Obsessive comp

ROZ SHAFRAN *gave the first Award for Outstanding Doctoral Research Contributions to Psychology Lecture at the Society's Annual Conference in Belfast in April.*

OBSESSIVE compulsive disorder (OCD) is an anxiety disorder that is estimated to affect 1–3 per cent of the population, although the true prevalence remains unknown (Antony *et al.*, 1998). Most people with OCD have both obsessions and compulsions. The obsessions are recurrent, unwanted intrusive thoughts, ideas, images or impulses. The individuals who experience the obsessions are horrified by them, and usually find their content to be morally repugnant and intensely distressing.

Most of these obsessions can be classified as having sexual, blasphemous or aggressive themes. The person resists the obsessions by attempting to ignore or suppress them, or to 'neutralise' them with some other thought or action. They are not simply worries, they are out of keeping with the person's character and they are resisted. The obsessions interfere with normal functioning, and the person knows that they are a product of his or her own mind.

For example, it is not uncommon in OCD for deeply religious people to have repeated blasphemous thoughts such as 'God doesn't exist', or for caring parents to have thoughts of harming their children. One devoted, loving mother regularly had the frightening image of throwing her baby down the stairs, and a recurrent fear that she might have unknowingly sexually abused the infant.

In the majority of clinical samples, obsessions are accompanied by compulsions. Compulsive behaviour takes the form of repetitive physical or mental acts that people feel driven to perform, either in response to the obsession or according to certain rules. They recognise these acts as unreasonable or excessive, but they see them as purposeful.

The function of the compulsion is to prevent a dreaded event and to reduce their distress. But either it is not connected in a realistic way with the event or it is excessive. Many people find the need to perform compulsive behaviour to be distressing in itself. They will often be frustrated by the time that it takes to complete the compulsion 'correctly' and the interference caused to normal social and work functioning.

The most common examples of compulsive behaviour are checking and washing. For instance, a man with OCD had the unwanted obsessional thought that he had contracted AIDS from sitting next to someone who looked unkempt. In response to this thought, he repeatedly checked his body for signs of ill health and washed his hands whenever he had an intrusive image of this person.

When outside, he would continually check around him to see if there were any discarded tissues that could potentially carry the HIV virus. This became so laborious that he remained indoors for much of the time. Any interruption to the checking or washing led to the entire routine beginning again.

For some, hand-washing is so extreme that they wash their hands in disinfectant or bleach.

Behavioural theory

A series of classic experiments conducted in the 1970s showed that anxiety played an important part in the maintenance of OCD (see Rachman & Hodgson, 1980). Specifically, it was shown that obsessions elicited anxiety and compulsions alleviated it.

It was argued that the reduction of anxiety reinforced compulsive behaviour according to normal learning processes such as conditioning (Rachman & Hodgson, 1980). It was also argued that the compulsion produced only a temporary reduction in the anxiety. So when the anxiety started to increase again after a relatively short period, the person was motivated to repeat the compulsive act.

Based on this theory, the behavioural treatment comprised exposure to the stimulus that elicited the obsession and preventing the compulsive response (exposure and response prevention). For example, the man with a fear of AIDS contamination described above was asked to touch the tissue (exposure) and then to refrain from washing his hands (response prevention).

The theory explicitly suggested that abnormal obsessions could develop from normal intrusive thoughts. And, indeed, it was shown that 90 per cent of the normal population do have unwanted, intrusive

ulsive disorder

thoughts with the same content as people with OCD (Rachman & de Silva, 1978; Salkovskis & Harrison, 1984). These intrusive thoughts had the same content as obsessions but were easier to dismiss, less frequent and less distressing than the 'abnormal obsessions'.

Such normal obsessions included: the thought of harm befalling a loved one; the impulse to do something (e.g. shout or throw things) to disrupt the peace at a gathering; the image of a parent lying dead; and the impulse to jump off the platform in front of an approaching train.

Cognitive-behavioural theory

The finding that 90 per cent of the normal population have unwanted intrusive thoughts led to the important question: Why do *abnormal* obsessions develop and persist?

Drawing on cognitive theory (Beck, 1976), it has been suggested that obsessional problems occur when people interpret the occurrence or content of unwanted intrusive cognitions as indicating they may be, or may have been, or may come to be, responsible for harm or its prevention (Salkovskis, 1985; Salkovskis *et al.*, 1998).

In this context, the 'responsibility' interpretations made by people with OCD are defined as:

> *The belief that one has 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 *et al.*, 1996.)

A person's specific interpretations of the intrusions in terms of his or her responsibility are hypothesised to elicit distress and compulsions (Salkovskis *et al.*, 1998). For example, a man had the normal intrusive thought about his son being injured in an accident. Once this thought occurred, he interpreted it as a sign that his son was in danger and that it was up to the man to try to protect him.

As a consequence, he formed a precise visual image of his son being safe and happy. As with the behavioural model, the apparent effectiveness of compulsions in reducing anxiety is suggested to reinforce compulsive behaviour.

Later work has supported the hypothesis that compulsions, avoidance and other behaviour — such as attempts at suppressing the obsession — paradoxically serve to increase the obsessions' frequency (Salkovskis *et al.*, 1997; Wegner *et al.*, 1987). These obsessions subsequently increase the compulsive behaviour, leaving the person trapped in the vicious obsession-compulsion cycle.

Study of responsibility

During the course of my doctoral work, empirical data from other researchers were emerging that supported the cognitive-behavioural hypothesis: that appraising normal intrusions as indicating potential responsibility for harm or its prevention plays a central role in the maintenance of OCD (Ladouceur *et al.*, 1995; Rhéaume *et al.*, 1995).

One study had manipulated responsibility and found that in the high responsibility condition, people with checking compulsions had stronger urges to check, had more discomfort and made higher estimates of the probability of harm than in the low responsibility condition (Lopatka & Rachman, 1995).

One of the aims of my thesis was to investigate the cognitive-behavioural hypothesis on the importance of responsibility. In addition to its theoretical importance, the hypothesis has treatment implications. These implications include modifying the interpretation of intrusive thoughts and modifying beliefs about responsibility through discussion techniques and behavioural experiments. Such interventions have been shown to be effective (Freeston *et al.*, 1997).

Given the theoretical and therapeutic importance of perceived responsibility, one of the studies in my thesis aimed to investigate the effects of manipulating responsibility in people with OCD. Specifically, we aimed to manipulate responsibility using an ecologically valid method and to explore whether there were differences in the effects of the responsibility manipulation depending on the nature of the compulsions.

The method chosen arose from the clinical observation (Rachman, 1976) that some checking behaviours could not be elicited if the person was in the presence of someone that she or he trusted (spouse or therapist). It was observed that 'most checking rituals are carried out when the person is alone … the rituals are most intense when a person feels responsible for the act concerned' (Rachman, 1976, p.270).

The cognitive-behavioural formulation accounts for these observations well — when the person is alone, he or she may feel more responsible for a negative outcome than when someone else is

present. Hence, the high responsibility condition involved carrying out the task to elicit the obsession when the person was alone; and in the low responsibility condition the same task was done in the presence of the experimenter.

Thirty-six volunteers recruited from self-help groups and media advertisements agreed to participate, met diagnostic criteria for OCD and had complete data sets. It was a within-participants experimental design. The manipulation of responsibility was effective: participants perceived themselves to be more responsible for harm when they were alone than when they were in the presence of the experimenter.

The participants also found that they had a stronger urge to perform the compulsive behaviour, more discomfort and higher estimates of threat when they were alone (high responsibility condition) than in the presence of the experimenter (low responsibility condition). There was no difference in their perceived responsibility for their thoughts in the two different conditions.

Within each condition, the more they felt they were responsible for the threat, the greater their anxiety and the stronger their urge to perform compulsive behaviour.

The responsibility manipulation did not have different overall effects according to the type of compulsion (checkers, cleaners and others). However, the urge to behave compulsively elicited by the exposure did differ between the groups and was highest in cleaners.

In summary, these results confirmed that obsessive-compulsive complaints depend on perceived responsibility for threat, and thus provided support for the cognitive-behavioural model of OCD (Shafran, 1997).

Further development of cognitive-behavioural theory

The different types of interpretations that people with OCD place on their normal, unwanted intrusive thoughts have proved a fertile area for study. As well as the issue of responsibility, it has been suggested that people with OCD appraise their intrusions as meaning that they are 'mad, bad or dangerous' (Rachman, 1997), and that such interpretations increase the range and seriousness of potentially threatening stimuli.

For example, one woman interpreted her intrusive thought about accidentally poisoning her mother as indicating that the woman secretly wished to poison her mother and would act on this thought if left alone with her.

People may be particularly frightened by the apparent lack of control that they have over their intrusions (Purdon & Clark, 1994). For instance, one woman believed that if she could not control the occurrence of her thoughts that she had inadvertently touched someone in a sexual area, then this meant that she:

- was going mad
- was unlikely to be able to control her behaviour
- probably had been unable to control her behaviour in the past
- probably had accidentally touched someone inappropriately.

An international working group is currently devising measures to identify the interpretations that people place on their intrusive thoughts across different domains (Obsessive Compulsive Cognitions Working Group, 1997), since this has implications for treatment.

For instance, the belief that the high frequency of the thoughts is a sign of impending madness can be challenged by demonstrating that suppressing thoughts paradoxically increases them.

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Another interpretation with specific implications for treatment is appraising intrusive thoughts as equivalent to actions. For example, one woman believed that if she had an image of her daughter lying dead, then it was as though she was 'tempting fate' and increasing the chance that her daughter would die. This particular interpretation has been called 'thought–action fusion' (TAF) (Rachman, 1993) and is closely connected with perceived responsibility for harm.

Developing the concept of TAF, devising an assessment measure and investigating it in a clinical sample were the aims of the second study in my thesis, which was conducted jointly with Canadian colleagues (Shafran *et al.*, 1996).

Thought–action fusion

TAF had been described as 'the psychological phenomenon in which the patient appears to regard the obsessional activity and the forbidden action as being morally equivalent' (Rachman, 1993, p.152). Preliminary psychometric evidence for TAF (Rachman, *et al.* 1995) led to the concept being developed more fully.

TAF was suggested to have two components. The first, likelihood TAF, refers to the belief that thinking about an unacceptable or disturbing event makes it more likely to happen in reality.

For instance, if a husband experiences an intrusive thought of his wife being in a car accident, he is likely to feel that his wife is at greater risk of having a car accident, *because* he has had the thought. As he has placed his wife in danger, he feels that it is his responsibility to prevent harm coming to her, perhaps by mentally 'neutralising' the thought.

The second component is moral TAF; this refers to the interpretation of obsessional thoughts and forbidden actions as *morally equivalent*. The person feels that his or her unacceptable thoughts, images or impulses are (almost) as bad as the event.

For example, if a mother experiences the intrusive thought that she is going to harm her child, she is likely to feel (almost) as morally responsible as if she had harmed her child in reality. It is possible that the mother interprets such an intrusion as revealing her 'true' nature: that is, 'only wicked people have this type of thought; I am wicked' or 'perhaps I really want to do this; I am wicked'.

The construct of TAF was originally derived from observing particular obsessional-compulsive phenomena. For instance, a religious woman, while praying, experienced

People may be particularly frightened by their apparent lack of control over intrusive thoughts — such as a religious person having sexual thoughts about Jesus

intrusive images of having sexual relations with Jesus. She believed that she had sinned against God by having such an image, and was therefore an immoral person.

A father experienced the intrusion that he was going to harm his son while dressing him. The father regarded this as meaning that he was a wicked paedophile who was unsafe to be left alone with children because he was liable to harm them.

A woman had the recurring intrusive image of her mother being in a car accident. When a car hit her mother, the woman believed that her 'bad thoughts' had contributed to the occurrence of the accident.

Although at first reading TAF may seem strange or unusual, consider for a moment whether you would be willing to write the sentence: 'I hope … [loved one] dies in a car accident tomorrow.' Many people — the majority perhaps — would find it distasteful and would consider that such actions might serve to tempt fate. Again, the point is that normal processes are contributing to the maintenance of OCD.

The second study in my thesis developed a questionnaire to assess TAF (Shafran *et al.*, 1996). The questionnaire was found to have good reliability and validity. The subscale assessing likelihood TAF was found to have good predictive validity in a later experiment (Rachman *et al.*,1996).

We found that people with obsessional problems have more TAF than those without obsessional difficulties. There was a significant relationship between TAF and measures of obsessionality, particularly checking. Later experimental work examined the relationship between TAF and urges to neutralise or 'cancel out' the effects of thinking a particular negative thought (Rachman *et al.*, 1996).

The concept that thoughts can influence actions — or are morally equivalent to them — has been well documented throughout history. For example, Bleuler used the term 'omnipotence of thought' to describe the observation that 'the patients also fear that they might destroy their beloved ones through a thought' (Bleuler, 1924, p.561). However, unlike the previous descriptions of this phenomenon, the cognitive-behavioural conceptualisation of TAF has implications for the effective treatment of OCD.

The future

These studies on responsibility and TAF formed part of a series of studies in my PhD. Since 1997, work on the cognitive-behavioural theory of OCD and its associated treatment continues to expand and is being applied to younger populations (Freeston *et al.*, 1997; March & Mulle, 1998; Rachman, 1998; Salkovskis *et al.*, 1998). There are some preliminary data indicating that TAF contributes to the development — not just the maintenance — of obsessions (Rassin *et al.*, 1999).

Neurological and neuropsychiatric theories have also been developed (e.g. Swedo *et al.*, 1998). Reconciling the cognitive-behavioural models and treatments with neurological ones remains a challenge for theoreticians, researchers and clinicians alike.

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