraisals	-0.78**	-0.74**

Note: Negative Appraisals: Intrusion Related Self Inference Scale, BAI: Beck's Anxiety inventory, BDI: Beck's Depression Inventory * $p<0.05$, ** $p<0.01$

Correlations between the Intrusion Related Self Inference Scale and the RIQ

Within the OCs Table 12 shows that the Intrusion Related Self Inference Scale correlated significantly with the Frequency of HR interpretations and this remained significant after controlling for depression. Similar correlations were found across the control groups. With regard to Belief of HR interpretations the Intrusion Related Self Inference Scale correlated significantly within the OCs and this correlation remained after controlling for depression and anxiety. Stronger correlations were found across the other groups and these also remained after controlling for depression and anxiety.

Table 12: Correlations between High responsibility RIQ subscales and the Intrusion Related Self Inference Scale. Correlations whist controlling for BAI and BDI also included

	RIQ: High Frequency	Controlled BDI BAI	RIQ: High Belief	Controlled BDI, BAI
Obsessionals				
Negative Appraisals	0.52**	0.45*	0.48**	0.41*
Anxious Controls				
Negative Appraisals	0.62**	0.61*	0.55**	0.51**
Non Anxious Controls				
Negative Appraisals	0.81**	0.78**	0.86**	0.84**

Note RIQ High Frequency: Frequency of high responsibility interpretations; RIQ High Belief: belief in high responsibility interpretations. *p<0.05 **p<0.01

SECTION 2: THE VALUE OF SELF DISCREPANCY THEORY

All discrepancies measured in this study are between actual selves and some self guide as a comparison value. For this reason and for the sake of simplicity in communication, the description of results omits the term actual from the labels of all 3 types of discrepancy.

Hypothesis 5: Self-discrepancies

Table 13: Mean and standard deviation (in brackets) of the scores of obsessional participants and control groups for scores on the ought self, ideal self and feared self.

	OCs Mean	ACs Mean	NACs Mean	
Ought self	25.22 (8.82)	28.84 (8.58)	18.88 (6.64)	F(2,56)=6.79*
Ideal self	29.39 (10.11)	31.95 (8.72)	23.29 (7.09)	F(2,55)=4.38*
Feared self	32.73 (10.60)	29.61 (11.04)	37.41 (5.00)	F(2,54)=3.01

Note: Ought self: Actual-Ought discrepancy, Ideal Self: Actual-Ideal discrepancy, Feared Self: Actual-Feared discrepancy * $p<0.05$

Actual-ought discrepancies

The results presented in Table 13 provide support for the hypothesis that greater discrepancy from the ought self leads to agitated related affect. The NACs were most like their ought self, followed by OCs and ACs. ACs differed significantly from the NACs ($p<0.05$). The OCs differed from the NACs but the significance level ($p=0.06$) was just above the conventional $p=0.05$. As expected the OCs did not differ significantly from the ACs ($p=0.47$).

Actual-Ideal discrepancies

From Table 12 it is clear that the NACs were most like their ideal selves followed by OCs and ACs. The findings also indicate that the ACs differed significantly from NACs ($p<0.05$) in terms of their ideal self. However no significant differences were found between the OCD group and the Non-Anxious Controls. This provides partial support for the hypothesis that discrepancies from the ideal self leads to dysphoria

Actual-Feared discrepancies

It is evident from Table 12 that the ACs were least discrepant from their feared selves followed by the OCs and NACs. However no significant differences were found between the clinical groups and the non-anxious controls providing no support for the hypothesis. However the content analysis of the feared self traits reported in the next section helps to shed light on these findings.

SECTION 3: QUALITIATIVE ANALYSIS OF THE FEARED SELF TRAITS

It was hypothesised that individuals with OCD would generate more moralistic themes as compared to ACs and NACs as noted by Rachman (1997). The traits were coded into themes (see Appendix G for definitions) and a one way analyses of variance was conducted on each of the themes to examine whether there were any differences across the three groups. Details of the inter-reliability analysis is given in the method section but a good final level of agreement was achieved (Kappa= 0.93). The results are presented in Table 14.

Table 14: Mean and standard deviations (in brackets) of the scores on themes across the three groups

Themes	OCs	ACs	NACs	
Moralistic	1.7 (1.6)	0.62 (0.97)	0.72 (0.07)	F (2,60) = 4.99*
Depressive	1.29 (1.52)	2.05 (1.99)	0.72 (1.07)	F (2,60) = 3.43*
Rejection	0.67 (0.76)	0.48 (0.87)	0.23 (0.57)	F (2,60) = 1.37
Negative	2.45 (1.61)	2.10 (2.00)	4.67 (1.75)	F (2,60) = 11.60**
Uncodable	0.88 (1.23)	1.76 (2.41)	0.61 (1.69)	F (2,60) = 2.22

Note: Depressive: Depressive/Anxiety themes* $p<0.05$, ** $p<0.01$

The hypothesis that OCD individuals would generate more moralistic traits was supported. Indeed OCs were significantly different from ACs ($p=0.02$) and NACs ($p=0.05$) supporting Rachman's (1997) hypothesis. This work also suggests that moralistic values for evaluating the self are specific to OCD as OCs differed significantly from ACs and NACs.

This work further sheds light on previous findings in this study. According to Self-discrepancy theory and Rachman's theory individuals with OCD would be least discrepant from their feared self. This was not borne out in that no significant differences were found across the three groups in terms of their discrepancies from their feared selves.

However the content analysis suggests that the standards used for evaluating the self vary across the groups which could explain why significant differences were not found across the groups. That is, the results suggest that individuals with OCD are more likely to generate moralistic traits compared to ACs and NACs. OCs also generated more rejection traits which again is consistent with Rachman's ideas that obsessional individuals fear specific consequences as a result of having unacceptable intrusions. However no significant differences were found across the three groups on this theme but this could be due to the modest sample size. In short it seems that the OCs have a tendency to define their feared self in terms of moralistic, depressive and negative traits. The ACs on the other hand seem to define their feared self in terms of depressive and negative traits. Indeed ACs generated significantly more depressive/anxiety traits as compared to NACs ($p<0.05$). However OCs were not significantly different from ACs ($p=0.35$) or NACs ($p=0.76$).

NACs however largely define themselves in terms of negative traits. Indeed NACs differed significantly from OCs ($p<0.001$) and ACs ($p<0.001$). However, OCs did not differ significantly from ACs ($p=0.99$). No differences were found across the groups in terms of the number of uncodable traits generated. In summary the results show that the parameters used to define the feared self varies across the groups.

CHAPTER 4

DISCUSSION

OVERVIEW

In this chapter the main findings with respect to the research hypotheses posed at the end of Chapter 1 will be discussed within the context of the published research. This will be followed by a critique of the study followed by conclusions from the research (including clinical implications) and suggestions for future studies.

Findings according to research hypotheses

In this section each of the research hypotheses will be addressed in turn.

SECTION 1: CONSTRUCTS RELEVANT TO THE CBT MODEL OF OCD

Hypothesis 1: The importance of responsibility in OCD

Hypothesis 1a)

This hypothesis explored whether inflated responsibility was specific to OCD or a general characteristic of other anxiety disorders. General attitudes to responsibility (using the Responsibility Attitude Scale: RAS Salkovskis et al, 2000) were examined as well as Frequency and Belief in Responsibility interpretations related to the experience of thoughts about possible harm (using the Responsibility Interpretations Questionnaire: RIQ Salkovskis et al, 2000). High and low responsibility interpretations were tapped. Unfortunately due to the poor item distributions of the low responsibility interpretations it was decided not to conduct any detailed analysis on these items. This reflects Salkovskis et al's (2001) findings that the low responsibility interpretations

subscale of the RIQ had very low test re-test reliability. Salkovskis et al (2001) suggested that the very low test re-test reliability was due to the low responsibility items being interspersed amongst high responsibility items. As a consequence they suggested that participants were misreading the items. They suggested that subsequent research should have the low responsibility items at the end to avoid confusion. However this present study suggests that this problem has not been rectified. On close examination of the low responsibility items it is clear that there are a number of double negatives which make it hard for the respondent to make sense of each statement. This coupled with the fact that there are very few items making up the LR Frequency and Belief subscales adds to the likelihood that these constructs have been inadequately tapped.

The results presented here support the hypothesis that Obsessional individuals are more likely to report general responsibility attitudes compared to Anxious and Non-Anxious Controls . It also supports the hypothesis that individuals with OCD are more likely to experience increased frequency and belief in specific interpretations of intrusive thoughts about possible harm where the items relate to high responsibility interpretations (eg. If I don't resist these thought it means I am being irresponsible) which is consistent with previous work (eg. Salkovskis et al, 2001).

Hypothesis 1B

It was predicted that there would be an association between responsibility and obsessive symptoms as measured by the Padua Inventory (Salkovskis et al, 2000). There was some evidence to support this association. Within the OCD sample, the results indicated moderate correlations between general responsibility attitudes (as measured by the RAS) and obsessive symptoms. With regard to HR frequency and belief interpretations, moderate correlations were found with obsessive symptoms. However all these associations became

non significant after controlling for anxiety and depression. This suggests that the responsibility measures may be tapping agitation and dejection related effects. However it is also possible that the lack of association after controlling for anxiety and depression was due to the modest sample sizes.

Summary

In summary the results largely support the hypothesis that responsibility cognitions are specific to OCD, as Obsessional individuals differed significantly from Anxious Control groups with comparable levels of depression and anxiety. These responsibility appraisals for causing or preventing harm are important because it is theorised that these appraisals, rather than the occurrence of the intrusions themselves lead to discomfort and consequently the neutralising behaviour (Rachman, 1993; Salkovskis, 1985; Salkovskis, Richards and Forrester, 1998; Salkovskis, Forester, Richards and Morrison, 1986b). There has been some previous work examining inflated responsibility in OCD but few studies have included samples of OCD participants and fewer still have included Anxious and Non-Anxious Control groups. The inclusion of Anxious Controls allowed the testing of the possibility that any difference between obsessionals and non-obsessionals is an effect of anxiety, depression or the fact that an individual labels themselves as a patient. This work also supports Salkovskis et al's (2000) findings. Unfortunately due to the poor psychometric properties of the Low Responsibility Interpretations subscales of the RIQ this work did not extend the understanding of the value of low responsibility in OCD. The findings here do however provide some evidence for an association between responsibility and Obsessional symptomatology supporting the cognitive behavioural theory of OCD (Salkovskis, 1985; Salkovskis, 1989; Salkovskis et al, 2000).

Hypothesis 2: The importance of TAF in OCD

Hypothesis 2a

The results presented here support the hypothesis that individuals with OCD have elevated levels of Thought Action Fusion compared to Non-Anxious Controls. However the OCD participants did not score significantly higher on the Total TAF scale compared to individuals suffering from other anxiety disorders. This suggests that the TAF is not a highly specific characteristic of individuals with OCD. This is in line with Rassin et al (2001) who on the basis of their work suggested that TAF maybe a pervasive bias that may occur in a variety of anxiety disorders. It is also noteworthy that the normal controls scored quite highly on the Total TAF suggesting that the TAF is not a determining factor in developing OCD, and that other factors must be present to create pathological symptoms.

However if the results of the sub-scales of the TAF are examined in conjunction with previous work it seems that one of the subscales may be more specific to OCD. Shafran et al (1996) suggested that the TAF Likelihood-Other subscale may be more specific to OCD compared to the other subscales as this was the only scale that significantly differentiated between their Obsessional sample and their student sample. Shafran et al (1996) also suggested that the Morality bias may be less pathological compared to the probability bias. Shafran et al (1996) further emphasised that the liklihood-Other bias may be more important than the liklihood-Self bias in OCD because a self fulfilling prophecy may be involved in the latter. For example, the intrusion 'I will have a car accident' may lead to increased anxiety and less attention on the road which may increase the risk of being in a car accident. The probability Other factor, however cannot be influenced by a self fulfilling prophecy and hence may be more exclusive to Obsessional thinking.

The findings in the present study are largely in line with Shafran et al's (1996) suggestions in that the Likelihood–Other subscale was the only subscale that differentiated Obsessionals from Non-Anxious Controls. However in this study, unlike Shafran et al's (1996) study an Anxious Control group was included and the Obsessionals were not found to be significantly different from Anxious Controls. This casts doubt on the exclusivity of this bias to Obsessional thinking and supports the finding by Rassin et al, (2001). However this study is one of few studies that have included an Anxious Control group and therefore further replication is required to increase the validity of these findings.

Hypothesis 2B

It was hypothesised that levels of TAF would be positively correlated with OCD symptomatology. The results here show that within the OCs all the TAF scales correlated with OCD symptomatology with the exception of TAF Moral which is in line with Shafran et al's (1996) reasoning that the morality bias may be less important in developing a psychological disorder. However within the NACs the TAF-Moral did significantly correlate with OCD symptomatology which suggests that it may still play a role in increasing susceptibility to psychological problems but perhaps not OCD.

It is also important to note that within the OCs the correlations between the TAF scales and Obsessional symptoms became non-significant when depression and anxiety were controlled for. A similar finding was reported by Shafran et al (1996) except that they found that within their Obsessional sample the correlation between TAF-Likelhood Others and the checking subscale of the MOCI remained after controlling for depression. The fact that partialling out depression and anxiety reduces the association between the TAF subscales and OCD symptomatology may be explained by the argument that anxiety and depression may activate the TAF bias (see Shafran

et al, 1996) in much the same way as dysfunctional assumptions are activated after a critical event. It might be that appraising the intrusions as catastrophic activates the TAF bias. That is, the individual becomes frightened of causing harm and starts attending to any Thought Action Fusion. Alternatively depression may lower an individuals resistance to compulsive behaviour (Shafran et al, 1996). Obviously this needs further exploration.

Summary

Overall these findings suggest that of all the TAF scales the TAF Likelihood-Others bias is most important in OCD symptomatology which concurs with previous findings (eg. Shafran et al, 1996; Rassin et al, 2001). However this work casts doubt on the exclusivity of the TAF Likelihood-Others bias to OCD thinking. This work also supports the view that TAF is a pervasive bias that may occur in a variety of anxiety disorders (eg. Rassin et al, 2001). However as Rassin et al (2000) note this does not rule out the possibility that TAF is more important in the development of OCD compared to the development of other anxiety disorders. In other words the causal status of TAF biases may be quite different in OCD as compared to other anxiety disorders (see Rassin et al, 2001).

Hypothesis 3: The importance of Negative appraisals of intrusions in relation to the self in OCD

Hypothesis 3a

This hypothesis explored whether people with OCD are more likely to make negative appraisals of their intrusions. The results presented here support Rachman's (1997) notion that OCs have negative appraisals of their intrusive thoughts. Indeed OCs scored significantly higher than both ACs and NACs on the Intrusion Related Self Inference scale. It also supports Purdon and Clark's (1994) findings that obsessions are interpreted as providing evidence of being immoral and bad. This finding also supports

the work of Ehntholt, Salkovskis and Rimes (1999) who found that obsessionals were more likely than anxious controls to fear other people making critical judgements of them.

Hypothesis 3b

It was predicted that there would be an association between the Intrusion Related Self Inference Scale and obsessive symptoms. This hypothesis was not supported within the Obsessional participants. The absence of the correlation between the Intrusion Related Self Inference Scale and obsessive symptoms is surprising as according to Rachman (1998):
'an inflated increase in the significance attached to an unwanted intrusive thought, such as obsession, will lead to more vigorous and intense attempts to suppress such thoughts' (p.393).

This finding also appears inconsistent with previous work that has suggested that unacceptability of intrusive thoughts are associated with OCD symptoms (eg. Purdon and Clark, 1994). A number of explanations for this finding are possible.

It is possible that although Obsessionals interpret their intrusions as reflecting unacceptable aspects of their character these negative appraisals of the intrusions are not a causal factor in OCD. Rather the negative appraisals of the intrusions are secondary to having recurrent obsessions. So although such intrusions may be appraised as meaning the self is bad, which may exacerbate symptoms to a degree, as a by-product of depression, it is not crucial to the development of OCD. It is however possible that these negative beliefs about the self are activated once OCD has developed but do not directly contribute to OCD symptomatology. In other words it may be that OCD has an effect on the person's perception of themselves which subsequently leads to depression but not the development of OCD symptoms

per se. This argument is in line with Fennell's (1997) point that:
'a long standing anxiety disorder might in the end lead to a general loss of self confidence even in a person who had originally had quite a positive and realistic self concept ...treatment of the presenting problem may restore confidence in the self without specific intervention.'

In other words patients, with obsessions reproach themselves for their intrusions which may account for their depression. This reasoning is supported by the significant correlation between depression and the Intrusion Related Self Inference Scale ($r=0.37$ $p=0.05$) when anxiety is controlled for. This reasoning also fits with the argument that evaluative processes may contribute to the persistence of the intrusion by reinforcing mood disturbance (Salkovskis, 1985, 1989; Purdon and Clark, 1994).

It is also important to bear in mind that individuals with OCD may not have been rating their most upsetting thoughts. This is an important issue as Clark and Nicki (1989) have argued that individuals responses to low frequency or irrelevant intrusions may differ significantly from their response to their most upsetting or most frequent intrusion.

One could also speculate that the lack of association between the Intrusion Related Self Inference Scale and OCD symptoms is due to the mixed OCD sample or due to the fact that the scale is only tapping one aspect of the negative appraisals made about the intrusions in relation to the self (as indicated by the very high Cronbach's alpha score). The Intrusion Related Self Inference Scale may also be more relevant to some individuals or types of OCD. For example individuals with obsessions about being a paedophile may be more likely to appraise these intrusions as evidence of being 'bad' than individuals who fear contamination. Individuals concerned about causing harm through, for example, leaving the cooker on may be more

likely to appraise these intrusions as meaning that they are 'incompetent' rather than 'bad'. It may be therefore worthwhile incorporating a continuum of appraisals of intrusions from incompetence to evil into the scale which will also probably have a beneficial impact on its reliability and validity. The importance of a broader measure is also indicated by research which suggests that perfectionist standards and self esteem are related to OCD symptomatology (see Salkovskis et al, 2000).

However it is possible that the sample size was too small to show an association between the Intrusion Related Self Inference Scale and obsessive symptoms. It is also important to note that the psychometric properties of this scale were not fully explored because it was designed for this study so it is possible that the lack of association is due to poor psychometric properties.

Summary

The results support the hypothesis that negative appraisals of intrusions are specific to OCD as obsessional participants differed significantly from Anxious Controls with comparable levels of depression and anxiety.
The findings do not provide evidence for an association between negative appraisals and OCD symptoms. However, it is likely that it is due to the poor psychometric properties of the Intrusion Related Self Inference Scale.

Hypothesis 4: The association between responsibility, TAF, and the Intrusion Related Self Inference Scale.

Association between TAF and Responsibility

It was hypothesised that TAF would correlate with responsibility.
All the TAF scales with the exception of TAF-Moral correlated with general responsibility attitudes (RAS) within the OCD sample. These correlations remained after controlling for anxiety and depression. The same pattern of

correlations was evident with the HR frequency of responsibility interpretations after controlling for depression and anxiety. However correlations between the HR belief in responsibility interpretations and the TAF scales did not remain after controlling for depression and anxiety suggesting that this scale maybe tapping agitation and dejection related affects. However this finding could also could be explained by the modest sample size as the correlations between the TAF-likelihood Other and Self subscales and HR belief in responsibility interpretations were approaching significance.

In summary the hypothesis that there would be an association between TAF and responsibility was supported in this study. However stronger correlations were evident between the Likelihood subscales and measures of responsibility, suggesting these may play a larger role in attitudes about responsibility for harm compared to TAF Moral which has already been suggested by Shafran et al (1996). In other words an individual who believes in TAF-Likelihood-Others and has an intrusive thought about an accident is liable to think he/she is more responsible for the occurrence of the accident.

Association between TAF and the Intrusion Related Self Inference Scale. It was hypothesised that there would be an association between the Intrusion Related Self Inference Scale and TAF. That is, the more individuals interpret intrusions as unacceptable the more the fear that thought will lead to action (see Salkovskis et al, 2001).

However within the OCs no correlations were evident between the Intrusion Related Self Inference Scale and the TAF scales. The lack of association between the Intrusion Related Self Inference Scale and the TAF could be due to the modest sample size or the poor psychometric properties of the Intrusion Related Self Inference Scale. Alternatively it could be argued that

there is not an association between the negative appraisals of intrusions and TAF. Clearly more research needs to be conducted to refine the scale and a bigger sample needs to be used before stronger conclusions can be drawn.

Association between the Intrusion Related Self Inference Scale and responsibility

It was hypothesised that there would be an association between the Intrusion Related Self Inference Scale and perceived responsibility. That is, the worse individuals appraise their intrusions as reflecting negative aspects of the self the greater feelings of responsibility because of the awfulness of a potential catastrophe becoming true (see Salkovskis et al, 2000). The correlational analysis largely supported this as within the OCs the Intrusion Related Self Inference Scale correlated with general responsibility attitudes and HR frequency and belief responsibility interpretations and these remained after controlling for depression and anxiety.

SECTION 2: THE VALUE OF SELF DISCREPANCY THEORY

Hypothesis 5: Self-discrepancies

Actual-Ought discrepancies

The findings provided support for the hypothesis that actual-ought discrepancies lead to agitated affect (Higgins, 1987; 1996; Carver et al, 1999). That is, the ACs differed significantly from the NACs. Although the OCs did not differ significantly from the NACs it was only just short of significance. Arguably this is due to the modest sample size in this study.

Actual-Ideal discrepancies

The hypothesis that actual-ideal discrepancies lead to dejection related affect (Higgins, 1987; 1996; Carver et al, 1999; Strauman, 1989) was partially supported in that ACs differed significantly from NACs. However no

significant differences were found between the OCs and the NACs. This may be explained by the fact that for this hypothesis to be tested properly a depressive control group is really required. For example, Strauman (1989) studied major depressive disorder and social anxiety which are very distinct diagnostic groups. However, perhaps a significant difference would have been found if a larger sample had been used.

Actual-Feared discrepancies

It was hypothesised according to self-discrepancy theory (Higgins, 1987; 1996; Carver et al, 1999) and Rachman's (1997) notion that OCs would have the smallest discrepancy from their feared self. This was not borne out in the present study. Indeed there was not a significant difference between the clinical groups and NACs. This suggests that individuals with OCD do not believe that deep down they have unacceptable aspects to their character. This finding appears at odds with the earlier finding that individuals with OCD do make negative appraisals of their intrusions and see them as evidence that they may be unacceptable in some way. However the qualitative analysis of the feared self traits helps to shed light on what appears to be an inconsistency in the findings.

SECTION 3: QUALIATATIVE ANALYSIS OF FEARED SELF TRAITS

It was hypothesised that individuals with OCD would report more moralistic traits relating to sexuality, aggression and religion as noted by Rachman (1997) compared to Anxious and Non-Anxious Controls. It was also hoped that this work would explain the reason why individuals with OCD did not report being least discrepant from their feared selves as compared to the Clinical Controls.

This method proved to be successful in the elicitation of feared self traits. As hypothesised individuals with OCD were more likely to report moralistic

traits compared to Anxious and Non-Anxious Controls. This work then suggests that moralistic standards for evaluating the self are specific to OCD as obsessionals differed significantly from ACs with comparable levels of depression and anxiety. This is compatible with Rachman's (1997) case histories that OCs are concerned about being viewed as immoral, dangerous, insane or criminal. The fact that individuals with OCD seem to hold moralistic beliefs explains why they are more likely to appraise their intrusions as meaning that they are evil, dangerous, insane and immoral, which is a finding shown earlier in this work.

The content analysis also shed light on the finding that there were no differences across the groups in terms of their actual-feared discrepancies. It seems that the parameters by which each group defines itself is different. For example, ACs were found to be least discrepant from their feared self which is perhaps not surprising given that they largely define their feared selves in terms of anxiety and depressive themes.

These findings also suggest that individuals with OCD although fearing that they are or will be immoral do not believe that they actually possess these traits as they rated their actual selves as quite discrepant from their feared self. This supports the notion that intrusions are viewed as ego-dystonic but suggests that individuals still interpret them with great significance. In other words these findings concur with the notion that obsessions are viewed as revealing important and hidden elements to the character (Rachman, 1997). So although individuals with OCD do not feel they actually possess these traits they fear that they may possess them by the fact that they are experiencing unacceptable intrusions. That is, the obsessions themselves may cause the individual to question whether they are evil, immoral or insane. This suggests that individuals who develop OCD may be particularly sensitive to moralistic internal criticism compared to other individuals. However this is speculation

and requires further research. Nevertheless it is in line with Rowa and Purdon's (2003) work that intrusions that conflict with valued aspects of the self are more upsetting and more likely to be appraised in a negative way. In other words it is consistent with Rachman's (1998) argument that intrusions that are most likely to become obsessions are those that have significance for the individual's value system.

CRITIQUE OF THE RESEARCH

A review will now be given of this work with respect to the sample, design and procedure, and the extent to which the findings can be generalised to individuals with OCD.

Sample

The modest sample size may account for the fact that group differences between the OCs, ACs and NACs failed to reach significance in some cases.

Design and procedure

This study was cross-sectional in nature so it was not possible to determine the causal role of responsibility, TAF and negative appraisals of intrusions in relation to the self in OCD. Our findings also do not shed light on the debate as to the relative importance of affect versus cognitions in OCD. However, the findings indicate that the two are closely linked and it is likely that depression and anxiety increase the occurrence and believability of intrusive thoughts (Shafran et al, 1996). However the design of this study is superior to other studies as few studies have included OCD participants and fewer still have included Anxious and Non Anxious Controls. The inclusion of OCD participants allowed the investigation of the importance of the constructs responsibility, TAF and the negative appraisals of intrusions in relation to the self within OCD. The inclusion of Anxious Controls allowed the testing of the possibility that any difference

between obsessionals and non obsessionals is a by-product of anxiety or depression or the fact that an individual labels themselves as a patient (Salkovskis et al, 2000).

A weakness of the procedure was that a full diagnostic interview was not conducted on the sample. With regard to the twelve cases recruited through No Panic the researcher had to rely totally on self-reported diagnoses. This has been a criticism of other studies (eg. Steketee, Frost and Cohen, 1998) and needs to be borne in mind when considering the validity of the findings.

Generalisability of the findings

The Clinical groups were largely recruited from self-help organisations so it is unclear how these individuals differ from other individuals with OCD. The OCD sample was a mixed Obsessional group which improves the generalisability of the findings. However a criticism of this work is that the Clinical groups were not asked how long they had the disorder for. Therefore the differences between the ACs and the OCs may have been exaggerated or reduced due to differences in the chronicity of their respective problems. On a similar note individuals with OCD were not asked when their OCD symptoms first began. The onset of OCD symptoms is important because some research suggests differences between early and late onset. That is, that individuals with early onset have more entrenched problems and are less responsive to treatment (eg. De Rosario-Campos, Leckman, Mercadante, Shavitt et al, 2001) which has implications for the generalisability of the findings. With regard to the NACs, these were largely recruited by asking friends and family of the researcher and so these may not have been unrepresentative of the normal population.

Measures used

The measures have all been discussed with respect to their reliability and validity. Nevertheless it is important to note that the Intrusion Related Self Inference Scale was designed for the purpose of this study and therefore thorough psychometric data is not available. Moreover, the high Cronbach's Alpha suggested that the measure may have been tapping a superficial construct. As such the findings using this measure need to be viewed with caution.

OVERALL SUMMARY OF FINDINGS AND CLINICAL IMPLICATIONS

In conclusion, the results of the current study support and extend previous research. The present findings that responsibility assumptions and appraisals are significantly elevated in obsessional participants compared to controls suggests their specificity to OCD and is in line with the cognitive behavioural theory of OCD. Unfortunately due to the poor reliability and validity of the LR items of the RIQ it was not possible to properly test out the hypothesis that low responsibility interpretations are more crucial to OCD as compared to high responsibility interpretations.

However the presence of inflated responsibility in OCD could equally be interpreted as a consequence of having OCD (Salkovskis et al, 2000). However a number of studies suggest a causal role for responsibility beliefs. For example, Lopatka and Rachman (1995) demonstrated using an experimental design with obsessional patients (mainly checkers) that a decrease in perceived responsibility resulted in decreased discomfort and a reduction in the urge to compulsively check. Other work by Shafran (1997) found that these effects were not restricted to checkers but occurred in Obsessional patients with a range of symptoms. The findings here also provide some evidence for an association between repsonsibility and OCD symptomatology supporting the CBT model of OCD (Salkovskis, 1985, 1989).

With regard to Thought Action Fusion, OCD individuals did not score significantly higher than patients suffering from other anxiety disorders. This casts some doubt on the view that TAF is a highly specific characteristic of individuals with OCD. Rather the current work supports the work of Rassin et al (2001) that TAF is a more pervasive bias that may occur in a variety of other anxiety disorders. However it is stressed that this does not rule out the idea that TAF is more important in the development of OCD as opposed to other anxiety disorders (Rassin et al, 2001). In other words TAF biases may be present in all anxiety disorders but the causal role of these biases may be different (Rassin et al, 2001). This work also suggests that of all the TAF Subscales the TAF likelihood-others bias may be more important than the other scales in terms of OCD symptomatology.

This study is one of few to provide empirical evidence for the negative appraisals of intrusions. It also provides evidence that these appraisals are significantly elevated in obsessional participants compared to controls suggesting their specificity to OCD. However for OCD individuals the Intrusion Related Self Inference Scale did not correlate with OCD. One can only speculate on the meaning of this lack of association but it is likely it is due to the poor psychometric properties of this scale. However, the fact that the Intrusion Related Self Inference Scale is linked to depression may explain the high levels of depression in OCD. It may also explain why individuals with co-morbid depression are less responsive to psychological treatment. For example, an individual who believes that deep down they are evil will be less willing to confront their fears.

With regard to self-discrepancy theory the hypotheses that actual-ought discrepancies and actual-ideal discrepancies lead to agitation and dejection related affects respectively were largely supported in this study which is consistent with previous findings (eg. Strauman, 1989). However the most

interesting finding was with regard to actual-feared discrepancies. OCs were not significantly different on this dimension compared to Anxious and Non-Anxious controls. However the content analysis of the feared self traits showed that individuals with OCD are more likely to generate moralistic traits in defining their feared selves as compared to controls which provides empirical support for Rachman's (1997) ideas. It also suggests that individuals with OCD are more likely to have moralistic beliefs for evaluating their internal world. It is emphasised therefore that obsessive individuals have different parameters for evaluating their feared selves. Moreover, although OCs feared violating moralistic standards their actual selves were quite discrepant from their feared selves. This supports the notion that intrusions are viewed as ego-dystonic. This work is important because with a better understanding of the way intrusions are appraised clinicians would be in a better position to help clients with obsessional thoughts to discover that their thoughts are a by-product of their value system (Rowa and Purdon, 2003, Rachman, 1997). This finding suggests that targeting compulsive behaviour with cognitive behaviour therapy will be less effective if negative appraisals and beliefs are not targeted. That is, if negative beliefs about the self are not targeted the individual may be less responsive to treatment. The findings reported in this research largely support the theoretical understanding of OCD (Salkovskis, 1985; Salkovskis, 1989; Rachman 1997), and support the use of a cognitive behavioural approach to the treatment of OCD.

FURTHER RESEARCH

There is always the possibility of Type 1 error and therefore further replication is required to further the validity of the findings. As already mentioned this study was cross sectional in nature so it was not possible to draw any conclusions about causation with respect to Responsibility, TAF and the negative appraisals of intrusions. Further work needs to test out whether the above constructs are indeed causal or a consequence of having OCD.

A prospective study examining individuals levels of these constructs over time as a predictor of OC symptoms will better illuminate the relationship between these constructs and the onset of OCD. It is also noteworthy that this study failed to examine whether low responsibility interpretations are more important in OCD compared to high responsibility interpretations. This work will require a more reliable and valid measure to be developed. The Intrusion Related Self Inference Scale also needs to be developed and tested thoroughly for its psychometric properties within an OCD population. It may also be worthwhile developing the Intrusion Related Self Inference Scale so it includes items that tap aspects of incompetence, perfectionism, low self esteem to more immoral appraisals of intrusions. Further work also needs to tease apart the effect of both mood state and cognitions on OCD symptomatology (Shafran et al, 1996). Lastly self discrepancy theory proved to be most valuable in showing that individuals with OCD appear to have a more moralistic way of defining their feared selves as compared to Normal and Anxious Controls but this needs further replication.

REFERENCES

Abramowitz, J.S., Franklin, M.E., Street, G.P., Kozak, M. J., and Foa, E.B. (2000). Effects of comorbid depression on response to treatment for obsessive-compulsive disorder. *Behaviour Therapy, 31,* 517-528.

Akhtar, S., Wig, N.H., Varma, V.K., Pershod, D., and Verma, S.H. (1975). A phenomenological analysis of symptoms in obsessive-compulsive neurosis. *British Journal of Psychiatry, 127,* 417-422

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders.* (4th ed.). Washington, DC: American Psychiatric Association.

Antony, M.M., Downie, F., and Swinson, R.P. (1998). Diagnostic issues and epidemiology in obsessive-compulsive disorder. In R.P.Swinson, M.M.Antony, S.Rachman, and M.A.Richter (Eds.) *Obsessive-compulsive disorder: Theory, research and treatment* (pp 3-32). New York: Guilford Press.

Barker, C., Pistrang, N., Elliot, R. (2001). *Research Methods in clinical and counselling.* T. Wiley and Sons Ltd.

Beck, A. (1976). *Cognitive therapy and the emotional disorders.* New York: Basic Books.

Beck, A.T. (1967). *Depression: Clinical, experimental and theoretical aspects.* New York: Harper and Row.

Beck, A.T., Epstein, N., Brown, G., and Steer, R.A. (1988). An inventory for measuring clinical anxiety: psychometric properties. *Journal of Consulting and Clinical Psychology, 56,* 893-897.

Beck, A.T., Steer, R., and Garbin, M. (1988). Psychometric properties of the Beck Depression Inventory: 25 years of evaluation. *Clinical Psychology Review, 8,* 77-100.

Beck, A.T., Ward, C.H., Mendelson, M., and Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4,* 561-571.

Black, D.W., Noyes, R., Goldstein, R.B. and Blum, N. (1992). A family study of obsessive-compulsive disorder. *Archives of General Psychiatry, 49,* 362-368.

Carver, S. S., Lawrence, J. W., and Scheier, M. F., (1999). Self-discrepancies and effect: incorporating the role of the feared selves. *Personality and Social Psychology Bulletin, Vol.25, No.7,* 783-792.

Christensen, H., Hadzi, P., Andrews, G., and Mattick, R. (1987). Behavior therapy and trycyclic medication in the treatment of obsessive-compulsive disorder: A quantitative review. *Journal of Consulting and Clinical Psychology, 55,* 701 – 711.

Clarke, D.A. (1992). Depressive, anxious and intrusive thought in psychiatric inpatients and outpatients. *Behaviour Research and Therapy, 30,* 93-102

Clark, D.A., and Nicki, R.M. (1989). Frequency as a moderating variable in self-report measures of negative cognition. *Behaviour Research and Therapy, 29,* 475– 477.

Clark, D.A., and de Silva, P. (1985). The nature of depressive and anxious thought: distinct or uniform phenomena. *Behaviour Research and Therapy, 23,* 383-393.

Coles, M.E., Mennin, D.S., and Heimberg , R.G. (2001). Distinguishing obsessive features and worries: the role of thought-action fusion. *Behaviour Research and Therapy, 39,* 947-959.

Do Rosario-Campos, M.C., Leckman, J.F., Nercadante, M.T., Shavitt, R.G., da Silva Prado, H.B.S., Sada, P.B.S., Zamignani, D.B.S., Miguel, E.C. (2001). Adults with early onset obsessive-compulsive disorder. *American Journal of Psychiatry, 158(II): 1899-1903.*

Edwards, S., and Dickerson, M. (1987). Intrusive, unwanted thoughts: a two stage model of control. *British Journal of Medical Psychology, 60,* 317-328.

Ehntholt, K.A., Salkovskis, P.M., and Rimes, K.A. (1999) Obsessive-compulsive disorder, anxiety disorders, and self-esteem: an exploratory study. *Behaviour Research and Therapy, 37,* 771-781.

Fennell, M. J. V. (1997). Low self esteem: A cognitive perspective. *Behavioural and Cognitive Psychotherapy, 25,* 1-25.

Foa, E.B. (1979). Failure on treating obsessive-compulsives. *Behaviour Research and Therapy, 17,* 169-176.

Foa, E.B., Amir, N., Bogert, K.V.A., Molnar, C., and Przeworki, A. (2001). Inflated perception of responsibility for harm in obsessive-compulsive disorder. *Anxiety Disorders, 15,* 259-275.

Foa, E.B., Grayson, J.B., and Steketee, G.S. (1982). Depression, habituation and treatment outcome in obsessive-compulsives. In J.Boulougouris (Ed), *Learning theory approaches to psychiatry* (pp.129-142). New York: Wiley.

Freeston, M.H., Ladouceur, R., Thibodeau, N., and Gagnon, F., (1992). Cognitive intrusions in a non-clinical population: II. Associations with depressive, anxious and compulsive symptoms. *Behaviour Research and Therapy, 30(3),* 263.

Freeston, M., Ladouceur, R., Gagnon, F., and Thibodeau, N. (1991). Cognitive intrusions and depressive, anxious and obsessive-compulsive symptoms: implications for obsessive-compulsive disorder. Paper presented at the association for the advancement of behaviour therapy, New York. In Purdon and Clark, D, A. (1994). Obsessive intrusive thoughts in non-clinical subjects. Part II. Cognitive appraisal, emotional response and thought control strategies. *Behaviour Research and Therapy, 32(4),* 403-410.

Freeston, M.H., Rheaume, J., and Ladoucer, R. (1996). Correcting faulty appraisals of obsessional thoughts. *Behaviour Research and Therapy, 34 (56),* 433-446.

Frost, R.O., Steketee, G., Cohn, L., and Giess, K. (1994). Personality traits in sub-clinical and non-obsessive volunteers and their parents. *Behaviour Research and Therapy, 82,* 47-56,

Higgins, E. T, (1987) Self-discrepancy: A theory relating self and affect. *Psychological Review, 94,* 319-340.

Higgins, E.T. (1996). Ideals, oughts and regulatory focus: affect and motivation from distinct pains and pleasures. In P.M. Gollwitzer and J.A. Bargh (Eds.), The psychology of action: *Linking cognition and motivation to behaviour* (pp.91-114). New York: Guilford.

Higgins, E.T. (1997). Beyond pleasure and pain. *American Psychologist, 52,* 1280-1300.

Higgins, E.T., Bond, R.N., Klein, R. and Strauman, T. (1986). Self-discrepancies and emotional vulnerability: How magnitude, accessibility and type of discrepancy influence affect. *Journal of Personality and Social Psychology, 51,* 5-15.

Higgins, E.T., Klein, R. and Strauman, T. (1985). Self-concept discrepancy theory. A psychological model for distinguishing among different aspects of depression and anxiety. *Social Cognition, 3,* 51-76.

Higgins, E.T., Bond, R., Klein, R. and Strauman, T. J. (1986). Self-discrepancies and emotional vulnerability. How magnitude, accessibility and type of discrepancy influence affect. *Journal of Personality and Social Psychology, 51,* 1-15.

Higgins, N.C., Pollard, C.A., and Merkel, W.T. (1992). Relationship between religion-related factors and obsessive disorder. *Current Psychology: Research and Reviews, 11,* 79-85.

Hodgson, R.J., and Rachman, S. (1977). Obsessional-compulsive complaints. *Behaviour Research and Therapy, 15,* 389-395.

Karno, M., Golding, J.M., Sorenson, S.B., and Burnam, M.A. (1988). The epidemiology of obsessive-compulsive disorder in five US communities. *Archives of General Psychiatry, 45,* 1094-1099.

Ladouccer. R., Rheaume, J., Freeston, M.H., Aublet, F., Jean, K., Lachance, S., Langlois. F., and De Pokomany-Morin, K. (1995). Experimental manipulations of responsibility: An analogue test for models of obsessive-compulsive disorder. *Behaviour Research and Therapy. 33,* 937-946.

Lelliot, P.T., Noshirvani, H.F., Basoglu, M., Marks, I.M., and Monteiro, W.O. (1988). Obsessive-compulsive beliefs and treatment outcome. *Psychologist Medicine, 18,* 697-702.

Lopatka, C., and Rachman, S. (1995). Perceived responsibility and compulsive checking: and experimental analysis. *Behaviour Research and Therapy, 33 (6),* 673-684.

Maltby, N. Tolin, D. F. (2003). Overview of Treatments for OCD and spectrum conditions. Conceptualisation, Theory and Practice. *Brief Treatment and Crisis Intervention, 3(2),* 127-144.

Markus, H., and Nurius, P. (1986). Possible selves. *American Psychologist, 41,* 954-969.

Muris, P., Meesters, C., Rassin, E., Merckelbach, H., and Campbell, J. (2001). Thought-Action Fusion and Anxiety Disorders symptoms in normal adolescents. *Behaviour Research and Therapy, 39,* 843-852.

Ogilvie, D.M. (1987). The undesired self: A neglected variable in personality research. *Journal of Personality and Social Psychology, 52,* 379-385

Overbeek, T., Schruers, K., Vermetten, E., Griez. E. (2002). Comorbidity of OCD and Depression: Prevalence, Symptom Severity and Treatment effect. *Journal of Clinical Psychiatry, 63(12),* 1106-1112.

Oyserman, D. and Markus, H. (1990). Possible selves and delinquency. *Journal of Personality and Social Psychology, 59,* 112-125.

Purdon, C. (2001). Appraisal of obsessional thought recurrences: Impact on anxiety and mood state. *Behaviour Research and Therapy, 32,* 47-64.

Purdon, C. and Clark, D.A. (1993). Obsessive intrusive thought in non-clinical subjects. Part I. Content and relation with depressive, anxious and obsessional symptoms. *Behaviour Research and Therapy, 31,* 713-720.

Purdon, C. and Clark, D, A. (1994a). Obsessive intrusive thoughts in non-clinical subjects. Part II. Cognitive appraisal, emotional response and thought control strategies. *Behaviour Research and Therapy, 32(4),* 403-410.

Purdon, C. and Clarke, D. A. (1994b). Perceived control and appraisal of obsessional intrusive thoughts: A replication and extension. *Behavioural and Cognitive Psychotherapy, 22,* 269-285.

Rachman, S. (1971). Obsessional ruminations. *Behaviour Research and Therapy, 9,* 239-235.

Rachman, S. (1993). Obsessions, responsibility and guilt. *Behaviour Research and Therapy, 31,* 149-154.

Rachman, S. (1997). A cognitive theory of obsessions. *Behaviour Research and Therapy, 35,* 793-801.

Rachman, S. (1998). A cognitive theory of obsessions: Elaborations. *Behaviour Research and Therapy, 36,* 385-401.

Rachman, S., and De Silva, P. (1978). Abnormal and normal obsessions. *Behaviour Research and Therapy, 16,* 233-248.

Rachman, S. and Hodgson, R. (1980). Obsessions and Compulsions. Englewood Cliffs, N.J.: Prentice Hall.

Rachman, S., Thordarson, D.S., Shafran, R., and Woody, S.R. (1995). Perceived responsibility: structure and significance. *Behaviour Research and Therapy, 33,* 779-784.

Rassin, E., Diepstraten, P., Merckelbach, H., and Muris, P. (2000). Thought-action fusion and thought suppression in obsessive-compulsive disorder. *Behaviour Research and Therapy, 39,* 757-764.

Rassin, E., Merckelbach, H., Muris, P., and Schmidt, H. (2001). The thought-action fusion scale: further evidence for its reliability and validity. *Behaviour Research and Therapy, 3,* 537-544.

Rassin, E., Merckelbach, H., Muris, P., and Spaan, V. (1999). Thought-action fusion as a causal factor in the development of intrusions. *Behaviour Research and Therapy, 37,* 231-237.

Rassin, E., Muris, P., Schmidt, H., and Merckelbach, H. (2000a). Relationships between thought-action fusion, thought suppression, and obsessive-compulsion symptoms: A structural equation modelling approach. *Behaviour Research and Therapy, 38,* 889-897

Rassin, E., Muris, P., Schmidt, H., and Merckelbach, H. (2000b). Thought-action fusion and thought suppression in obsessive-compulsive disorder. *Behaviour Research and Therapy, 30,* 273-281.

Reynolds, M., and Salkovskis, P.M (1991). The relationship among guilt, dysphoria, anxiety and obsessions in a normal population: an attempted replication. *Behaviour Research and Therapy. 30,* 259-265.

Reynolds, M., and Salkovskis, P.M. (1992). Comparison of positive and negative intrusive thoughts and experimental investigation of the differential effects of mood. *Behaviour Research and Therapy. 30,* 273-281.

Rheaume, J., Ladouceur, R., Freeston, M.H., and Letarte, H. (1995). Inflated responsibility in obsessive-compulsive disorder: validation of an operational definition. *Behaviour Research and Therapy, 33(2),* 159-169.

Ricciardi, J.N., and McNally, R.J. (1995). Depressed mood is related to obsessions but not to compulsions in obsessive-compulsion disorder. *Journal of anxiety Disorders, 9,* 249-256.

Roberts, A.R., Yeager, k. K., Siegel, A. (2003). Obsessive Compulsive Disorder, Comorbid Depression, Substance Abuse and Suicide Attempts: Clinical Presentations, Assessments and Treatment. *Brief Treatment and Crisis Intervention, 3(2),* 145-168.

Roth, A., and Fonaghy, P. (1996). What works for whom? *A critical review of psychotherapy research.* The Guilford Press. New York

Rowa, K. Anthony, M.M, Swinson, R.P. (2003). Behavioural Treatment of Obsessive Compulsive Disorder. *Behavioural and Cognitive Psychotherapy , 28(4),* 25-36.

Rowa, K., and Purdon, C. (2003). Why are certain intrusive thoughts more upsetting than others? *Behavioral and Cognitive Psychotherapy, 31,* 1-11.

Salkovskis, P.M. (1985) Obsessional-compulsive problems: a cognitive-behavioural analysis. *Behaviour Research and Therapy, 27,* 677-682.

Salkovskis, P.M. (1989). Cognitive-behavioural factors and the persistence of intrusive thoughts in obsessional problems. *Behaviour Research and therapy, 27,* 677 - 682

Salkovskis, P.M. (1996). Cognitive-behavioural approaches to the understanding of obsessional problems. In R.Rapee (Ed.). *Current controversies in anxiety disorders.* New York: Guilford.

Salkovskis, P.M., and Kirk, J. (1997). Obsessive-compulsive disorder. In D.M.Clark and C. Fairburn (Eds.). *The science and practice of cognitive behaviour therapy.* Oxford. Oxford University Press.

Salkovskis, P.M. (2000). Obsessional-compulsive problems: A cognitive-behavioural analysis. In D.J.Stein and M.M. Stone (Eds.) *Essential papers on obsessive-compulsive disorder.* (Pp 218-238). New York University Press. New York.

Salkovskis, P.M., and Warwick, H.M.C. (1988). Cognitive therapy of obsessive-compulsive disorder. In C. Perris, I. M. Blackburn and H. Perris. *The Theory and Practice of Cognitive Therapy.* Heidelberg. Springer.

Salkovskis, P.M., Wroe, A. L., Gledhill, A., Morrison, N., Forrester, E., Richards, C., Reynolds, M., and Thorpe, S. (2000). Responsibility attitudes and interpretations are characteristic of obsessive compulsive disorder. *Behaviour Research and Therapy, 38,* 347-372.

Salkovskis, P.M., Forrester, E. and Candida, R. (1998). Cognitive-behavioural approach to understanding obsessional thinking. *British Journal of Psychiatry, 173(suppl.35),* 53-63.

Salkovskis, P.M., Forrester, E., Richards, H.C. and Morrison, N. (1998). The devil is in the detail: conceptualising and treating obsessional problems. In N.Tarrier, A.Wells and G. Haddock. *Treating complex cases: the cognitive behavioural therapy approach (pp.46-80)* Chichester: Wiley.

Salkovskis, P.M., and Harrison, J. (1984) Abnormal and normal obsessions: A replication. B*ehaviour Research and Therapy, 22,* 549-552.

Salkovskis, P.M., Forrester, E. and Richards, C. (1998). Cognitive-behavioural approach to understanding obsessional thinking. *British Journal of Psychiatry, 173(Suppl. 35),* 53-63.

Salkovskis, P.M., Westbrook, D., Davis, J., Jeavons, A. and Gledhill, A. (1997). Effects of neutralizing on intrusive thoughts: an experiment investigating the aetiology of obsessive compulsive disorder. *Behaviour Research and Therapy, 35(3),* 211-219.

Salkovskis, P.M. Wroe, A. L, Gledhill, A., Morrison, N., Forrester, E. Richards, C., Reynolds, S., and Thorpe, S. (2000). Responsibility attitudes and interpretations are characteristic of obsessive compulsive disorder. *Behaviour Research and Therapy, 38,* 347-372.

Sanavio, E. (1988). Obsessions and compulsions: the Padua Inventory. *Behaviour Research and Therapy, 26,* 169-177.

Shafran, R. (1997). The manipulation of responsibility in obsessive-compulsive disorder. *British Journal of Clinical Psychology, 36,* 397-407.

Shafran, R., Thordarson, D.S., and Rachman, S. (1996). Thought Action Fusion in Obsessive Compulsive Disorder. *Journal of Anxiety Disorders, 10 (5),* 379-391.

Staebler, C.R., Pollard, C.A., and Merkel, W.T. (1993). Sexual history and quality of current relationships in patients with obsessive compulsive disorder: a comparison with two other psychiatric samples. *Journal of Sex and Marital Therapy, 19,* 147-153

Steer, R.A. and Beck, A.T. (1997). Beck Anxiety inventory. In C.P. Zalaquett, and R.J. Woods (Eds.) *Evaluating stress: a book of resources.* (pp.28 – 40) Lanham. MD. Scarecrow Press.

Steketee, G., Frost, R.O., and Cohen, I. (1998). Beliefs in obsessive-compulsive disorder. *Journal of Anxiety Disorders, 12,* 525-537.

Steketee, G., Quay, S., and White, K. (1991). Religion and guilt in OCD patients. *Journal of Anxiety Disorders, 5,* 359-367.

Strauman, T, J., and Higgins, E, T. (in press). Self discrepancies as predictors of chronic vulnerability to different syndromes of emotional distress. Journal of Personality. In Strauman, T. J. (1989). Self discrepancies in clinical depression and social phobia: cognitive structures that underlie emotional disorders? *Journal of Abnormal Psychology, 98(1),* 14-22.

Teasdale, J.D. (1983). Negative thinking in depression: Cause, effect or reciprocal relationship? *Advances in Behaviour Research and Therapy, 5,* 3-25.

Tuekel, R., Polat, A., Oezdemir, O., Aksuet, D., Tuerksoy, N. (2002). Comorbid conditions in OCD. *Comprehensive Psychiatry, 43(3),* 204-209.

Van Balkom, A.J.L.M., Van Oppen, P., Wermeulen, A.W.A., Van Dyck, R., Nauta, M.C.E., and Vorat, H.C.M. (1994). Meta analysis on the treatment of obsessive-compulsive disorder: A comparison of antidepressants, behaviour and cognitive therapy. *Clinical Psychology Review, 14,* 359-381.

Van Oppen, P. (1992). Obsessions and compulsions: dimensional structure, reliability, convergent and divergent validity of the Padua inventory. *Behaviour Research and Therapy, 80,* 681-687.

Van Oppen, P., De Haan, E., Van Balkom, A.J.L.M., Spinhoven, P., Hoogduin, K., and Van Dyck, R. (1995). Cognitive therapy and exposure in vivo in the treatment of obsessive-compulsive disorder. *Behaviour Research and Therapy, 33,* 379 - 390
Wells, A., (1997). *Cognitive therapy of anxiety disorders.* Chichester: Wiley

Wells, A. and Morrison, A.P. (1994). Qualitative dimensions of normal worry and normal obsessions. A comparative study. *Behaviour Research and Therapy, 32,* 867-870.

Wilson, K.A., and Chambless, D.L. (1999). Inflated perceptions of responsibility and obsessive-compulsive symptoms. *Behaviour Research and Therapy, 37,* 325-335.

Wilson, G.T., Eldredge, K.L., Smith, D. and Niles, B. (1991). Cognitive behavioral treatment with and without response prevention for bulimia. *Behaviour Research and Therapy, 129,* 575-583.

Wittal, M.L., O'Neil, M.L. (2003). Cognitive and behavioural methods for obsessive-compulsive disorder. *Brief Treatment and Crisis Intervention, 3,* 201-216.

APPENDIX A
Letter of ethical approval

Camden and Islington Community Health Service
LOCAL RESEARCH ETHICS COMMITTEE

Research & Development Unit, 3rd Floor, West Wing, St. Pancras Conference Centre
St Pancras Hospital, London NWI OPE
tel: 020 7530 3376 fax: 020 7530 3235
e-mail: ayse.all@camdenpct.nhs.uk
Chair: *Stephanie Ellis* Administrator: *Ayse All*

20 August 2002

Dr Susan Ferrier

Dear Dr Ferrier

LREC Ref: 02/77 (please quote in all further correspondence)
Title: Inflated responsibility, though action fusion and the role of the unacceptability of the self in OCD

Thank you for attending the ethics committee meeting on Monday 19th August 2002 to discuss the above project. I am pleased to inform you that after careful consideration the Local Research Ethics Committee has no ethical objections to your project proceeding. This opinion has also been communicated to the North Central London Community Research Consortium.

PLEASE NOTE THAT THIS OPINION ALONE DOES NOT ENTITLE YOU TO BEGIN RESEARCH.

Camden and Islington Community Health Service LREC considers the ethics of proposed research projects and provides advice to NHS bodies under the auspices of which the research is intended to take place. It is that NHS body which has the responsibility to decide whether or not the project should go ahead, taking into account the ethical advice of the LREC[1]. Where these procedures take place on NHS premises or using NHS patients, the researcher must obtain the agreement of local NHS management, who will need to be assured that the researcher holds an appropriate NHS contract, and that indemnity issues have been adequately addressed.

N.B. Camden and Islington Community Health Service LREC is an independent body providing advice to the North Central London Community Research Consortium. A favourable opinion from the LREC and approval from the Trust to commence research on Trust premises or patients are **NOT** one and the same. Trust approval is notified through the Research & Development Unit.

The following conditions apply to this project:

- You must write and inform the Committee of the start date of your project. The Committee (via the Local Research Ethics Committee Administrator or the Chair at the above address) must also receive notification:

  a) when the study commences;
  b) when the study is complete;
  c) if it fails to start or is abandoned;
  d) if the investigator/s change and
  e) if any amendments to the study are made.

- The Committee must receive immediate notification of any adverse or unforeseen circumstances arising out of the project.

[1] Governance Arrangements for NHS Research Ethics Committees, *July 2001 (known as GAFREC)*

- It is the responsibility of the investigators to ensure that all associated staff, including nursing staff, are informed of research projects and are told that they have the approval of the Ethics Committee and management approval from the body hosting the research.
- The Committee will require a copy of the report on completion of the project and may request details of the progress of the research project periodically (i.e. annually for longer projects).
- If data is to be stored on a computer in such a way as to make it possible to identify individuals, then the project must be registered under the Data Protection Act 1998. Please consult your department data protection officer for advice.
- Failure to adhere to these conditions set out above will result in the invalidation of this letter of no objection.

Please forward any additional information/amendments regarding your study to the Local Research Ethics Committee Administrator or the Chair at the above address.

Yours sincerely

Stephanie Ellis
Chair, LREC

APPENDIX B

Advertisement in No Panic Newsletter

Recruits urgently needed by the end of February 2003!

We are looking for volunteers to take part in a study. The study is exploring how individuals with different anxiety disorders are similar or different in terms of their beliefs and thought processes.

The information we get from this study may help us to understand and improve treatments for people with different anxiety disorders.

We are looking for individuals 18 years and over that fall into two main groups:
1. Obsessive compulsive disorder with or without other anxiety problems
2. Anxiety disorders including phobias, panic attacks, and social anxiety.

The study involves answering a questionnaire about your current symptoms and the different thoughts that come into your mind including feelings of responsibility. You will also be asked about your views about what kind of person you are, including aspects that you are not happy with. Occasionally this may be uncomfortable or distressing. The questionnaire can be sent to your home or completed at the hospital.

If you are interested or may be unsure if it is for you, then please contact me and we can discuss it further. I can be contacted by telephone on: 0207 5302350 or by letter at the address below. If you do leave a message at the Psychology Department please leave your name and number and say you are interested in participating in some research. Thank you.

Dr Sue Ferrier Psychology Department, Charterhouse Building, Archway Campus, Highgate Hill, London, N19 3NU.

APPENDIX C
Patient Information Sheet

Appendix C

Camden and Islington NHS
Mental Health NHS Trust

CONFIDENTIAL

INFORMATION SHEET

Title of project: Beliefs about the self and how these influence mood and behaviour
Name of researcher: Susan Ferrier
Hospital base:
Leading institution: University College, London

Objective of the study
The purpose of the study is to understand the thought processes people with different anxiety disorders have and to understand how they are similar or different. This will involve answering a questionnaire about your current symptoms, the different types of thoughts that come into your mind and feelings of responsibility. You will also be asked about your views about what kind of person you are, including aspects that you may not be happy with. Occasionally this may be uncomfortable or distressing.
The questionnaire will probably take about 2 hours to complete so you may want to complete it over 2 separate occasions. The information we get from this study may help us to understand and treat patients with different anxiety disorders.

You have been chosen to participate because of the anxieties that you have at the present time. Over the course of the next 18 months (September 2002 to February 2004) I will be inviting 40 patients with different anxiety disorders to participate in the research.

However it is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you receive.

The results of this study will contribute to the researcher's thesis for the award of doctorate in clinical psychology. The findings may also be published in a research journal, however the individuals that participated in the research will not be identified. Thank you for considering to take part in this study.

If you would like further information about the study please contact Susan Ferrier:
Contact telephone number:
Contact address:

All proposals for research using human subjects are reviewed by an ethics committee before they can proceed. This proposal was reviewed by Camden and Islington Ethics Committee.

APPENDIX D
Healthy Volunteer Information Sheet

Appendix D

Camden and Islington NHS
Mental Health NHS Trust

CONFIDENTIAL

HEALTHY VOLUNTEER INFORMATION SHEET

Title of project: Beliefs about the self and how these influence mood and behaviour

Name of researcher: Dr. Susan Ferrier

Hospital base:
Leading institution: University College, London

Objective of the study
The purpose of the study is to understand the thought processes of people with and without different anxiety disorders and to understand how they are similar or different. This will involve answering a questionnaire about your current symptoms, the different types of thoughts that come into your mind and feelings of responsibility. You will also be asked about your views about what kind of person you are, including aspects that you may not be happy with or perhaps worry about being. Occasionally this may be uncomfortable or distressing.
The questionnaire will probably take about 2 hours to complete so you may want to complete it over 2 separate occasions. The information we get from this study may help us to understand and treat patients with different anxiety disorders.
You have been chosen to participate because you do not have an anxiety disorder. Over the course of the next 18 months (September 2002 to February 2004) I will be inviting 60 individuals with and without different anxiety disorders to participate in the research.

However it is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason.

The results of this study will contribute to the researcher s thesis for the award of doctorate in clinical psychology. The findings may also be published in a research journal, however the individuals that participated in the research will not be identified. Thank you for considering to take part in this study.

If you would like further information about the study please contact Susan Ferrier.
Contact telephone number:
Contact address:

All proposals for research using human subjects are reviewed by an ethics committee before they can proceed. This proposal was reviewed by Camden and Islington Ethics Committee.

APPENDIX E
Consent form

Appendix e

Camden and Islington NHS
Mental Health NHS Trust

CONFIDENTIAL

CONSENT FORM

Title of Study: Beliefs about the self and how these influence mood

Investigator's Name: Susan Ferrier

To be completed by the participant Delete as necessary

1. I have read the information sheet about this study
   YES/NO

2. I have had an opportunity to ask questions and discuss this study
   YES/NO

3. I have received satisfactory answers to all my questions
   YES/NO

4. I have received sufficient information about this study YES/NO

5. I understand that I am free to withdraw from this study:-

   *at any time YES/NO
   *without giving a reason for withdrawing YES/NO
   *without affecting my future medical care YES/NO

6. Do you agree to take part in this study? YES/NO

Signed.....Date.....
.....

Name in Block Letters

APPENDIX F: Covering letter and questionnaire

Camden and Islington NHS
Mental Health NHS Trust

Towards a greater understanding of anxiety disorders

This is a research project being conducted at University College London in conjunction with the Psychology Department at the Whittington Hospital.

Thank you for agreeing to take part in the study. I have enclosed a consent form, information sheet, questionnaire and self addressed envelope. If you have any questions about the research/questionnaire please do not hesitate to ring me at the Psychology Department on 0207 5302350. Please note the consent form requires your signature but I do not need your name on the questionnaire, as you will be given an ID number.

It is not possible to give individual feedback but I will summarise the findings and send them if requested.

Thank you very much for your time.

Yours sincerely,

Sue Ferrier Ph. D

QUESTIONNAIRE

ID number: .....

CONFIDENTIAL

Demographic details
Please circle where appropriate.

Sex: Male / Female

Age: .....

Years of education: .....
(count years of education from five years old,
ie, if left school at fifteen years old = ten years of education)

Religious background: .....

Are you currently taking any psychiatric medication Yes / No
If Yes, please state

Do you have an anxiety disorder? Yes No
If yes, please state.

Have you ever had an anxiety disorder? Yes No
If yes, please state

PADUA INVENTORY

Instructions
The following statements refer to thoughts and behaviours which may occur to everyone in everyday life. For each statement, choose the reply which best seems to fit you and the degree of disturbance in everyday life. For each statement, choose the reply which best seems to fit you and the degree of disturbance which such thoughts or behaviours may create.

Rate your replies as follows:

0 Not at all
1 A little
2 Quite a lot
3 A lot
4 Very much

1. I feel my hands are dirty when I touch money ..... ☐
2. I think even slight contact with bodily secretions (perspiration, saliva, urine etc.) may contaminate my clothes or somehow harm me ..... ☐
3. I find it difficult to touch an object when I know it has been touched by strangers or by certain people ..... ☐
4. I find it difficult to touch garbage or dirty things ..... ☐
5. I avoid using public toilets because I am afraid of disease and contamination ..... ☐
6. I avoid using public telephones because I am afraid of contagion and disease ..... ☐
7. I wash my hands more often and longer than necessary ..... ☐
8. I sometimes have to wash or clean myself simply because I think I may be dirty or 'contaminated' ..... ☐
9. If I touch something that I think is 'contaminated' I immediately have to wash or clean myself ..... ☐
10. If an animal touches me, I feel dirty and immediately have to wash myself or change my clothing ..... ☐
11. When doubts and worries come into my mind, I cannot rest until I have talked them over with a reassuring person ..... ☐
12. When I talk I tend to repeat the same things and the same sentences several times ..... ☐

13. I tend to ask people to repeat the same things to me several times consecutively, even though I did understand what they said the first time ☐

14. I feel obliged to follow a particular order in dressing, undressing, and washing myself ☐

15. Before going to sleep I have to do certain things in a certain order ☐

16. Before going to bed I have to hand up or fold my clothes in a special way ☐

17. I feel I have to repeat certain numbers for no reason ☐

18. I have to do things several times before I think they are properly done ☐

19. I tend to keep on checking things more often then necessary ☐

20. I check and recheck gas and water taps and light switches after turning them off ☐

21. I return home to check doors, windows, drawers etc. to make sure they are properly shut ☐

22. I keep on checking forms, documents, checks etc. in detail, to make sure I have filled them in correctly ☐

23. I keep on going back to see that matches, cigarettes etc. are properly extinguished.. ☐

24. When I handle money I count and recount it several times ☐

25. I check letters carefully many times before posting them ☐

26. I find it difficult to take decisions, even about unimportant matters ☐

27. Sometimes I am not sure I have done things which in fact I know I have done ☐

28. I have the impression that I will never to able to explain things clearly, especially when talking about important matters that involve me ☐

29. After doing something carefully, I still have the impression I have either done it badly or not finished it ☐

30. I am sometimes late because I keep on doing certain things more often than necessary ☐

31. I invent doubts and problems about most things I do ☐

32. When I start thinking of certain things, I become obsessed with them ☐

33. Unpleasant thoughts come into my mind against my will and I cannot get rid of them ☐

34. Obscene or dirty words come into my mind and I cannot get rid of them ☐

35. My brain constantly goes its own way and I find it difficult to attend to what is happening around me ☐

36. I imagine catastrophic consequences as a result of absent-mindedness or minor errors which I make ☐

37. I think or worry at length about having hurt someone without knowing it ☐

38. When I hear about a disaster, I think it is somehow my fault ☐

39. I sometimes worry at length that for no reason that I have hurt myself or have a disease ☐

40. I sometimes start counting objects for no reason ☐

41. I feel I have to remember completely unimportant numbers ☐

42. When I read I have the impression I have missed something important and must go back and reread the passage at least two or three times ☐

43. I worry about remembering completely unimportant things and make an effort not to forget them ☐

44. When a thought or doubt comes into my mind, I have to examine it from all points of view and cannot stop until I have done so ☐

45. In certain situations I am afraid of losing my self control and doing embarrassing things ☐

46. When I look down from a bridge or a very high window, I feel an impulse to throw myself into space ☐

47. When I see a train approaching I sometimes think I could throw myself under its wheels ☐

48. At certain moments I am tempted to tear off my clothes in public ☐

49. While driving I sometimes feel an impulse to drive the car into someone or something ☐

50. Seeing weapons excites me and makes me think violent thoughts ☐

51. I get upset and worried at the sight of knives, daggers, and other pointed objects ..... ☐

52. I sometimes feel something inside me which makes me do things which are really senseless and which I do not want to do ..... ☐

53. I sometimes feel the need to break or damage things for no reason ..... ☐

54. I sometimes have an impulse to steal other people's belongings, even though they are no use to me ..... ☐

55. I am sometimes almost irresistibly tempted to steal something from the supermarket ..... ☐

56. I sometimes have an impulse to hurt defenceless children or animals ..... ☐

57. I feel I have to make special gestures or walk in a certain way ..... ☐

58. In certain situations I feel an impulse to eat too much, even if I am then ill ..... ☐

59. When I hear about a suicide or a crime, I am upset for a long time and find it difficult to stop thinking about it ..... ☐

60. I invent useless worries about germs and diseases ..... ☐

TAF SCALE

Please read the statements below and indicate whether you agree or disagree with each statement by putting a tick in the appropriate column. Do not spend too much time on each item.

		Disagree strongly	Disagree	Uncertain	Agree	Agree strongly	Office use only
1	Thinking of making an extremely critical remark to a friend is almost as unacceptable to me as actually saying it.						
2	Having a blasphemous thought is almost as sinful to me as blasphemous action.						
3	Thinking about swearing at someone else is almost as bad as carrying out a nasty action.						
4	When I have a nasty thought about someone else, it is almost as bad as carrying out a nasty action.						
5	Having violent thoughts is almost as unacceptable to me as violent acts.						
6	When I think about making an obscene remark or gesture in church, it is almost as sinful as actually doing it.						
7	If I wish harm on somebody, it is almost as bad as doing harm.						
8	If I think about making an obscene gesture to someone else, it is almost as bad as actually doing it.						
9	When I think unkindly about a friend, it is almost as disloyal as doing an unkind act.						
10	If I have a jealous thought, it is almost the same as making a jealous remark.						
11	Thinking of cheating in a personal relationship is almost as immoral to me as actually cheating.						
12	Having obscene thoughts in church is unacceptable to me.						
13	If I think of a relative or friend losing their job, this increases the risk that they will lose their job.						

CONTINUATION OF THE TAF SCALE

		Disagree strongly	Disagree	Uncertain	Agree	Agree strongly	Office use only
14	If I think of a friend/relative being in a car accident this increases the risk that he/she will have a car accident.						
15	If I think of a friend/relative in a fall fall, this increases the risk that he/she will have a fall and be injured.						
16	If I think of a relative/friend falling ill this increases the risk that he/she will fall ill.						
17	If I think of myself being injured in a fall, this in creases the risk that I will have a fall and be injured.						
18	If I think of myself being in a car accident, this increases the risk that I will have a car accident.						
19	If I think of myself falling ill, this increases the risk that I will fall ill.						

Name: _____ Date: _____

RIQ

We are interested in your reaction to intrusive thoughts that you have had in the **last two weeks**. Intrusive thoughts are thoughts that suddenly enter your mind, may interrupt what you are thinking or doing and tend to recur on separate occasions. They may occur in the form of words, mental image, or an impulse (a sudden urge to carry out some action). We are interested in those intrusive thoughts that are unacceptable. Research has shown that most people experience or have experienced such thoughts which they find unacceptable in some way, at some time in their lives to a greater or lesser degree, so there is nothing unusual about this.

Some examples of unpleasant intrusions are:

- Repeated image of attacking someone
- Suddenly thinking that your hands are dirty and may cause contamination
- Suddenly thinking you may not have turned off the gas, or that you have left a door unlocked
- Repeated senseless images of harm coming to someone you love
- Repeated urge to attack or harm somebody (even though you would never do this)

IMPORTANT

Think of INTRUSIONS OF THE TYPE DESCRIBED ABOVE that you have had in the last 2 week, and answer the following questions with that intrusion in mind. The questions do NOT relate to all thoughts but specifically to your negative intrusions.

Please write down intrusions that you have had in the last 2 weeks.

The questionnaire has two parts:
Overleaf are some of the ideas that may go through your mind **when you are bothered by worrying intrusive thoughts which you know are probably senseless or unrealistic**. Think of times when you were bothered by intrusive thoughts, impulses and images **in the last 2 weeks.**

A. Frequency

Indicate how often each of the ideas listed below occured when you were bothered by these intrusive thoughts, impulses or images; circle the digit that most accurately describes the frequency of the occurence of the ideas using the following scale:

Over the LAST TWO WEEKS:

0 Idea never occurred
1 Idea rarely occurred
2 Idea occurred during about half the times when I had worrying intrusive thoughts
3 Idea usually occurred
4 Idea always occurred when I had worrying intrusive thoughts.

F1	never occurred	rarely occurred	half the time	usually occurred	always occurred
If I don't resist these thoughts it means I am being irresponsible	0	1	2	3	4
I could be responsible for serious harm	0	1	2	3	4
I cannot take the risk of this thought coming true	0	1	2	3	4
If I don't act now then something terrible will happen and it will be my fault	0	1	2	3	4
I need to be certain something awful won't happen	0	1	2	3	4
I shouldn't be thinking this sort of thing	0	1	2	3	4
It would be irresponsible to ignore these thoughts	0	1	2	3	4
I'll feel awful unless I do something about this thought	0	1	2	3	4
Because I have thought of bad things happening then I must act to prevent them	0	1	2	3	4
Since I have thought of this I must want it to happen	0	1	2	3	4
Now I have thought of things which could go wrong I have a responsibility to make sure I don't let them happen	0	1	2	3	4
Thinking this could make it happen	0	1	2	3	4
I must regain control of my thoughts	0	1	2	3	4
This could be an omen	0	1	2	3	4
It's wrong to ignore these thoughts	0	1	2	3	4
Because these thoughts come from my own mind, I must want to have them	0	1	2	3	4

Now rate these items:

F2	never occurred	rarely occurred	half the time	usually occurred	always occurred
Thoughts can NOT make things happen	0	1	2	3	4
This is just a thought so it does not matter	0	1	2	3	4
Thinking of something does not make me responsible for whether it happens	0	1	2	3	4
There's nothing wrong with letting things come and go naturally	0	1	2	3	4
Everyone has horrible thoughts sometime, so I don't need to worry about this one	0	1	2	3	4
Having this thought doesn't mean I have to do anything about it	0	1	2	3	4

B. Belief

Over the last two weeks, When you were bothered by these worrying intrusive thought, how much did you believe each of these ideas to be true? Rate the belief you had of these ideas <u>when you had the intrusions</u>, using the following scale; mark the point on the line that most accurately applies to your belief at the time of the intrusion

B1	I did not believe this idea at all										I was completely convinced this idea was true
If I don't resist these thoughts it means I am being irresponsible	0	10	20	30	40	50	60	70	80	90	100
I could be responsible for serious harm	0	10	20	30	40	50	60	70	80	90	100
I cannot take the risk of this thought coming true	0	10	20	30	40	50	60	70	80	90	100
If I don't act now then something terrible will happen and it will be my fault	0	10	20	30	40	50	60	70	80	90	100
I need to be certain something awful won't happen	0	10	20	30	40	50	60	70	80	90	100
I shouldn't be thinking this sort of thing	0	10	20	30	40	50	60	70	80	90	100
It would be irresponsible to ignore these thoughts	0	10	20	30	40	50	60	70	80	90	100
I'll feel awful unless I do something about this thought	0	10	20	30	40	50	60	70	80	90	100
Because I have thought of bad things happening then I must act to prevent them	0	10	20	30	40	50	60	70	80	90	100
Since I have thought of this I must want it to happen	0	10	20	30	40	50	60	70	80	90	100
Now I have thought of things which could go wrong I have a responsibility to make sure I don't let them happen	0	10	20	30	40	50	60	70	80	90	100
Thinking this could make it happen	0	10	20	30	40	50	60	70	80	90	100
I must regain control of my thoughts	0	10	20	30	40	50	60	70	80	90	100
This could be an omen	0	10	20	30	40	50	60	70	80	90	100
It's wrong to ignore these thoughts	0	10	20	30	40	50	60	70	80	90	100
Because these thoughts come from my own mind, I must want to have them	0	10	20	30	40	50	60	70	80	90	100

Now rate these items:

<u>B2</u>	I did not believe this idea at all										I was completely convinced this idea was true
Thoughts can NOT make things happen	0	10	20	30	40	50	60	70	80	90	100
This is just a thought so it does not matter	0	10	20	30	40	50	60	70	80	90	100
Thinking of something does not make me responsible for whether it happens	0	10	20	30	40	50	60	70	80	90	100
There's nothing wrong with letting things come and go naturally	0	10	20	30	40	50	60	70	80	90	100
Everyone has horrible thoughts sometime, so I don't need to worry about this one	0	10	20	30	40	50	60	70	80	90	100
Having this thought doesn't mean I have to do anything about it	0	10	20	30	40	50	60	70	80	90	100

RAS

This questionnaire lists different attitudes or beliefs which people sometimes hold. Read each statement carefully and decide how much you agree or disagree with it.
For each of the attitudes show your answer by putting a circle round the words which BEST DESCRIBE HOW YOU THINK, Be sure to choose only one answer for each attitude, Because people are different, there is no right answer or wrong answer to these statements. To decide whether a given attitude is typical of your way of looking at things, simply keep in mind what you are like MOST OF THE TIME.

1. I often feel responsible for things that go wrong.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

2. If I don't act when I can forsee danger, then I am to blame for any consequences if it happens.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

3. I am too sensitive to feeling responsible for things going wrong.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

4. If I think bad things, this is as bad as <u>doing</u> bad things.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

5. I worry very much about the effects of things I do or don't do.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

6. To me, not acting to prevent disaster is as bad as making disaster happen.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

7. If I know that harm is possible, I should always try and prevent it, however unlikely it seems.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

8. I must always think through the consequences of even the smallest actions.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

9. I often take responsibility for things which other people don't think are my fault.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

10. Everything I do can cause serious problems

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

11. I am often close to causing harm.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

12. I must protect others from harm.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

13. I should never cause even the slightest harm to others.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

14. I will be condemned for my actions.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

15. If I can have even the slightest influence on things going wrong, then I must act to prevent it.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

16. To me, not acting where disaster is a slight possibility is as bad as making that disaster happen.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

17. For me, even slight carelessness is inexcusable when it might affect other people.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

18. In all kinds of daily situations, my inactivity can cause as much harm as deliberate bad intentions.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

19. Even if harm is a very unlikely possibility, I should always try to prevent it at any cost.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

20. Once I think it is possible that I have caused harm, I can't forgive myself.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

21. Many of my past actions have been intended to prevent harm to others.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

22. I have to make sure other people are protected from all of the consequences of things I do.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

23. Other people should not rely on my judgement.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

24. If I cannot be certain I am blameless, I feel that I am to blame.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

25. If I take sufficient care then I can prevent any harmful accidents.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

26. I often think that bad things will happen if I am not careful enough.

TOTALLY AGREE	AGREE VERY MUCH	AGREE SLIGHTLY	NEUTRAL	DISAGREE SLIGHTLY	DISAGREE VERY MUCH	TOTALLY DISAGREE

Responsibility Interpretation Questionnaire

4 scores are derived from the RIQ

INTRUSION RELATED SELF INFERENCE SCALE

We are interested in what you think about your intrusive thoughts that you had in the last two weeks. Intrusive thoughts are thoughts that suddenly come into your mind. They may occur in the form of words, mental images, or impulses. Research has shown that most people experience these thoughts which they find unacceptable in some way, so there is nothing unusual about this.
Some examples of unpleasant intrusions include:
- Repeated image of attacking someone
- Suddenly thinking you have left the door unlocked
- Suddenly thinking your hands are dirty and you may cause contamination.

For each statement below, choose the reply which best fits what you think. Rate your replies as follows:

0 Not at all
1 A little
2 Quite a lot
3 A lot
4 Very much

Some of my intrusive thoughts make me:

1. Think that deep down I am a bad person ..... ☐
2. Fear I am not the type of person I ought to be ..... ☐
3. Worry that I may do something that would cause others to disown me ..... ☐
4. Fear I will become someone other people will think is unacceptable ..... ☐
5. Worry about the type of person I really am ..... ☐
6. Worry that if people really knew me they would think I was a bad person ..... ☐
7. Feel that if other people really knew me they would reject me ..... ☐
8. Try not to think about the person I might be ..... ☐
9. Fear what I might be capable of doing ..... ☐
10. Feel guilty ..... ☐
11. Worry I will be seen as a wicked person by others ..... ☐
12. Feel that other people would think negatively of me if they knew what went through my mind ..... ☐

SELVES QUESTIONNAIRE

In this study you are going to be asked to give information about several aspects of your **SELF**. You are going to be asked to think about some fairly subtle issues and to make some difficult distinctions. It is important that you take your time, reflect on yourself, and answer the questions carefully, honestly and as accurately as possible.

Please take your time. Thinking about yourself and making these distinctions can be a tiring process. We know that this is going to wear you out a little. If you start to get 'burned out', or begin to lose your concentration, take a little break from it to relax. Return to the questionnaire when you've regained your ability to focus.

Work your way through the booklet, completing the pages in order. If you find that the same traits come to your mind as you work on different pages, that is OK. The traits you list can be the same from one page to another, or they can differ. Whatevere is correct for you is what you should write down.

Please read all the instructions you are given very carefully. If there is any part of the instructions that you don't understand - either at this point or as you go along - ask the person in the office for assistance.

Please note:
A trait can be understood as a psychological or behavioural aspects of a person.
Eg. Imaginative, cautious, immoral, extroverted.

Turn now to the next page, read the instructions printed at the top of it, and provide the information requested.

ACTUAL SELF

Below, please list some traits which make up your 'Actual Self'. Your Actual Self is the kind of person you think *are* right now. Its defined by the personality traits you think you actually *do have* as part of your self.

Make sure these are traits you believe *YOU* actually have, not what others think of you.

Please list seven traits that describe your Actual Self. Print these qualities, one per line, on the seven lines below.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

OUGHT SELF

Below, please list some traits which make up your 'Ought Self'. Your Ought Self is the kind of person you believe you have the ***duty*** or ***obligation*** to be. Its defined by the personality traits you think you ought to possess, or feel *obliged* to possess. Its not neccessary that you actually have these traits now, only that you believe you ***ought*** to have them.

Make sure these are ***YOUR*** ought self traits, not traits that other people think you ought.

Please list seven traits that describe your own Ought Self. Print these qualities, one per line, on the seven lines below.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

IDEAL SELF

Below, please list some traits which make up your 'Ideal Self'. Your Ideal Self is the kind of person you'd really ***like*** to be. Its defined by the personality traits ***you ideally would like to have***. Its not neccessary that you actually have these traits now, only that you want to have them.

Make sure these are ***YOUR*** ideal self traits, not what other people would like you to be.

Please list seven traits that describe your Ideal Self. Print these qualities, one per line, on the seven lines below.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

FEARED SELF

Below, please list some traits which make up your 'Feared Self'. Your Feared Self is the kind of person you fear being. It's defined by the personality traits you ***might*** become in the future, but that you'd rather ***NOT*** become. It's not necessary that you have these traits, only that you want to avoid having them.

Make sure these are ***YOUR*** feared self traits, not what others fear for you.

Please list seven traits that describe your Feared Self. Print these qualities, one per line, on the seven lines below.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

Now go back and locate page 3, the page headed OUGHT SELF. Copy the traits you wrote down on page 3 into the seven space below.

After writing all seven of your Ought Self traits into the spaces below, rate h*ow similar* you are NOW to each trait, according to a scale that ranges from 'I am *just like* this trait' (1) to 'I am the *opposite* of this trait' (7) . CIRCLE the number on the scale to the right of each space below that best describes where you think you are regarding the trait you wrote in that space.

		I am ***just like*** this trait						I am the ***opposite*** of this trait
1.	_____	1	2	3	4	5	6	7
2.	_____	1	2	3	4	5	6	7
3.	_____	1	2	3	4	5	6	7
4.	_____	1	2	3	4	5	6	7
5.	_____	1	2	3	4	5	6	7
6.	_____	1	2	3	4	5	6	7
7.	_____	1	2	3	4	5	6	7