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# Multiple pathways to inflated responsibility beliefs in obsessional problems: possible origins and implications for therapy and research

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## Abstract

The purpose of this paper is to consider the possible origins of an inflated sense of responsibility which occupies an important place in the cognitive theory of obsessive compulsive disorder (Rachman, S. (1993). Obsessions, responsibility, and guilt. *Behaviour Research and Therapy*, 31, 149–154. Salkovskis, P. M. (1985). Obsessional-compulsive Problems: A cognitive-behavioural analysis. *Behaviour Research and Therapy*, 23 (5), 571–583). Clinical experience and consideration of current cognitive conceptualisations of obsessions and obsessive compulsive disorder suggest a number of possibilities, each of which is described after a brief introduction to the concept itself. While there are reasons to believe that some general patterns can be identified, the origins of obsessional problems are best understood in terms of complex interactions specific to each individual. © 1999 Elsevier Science Ltd. All rights reserved.

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## 1. Introduction

Cognitive approaches to obsessional problems are based on the notion that the negative interpretation of intrusive thoughts, images, impulses and doubts are crucial both to the

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experience of distress and to the motivation of behaviour such as neutralising, thought suppression, reassurance seeking and avoidance (Freeston, Rhéaume, & Ladouceur, 1996; Freeston, Ladouceur, Rhéaume & Léger 1998; Rachman, 1993, 1997, 1998; Salkovskis, 1985, 1989a, 1996).

Data are accumulating consistent with the hypothesis that beliefs concerning responsibility for causing or preventing harm to oneself or others plays a critical role in the *maintenance* of compulsive checking and other forms of obsessional neutralising behaviour in obsessive compulsive disorder (OCD). More specifically, people suffering from obsessional problems appear to have an enduring tendency to make negative interpretations of intrusions. This cognitive theory of obsessions also suggests that pre-existing general assumptions and beliefs concerning such responsibility may be the basis of such tendencies. For example, holding a belief such as “Failing to prevent harm to someone is the same as having caused that harm” is likely to result in that person behaving in an acceptably careful way without being troubled by the extent to their carefulness. However, a critical incident in which the person fails to prevent what they regard as a potentially foreseeable accident could lead the person to blame themselves for the harm, to become yet more hypervigilant for preventable harm, to set themselves even stricter criteria for being sure that they were successful in its prevention and to begin checking in order to prevent this harm. A mild and probably adaptive tendency to be careful thus cascades into an obsessional disorder.

Another example would be the firmly held belief that “thinking about doing something unacceptable is as bad as actually doing it”. Again, this belief need not necessarily lead to distress in itself. However, if that person starts to experience intrusive thoughts of harming their children, it is likely that they would be particularly distressed by them and likely to attempt both to prevent the thoughts and to neutralise or counterbalance their intrusions. This hypothesis suggests that it may be possible to identify factors which predispose to the *origins* of obsessional thinking and behaviour, in terms of the formation of such general assumptions.

## 2. Responsibility in OCD: nature and origins of the cognitive theory

In a crucial early series of experiments, it was demonstrated that when obsessional fears are experimentally elicited compulsive behaviour usually has the effect of substantially and rapidly reducing discomfort. However, it was also demonstrated that the *prevention* of compulsive behaviour resulted in the rather slower spontaneous decay of discomfort. These experiments (Roper, Rachman, & Hodgson, 1973; Rachman, 1976) formed the basis of Exposure and Response Prevention (ERP), the best validated psychological approach to the treatment of obsessional problems. In these experiments, it was also noted that it was harder to elicit discomfort in subjects with checking compulsions. The explanation offered by the subjects was that the presence of another person, especially someone in a responsible position, inhibited discomfort since any responsibility for harm will lie with the experimenter.

In a detailed cognitive analysis of OCD, Salkovskis (1985) emphasized the significance of inflated responsibility. It was suggested that: (i) it was the *appraisal* of the intrusions noted as

prominent in obsessional problems which was the source of discomfort, distress and neutralising behaviour in OCD; (ii) that the occurrence of both persistent discomfort and neutralising behaviour (including covert neutralising) distinguished normal intrusions from obsessional disorder; and (iii) that neutralising occurred as a result of the person interpreting the occurrence and/or content of intrusions as indicating that they might be responsible for unacceptable and preventable harm to themselves or other people.

The suggestions made by Salkovskis (Salkovskis, 1985, 1989a,b; Salkovskis & Warwick, 1988) concerning the formation, development and activation of exaggerated beliefs concerning responsibility drew on Beck's (1976) cognitive theory of emotional problems. The hypothesis specified that

“particular types of intrusive thoughts will interact with beliefs of responsibility in “oversocialised” individuals. These are the people described by Rachman and Hodgson (1980) as being ‘of tender conscience’ and therefore especially sensitive to ways in which intrusive thoughts might infringe upon their strict moral beliefs, and as being particularly likely to try to correct any infringements” (Salkovskis, 1989b, pp.53–54).

The cognitive theory of the *development* of obsessional disorder therefore suggests that, as a result of prior experience, the individual develops particular assumptions. These assumptions may be self-evidently problematic or may initially appear to be innocuous. At some later time, the occurrence of a particular critical incident or series of such incidents has the effect of activating the assumptions, leading to appraisals linked to responsibility for harm by what is done or not done. Such critical incidents are defined as events or situations which activate previously “silent” assumptions (usually, this means that critical incidents “mesh” with beliefs; e.g., the incident or situation fulfils the conditions inherent in the assumption). For example, the birth of a child would have such an effect in someone who believes that they should take *every possible precaution* to ensure that they do not cause or risk harm to those who cannot protect themselves. The development of attempts to resist, to avoid and to neutralise (also regarded as linked to such assumptions) triggers maintenance cycles as described by the theory (Freeston et al., 1998; Salkovskis, 1989a; Salkovskis, Forrester, & Richards, 1998b; Rachman, 1997).

The type of threat appraisals which generate anxiety are determined by the multiplicative interaction between the perception of the likelihood of danger and the perception of how awful such danger would be if it were to happen (Salkovskis, 1996). Thus, someone who believes that a particular dangerous outcome is very unlikely but particularly horrible would be extremely anxious. If a person believes that causing some harm is personally acceptable (“you can’t make an omelette without breaking a few eggs”), the idea that they may cause harm would not be a totally unacceptable consequence. By contrast, the person who believes that risking harm to others is unacceptable (“you shouldn’t make an omelette if you can’t do it without breaking eggs”; “your sins will find you out”) will be particularly sensitive to ideas of causing harm. The latter is typical of obsessional patients, who often describe fears of highly improbably but extremely catastrophic outcomes. This suggests that general assumptions which lead to inflated awfulness estimates are likely to predispose to obsessional problems.

### 3. Present status of the cognitive theory of obsessional problems

The cognitive hypothesis has been considerably elaborated over the last decade and has received empirical support from psychometric studies (Freeston, Ladouceur, Gagnon & Thibodeau, 1992; Rhéaume, Ladouceur, Freeston, & Letarte, 1995b) and experimental evidence (Lopatka & Rachman, 1995; Shafran, 1997; Ladouceur, Rhéaume, Freeston, Aublet, Jean, Lachance, Langlois, & DePokomandy-Morin, 1995; Ladouceur, Rhéaume & Aublet, 1996). It has been indicated that clinically, progress occurs when the element of responsibility is incorporated into cognitive case-analyses (Freeston et al., 1996; Ladouceur, Léger, Rhéaume, & Dubé, 1996; Salkovskis, 1989b; Salkovskis & Warwick, 1988; Salkovskis & Kirk, 1997; van Oppen & Arntz, 1994; van Oppen, de Haan, van Balkom, Spinhoven, & van Dyck, 1995).

Recently, the appraisal of responsibility that characterises obsessional problems has been more tightly defined as:

The belief that one has power which is pivotal to bring about or prevent subjectively crucial negative outcomes. These outcomes are perceived as essential to prevent. They may be actual, that is having consequences in the real world, and/or at a moral level (Salkovskis, Rachman, Ladouceur, Freeston, Taylor, Kyrios, & Sica, 1996).

This definition was devised in order to decrease ambiguity which may arise from the use of the term “responsibility”, because the theoretical construct is not entirely identical to everyday usage. For example, the definition given here encompasses beliefs concerning the consequences of omissions (e.g., failing to prevent harm that might not be easily foreseen) and the perception that one may lose control of one’s thoughts or behaviour in some potentially harmful way.

An inflated sense of responsibility can take various forms. It can be too extensive, too intense, too personal and too exclusive—or all of these (Rachman, 1993). Inflated responsibility is not intrinsically pathological (Rachman, Thordarson, Shafran, & Woody, 1995) since there is far more responsibility than there is OCD; however, extensive and inappropriate appraisals of responsibility can lead to extreme behaviour in which the affected person “confesses” to crimes or accidents of which they have little or no knowledge. People who are prone to inflated responsibility may be inclined to experience considerable guilt, not only for their own actions but even for those of other people.

It has thus been suggested that this (mis)appraisal of responsibility is the driving force for various forms of compulsive activity, notably compulsive checking, which is usually carried out in anticipation of some misfortune that might bring harm to other people. In circumstances in which they feel a high degree of responsibility, affected people feel compelled to check repeatedly the security of situations. A subtle and complex variation of inflated responsibility arises from the associated operation of the phenomenon known as *thought–action fusion* (Shafran, Thordarson, & Rachman, 1995). This phenomenon, which is encountered in some people suffering from OCD, is a cognitive bias in which the person comes to believe that at least some of their unwanted intrusive thoughts are the moral equivalent of the repugnant actions which feature in their thoughts. A second form of thought–action fusion is the belief that merely having the noxious thought increases the probability of harm coming to people who feature in the thought. For example, if a person with OCD experiences recurrent

obsessions in which relatives are involved in horrific accidents they come to feel and believe that having experienced this unwanted thought puts the relatives at increased risk of being injured in an accident.

The hypothesised role of inflated responsibility has been subject of some recent experiments in which the subject's sense of responsibility is deliberately manipulated in a way to increase or decrease this sense for experimental purposes. The elevations or decreases in responsibility often are difficult to negotiate with OCD subjects, but when the manipulation succeeds, the resulting psychological effects are highly significant. For example, Lopatka and Rachman (1995) found that subjects with OCD experienced a steep decline in compulsive checking urges when they transferred their sense of responsibility for the anticipated consequences of their actions to an experimenter. An increase in responsibility was followed by an increase in the urge to check, but this effect was not as large, presumably because of a ceiling effect. Comparable results were obtained by Shafran (1997) who found that manipulations of inflated responsibility, up or down, were followed by similar changes in psychological state and compulsive urges, with some differences that were minor. Other examples are provided by Ladouceur et al. (1995, 1996) who found significant increases in compulsive checking corresponding to increases in the sense of responsibility for the outcome of one's action.

It is of note that the bulk of theoretical and empirical work on the cognitive theory of obsessions has focussed on maintenance factors. This is appropriate, given that such factors have particular implications for treatment, and that experimental and psychometric studies can more readily be carried out on them. However, the theory also has a range of specific implications for the origins of obsessional problems, which are elaborated in the next section.

#### **4. Origins**

Given the growing experimental evidence supporting the hypothesis that inflated responsibility plays an important role in OCD, and the increasing use being made of the concept by therapists seeking to treat patients with OCD, one is bound to ponder the origin and sustenance of this inflated sense of responsibility. How do distorted and inflated beliefs about responsibility develop and evolve? The general cognitive theory of emotional problems as described by Beck (1976) proposes that childhood and/or adolescent experience is crucial to the formation of many attitudes which become dysfunctional later in the person's life. Such experience may involve longer term socialisation into the acceptance of particular beliefs, or the beliefs can occur as a result of discrete or sustained traumatic events.

If it is possible to identify such factors in obsessional problems, it may be that this information can be used in therapy or to devise prevention programmes. At present we have little to depend on other than extrapolations from the main cognitive theory and the information accumulating in case reports; as yet, there are no systematically collected data on the origins of negative beliefs in obsessional problems. Clearly, the evolution of such beliefs is likely to be a subtle and interactive process taking place over many years in ways which are hard to detect. What is proposed here is a set of more obvious patterns which are likely to be relatively easy to detect on the basis of retrospective self report. Factors which may be involved in further inflating levels of responsibility will then be identified.

These possibilities include: (1) An early developed and broad sense of responsibility for averting threat that is deliberately or implicitly encouraged and promoted during childhood by significant figures and circumstances, leading to enduring and “justified” beliefs about the importance of a sense of responsibility; (2) Rigid and extreme codes of conduct and duty; (3) childhood experience in which sensitivity to ideas of responsibility develops as a result of being shielded from it; this may include over indulgence, and/or may be the consequence of the implication or declaration of incompetence by those around the child; (4) a specific incident or series of incidents in which actions or inaction *actually* contributed in a significant way to a serious misfortune which affects oneself or, often more importantly, others and (5) an incident in which it wrongly *appeared* that one’s thoughts and/or actions or inaction contributed to a serious misfortune. Each of these points are illustrated by clinical examples. The reader is, however, reminded of George Mandler, who pointed out that the plural of case studies is not empirical data; the purpose of the illustrations used here is to clarify the concepts with reference to actual clinical cases seen by the authors rather than to provide evidence for their importance.

#### *4.1. An early developed and broad sense of responsibility that is deliberately or implicitly encouraged or promoted during childhood*

Some children or adolescents may be obliged to assume actual responsibilities at an unusually early age as a consequence of incompetent parenting, leading the child to take responsibility for the welfare of siblings or even the parents themselves. In a related but slightly different pattern the child may, as a result of parental communications, believe that they are responsible for negative consequences over which they have little or no control; i.e. the child is consistently scapegoated for negative occurrences or circumstances whether or not they are in fact responsible. For some children, the parent will identify a “rational” basis for such scapegoating (“look what you made me do now”). It seems likely that this latter pattern will be associated with thinking errors such as:

**“influence = responsibility”.**

We suggest that people who have these types of upbringing are likely to develop and accept a wide sense of responsibility and are inclined to translate it into a high degree of conscientiousness, marked by a dedication to work and an acute sense of social obligations. If they fail to meet their absorbed standards of responsibility, this can lead to a sense of failure, disappointment and guilt. “Failures” of this kind can be caused by overload, particularly when the person is unable to cope with the addition of new demands on top of already heavy responsibilities. Much of the behaviour that is driven by the sense of responsibility is directed towards the prevention of anticipated mishaps rather than a deliberate promotion of good fortune.

This trained sense of responsibility is of early onset and can be illustrated by particular case histories. The social life of a patient was impaired by high levels of tension and anxious expectation that she might not do exactly the right thing, and by the additional possibility that her guests might not be enjoying themselves. She felt responsible for ensuring that everyone in her company, whether they were guests or not, was feeling contented. If someone appeared to be upset at any of these social gatherings, she attributed the blame to herself and experienced

consequent agitation and guilt. The origin of this elevated sense of responsibility could be traced to her upbringing as she was the eldest of three children of a single mother who was obliged to work much of the time. As a result, the patient had, from an early age, literally been given responsibility for protecting and caring for her younger siblings, and this by a mother who was herself under considerable strain and persistently anxious. The father suffered from alcoholism and finally left. The mother had to raise the children and earn a (modest) living by working long hours. The mother emphasised to the patient that it was up to her to act as a “substitute mother” during her mother’s long absences at work. In the second case, a middle-aged man who was heavily engaged in all kinds of charitable work, complained of the burden of all of his self-imposed social obligations. Unable to cope to a degree which met his own extremely high standards, he began to feel increasingly depressed and the associated OCD symptoms increased. He traced the development of his inflated sense of responsibility to a turbulent and unhappy childhood in which he had been obliged to defend and protect his unassertive mother from the unpredictable and often objectionable behaviour of his alcoholic father. He recollected how as a young schoolboy he regularly turned down invitations from other youngsters to join in sports and other activities because he felt compelled to return home as soon as possible in order to ensure that his mother was safe and to protect her if necessary from the aggression of the father, who worked irregular shifts and often was home during the day. In a third instance, a 49 year old woman with extreme cleaning and ordering rituals was the eldest of 9 children; she recalled that “my mother was always pregnant, my father was always drunk, and I was always to blame”. Her earliest recollection of “ordering” was tidying her corner of a shared bedroom, then backing out of the room with eyes firmly fixed on the tidiness, resolving that she would not be like her mother when she grew up. From a very early age she was punished for “failures” and “irresponsibility” when problems occurred in the household and with her siblings. Her mother’s attitude tended to be reproachful when things went wrong, her father’s was unpredictable, varying from indifference to abusive. In later life, she became highly successful and affluent. In therapy she expressed the fear that stopping cleaning her (immaculate) house would result in her sliding into the kind of chaos she had experienced as a child. The fear of this happening had not only driven her cleaning compulsions, but also led her to decide not to have children of her own, something she now bitterly regretted.

#### *4.2. Rigid and extreme codes of conduct and duty*

The second type of influence is similar to the first, in that it concerns the development of a set of attitudes which provide rules concerning standards of thinking and behaving. Although family situations appear to be a particularly likely implicit and explicit influence on responsibility attitudes, other influences may have the same effect. Strict behavioural codes inculcated by respected authoritarian or authoritative sources such as school and clergy can also lead to the development and the reinforcement of attitudes about responsibility in some people. For both educational and religious institutions there is also the explicit possibility of blame, guilt and punishment, worldly or divine. In many countries, primary and secondary education has been or is provided by religious institutions; teachers are often members of religious orders. A number of patients have reported the role of priests in developing attitudes

about, for example, moral thought–action fusion that can go beyond obsessions of religious content. The commonest manifestation of such religious beliefs triggering obsessional problems is the clinically often observed phenomenon of “sin by thought”. Some instances are less direct but equally obvious. For example, a woman had difficulty eating or drinking because she would have the thought “this is the flesh of the devil” or “this is the devil’s blood”. She had a strict Roman Catholic upbringing, and retained strong religious beliefs. In particular, she believed that transubstantiation was a real physical and metaphysical phenomenon; that is, she believed that, with the right ceremony and intention, the wine and bread became the blood and body of Christ. At the outset of her obsessional problem, it had occurred to her that, if transubstantiation could occur in the way she had been taught, food and drink combined with thoughts of the devil might be transformed in an altogether more unpleasant way. She had sought to exclude any thought of the devil and related matters, but had (probably as a consequence) been increasingly beset by these intrusions and therefore had to dispose of ever increasing amounts of food and drink. It was notable that numerous discussions with priests had not helped matters. Of course, many people have been exposed to these same influences and most have emerged without developing an inflated sense of responsibility. Also, there does not appear to be any particular religion implicated, but rather the effects seems to arise through the extreme nature of teaching or the extreme interpretations made by the person taught (although there is weak evidence that, in a western/christian ethos student sample, Catholics scored higher on the Padua Inventory, a measure of obsessional symptoms; Hutchinson, Patock-Pekham, Cheong, & Nagoshi, 1998). We have seen patients in whom religious beliefs have been the focus of obsessional concerns from almost all Christian traditions as well as from the Islam and Judaism. It is important to note that therapy should never involve undermining willingly held religious beliefs, although clarification of the implications of the religious beliefs may be important and helpful (see Salkovskis, 1989b).

#### *4.3. Childhood experiences where sensitivity to ideas of responsibility develops as a result of never being confronted by it*

The third route to the development of an inflated sense of responsibility for harm can arise from a childhood in which worries are prominent in the family milieu. This may sometimes involve a pattern of over indulgence. Responsibility is explicitly or implicitly (but obviously) withheld from the child by the parents. The parents are likely to be excessively anxious and fearful themselves, and to convey a sense that danger is “just round the corner” as well as the notion that the child may well be incompetent to deal with such danger were it to materialise. In some cases the parents may even model some behaviour that resembles compulsions. The child is likely to develop beliefs such as “Prevention is better than cure”, “Better safe than sorry” or as they say in Greece, “It is better to tie up one’s donkey than to chase it” (G. Simos, personal communication, June 1997). Such individuals may have great difficulty in leaving home and when they do so, are unprepared to cope with the difficulties and “dangers” of the outside world. Leaving home is usually marked by the emergence of OCD symptoms in those who have not already developed the problem. Given their lack of preparation these people find the accretion of obligations and responsibility tiring, burdensome, and often frightening. As a result, they too can develop a sense of failure and consequent demoralization,

sometimes leading to a return to the safety of the home. In these cases, the parental over-protection is combined with continual parental oversight and repeated criticism for failures to take necessary precautions in dealing with potential hazards. In one instance, a 32-year old patient with OCD described how carefully she had been over-protected by critical parents who delayed her departure from the parental home for as long as possible. The patient married at the age of 28 but immediately found the responsibility and demands of a marital relationship to be unbearable: she was also incapable of taking responsibility for participating in the running of the home. The marriage ended within six months and she returned to the safety of her parental home. Prior to the marriage she had developed compulsive checking of her hair, clothing and also of the stove, doors and windows in the house (these checking activities were conducted mainly within the parental home). When she married and moved to her own apartment the compulsive checking was exacerbated and occupied much of her waking day. After the failure of the marriage and the return to the parental home, the compulsive behaviour abated somewhat but remained a significant clinical problem. Another patient presented with obsessional checking, focussing both on his work (checking for errors) and home (door, gas, electric appliances). A major theme of his childhood was the idea that he was “delicate” and “not quite up to difficult things”, and that he should not be subject to stress, as he would not be able to cope. He trained as a architect, taking three years longer than usual, largely as a result of his obsessional problem. On qualifying, he obtained a job as a draughtsman rather than as an architect, and would check his drawings with his father, who would go over them with him and provide reassurance, but was frequently critical of his “untidiness”.

#### *4.4. An incident in which one's actions or inaction actually contributed in a significant way to a serious misfortune which affects oneself or others*

A fourth possibility is that inflated responsibility can arise in a sudden fashion after a critical incident, usually one in which misfortune has catastrophically affected the health or welfare of other people. An important element here is the strong belief that one played a crucial role in bringing about the occurrence, or should have done so in its prevention. It is important to note that the perception of a “near miss” or “lucky escape” can have the same effect if the person believes that the catastrophe was only averted by unlikely circumstances or good luck. This type of inflated responsibility, in the absence of the factors described above, tends to have specific and circumscribed parameters and to be of relatively later onset. It is illustrated by a young doctor who had been brought up by over-protective parents who expected high standards of conduct from him. He was bright and managed the demands of medical school, albeit with some psychological difficulty in the form of prolonged tension. When he began to do his clinical internship however, he made a prescription error that might have harmed the patient concerned but which fortunately, did not have any adverse effects. The error was detected by the patient's clinical supervisor who became extremely critical and even hostile. In order to protect himself from possible criticism or worse, the clinical supervisor forced the intern to falsify the prescription record. Understandably this undermined the intern's confidence and increased feelings of his guilt. Shortly thereafter he noticed that he was spending an inordinate amount of time checking the details of each prescription. Repetitive

checking then spread to all his other duties. Weighed down by his steeply inflated feelings of responsibility, especially in his clinical role, his mood deteriorated and his compulsive behaviour ultimately made him unfit for work. He changed to another profession and although his acute and inflated sense of responsibility continued to trouble and inconvenience him, he partly succeeded in protecting himself by avoiding virtually all situations in which he would have any significant responsibility, particularly if it involved the possibility of harm coming to someone else. Another patient forgot to turn the television off before going to bed. She woke to smoke and flames, and escaped with her daughter, thinking her husband to be working a night shift. She then noticed his car outside the house, which by then was engulfed in flames, and presumed him to be inside. Two hours later, he returned from work, his car having broken down. The patient subsequently learned that the fire was caused by the TV overheating, and developed obsessional checking within days.

Salkovskis, Forrester, Richards, & Morrison (1998a) refer to another case where actual events had contributed to the person's obsessional fears.

“Sarah was referred with obsessive ruminations about strangling her baby son. Two events from her childhood gave her a strong conviction that she was a potential source of harm to others. When Sarah was two years old, her parents fostered a baby girl. Sarah was told by her mother that she came into the room and found Sarah trying to smother the baby with a pillow. Although Sarah has no memory of the actual incident, she remembers being told this frequently by her mother and having the tale repeated many times to others, both within the family and out. She has no idea whether she had been actually trying to do this or whether that was the way her mother chose to interpret the situation. Later, when she was almost 5 years old (just before she started school), she remembers playing with a neighbour's dog and throwing a stick into a lake for it to fetch. The dog went in and drowned. She recalls standing with the neighbour, both of them in tears. These events appear to have fuelled her belief that she could be a potential source of harm to others.”

#### *4.5. An incident in which it appeared that one's thoughts and/or actions or inaction contributed to a serious misfortune*

A further possibility is that an inflated sense of responsibility can arise from an incident or set of incidents that is in fact coincidental. This can happen, for example, when a child angrily wishes an adult dead; soon afterwards the adult, by unfortunate coincidence, actually dies. Tallis (1994) has described two case examples of the way such learning experiences may contribute to responsibility feelings and the origins of OCD. Even if the person comes at a later point to recognise that the episode was indeed coincidental and not causal, this may not be sufficient to deflate the exaggerated sense of responsibility, probably because the attitude becomes embedded in the person's general belief system. People who are prone to the cognitive bias of thought–action fusion are the ones who are most likely to experience inflations of responsibility in this way, although it is by no means confined to this type of problem. It is further suggested that this form of late onset of inflation of responsibility tends to occur during

periods of general stress, most likely accompanied by a period of depression. This type of onset can be illustrated by a patient whose already well-developed sense of responsibility was rapidly inflated after an incident in which the misfortune, it turns out, was coincidental. The patient had been suffering from recurrent episodes of depression and a moderate degree of inconvenience from his compulsive and repetitive checking activities. In an attempt to obtain relief from accumulating stress at work and repeated disappointments over their inability to have a child, the patient and his wife took a holiday in the country. His wife was pregnant at the time, having had four miscarriages, all of which had taken place in less than three months from the start of the pregnancy. On the occasion in question, she had just passed the three month point when he accidentally drove over a pothole on a rural road. He and his wife were both jarred by the unexpected bump but neither suffered any bruising or injury. Unfortunately his wife lost the baby three days later, and although advised to the contrary by the obstetrician, the patient attributed this latest miscarriage to his “irresponsible” driving. He continued to feel upset and guilty over the event for a number of years, even though he had accepted the obstetrician’s view that the bump in the car had nothing to do with the fifth miscarriage. After the incident his sense of responsibility intensified and he became excessively cautious about all sorts of everyday activities, but particularly those pertaining to his wife’s health and welfare. When seen initially, his inflated responsibility had grown out of control and his compulsive checking behaviour seriously interfered with his ability to earn a living. Another patient recalled that, at age 16, she saw her brother waiting outside her workplace, and thought “my Dad has died”. This was indeed so, and she took this as evidence that her thinking of him dying was connected to his actually dying, either as a premonition or as an actual cause. From then on, she unsuccessfully tried to avoid having any thoughts of harm coming to those she cared for, and developed extensive neutralising. Questioning indicated that her father had been seriously ill for days, and her brother never met her from work, two facts that she had overlooked in her anxiety.

These five possibilities are not mutually exclusive, but can overlap to a considerable extent. The fourth and fifth factors may act as the origins of key beliefs, but also be critical incidents for people in whom a previous vulnerability is present. There are also a number of factors that can contribute to inflating responsibility even further and may occur at any point in the persons history. These factors include criticism, increases in levels of responsibility, and additional experiences of the type described in Section 4.4 and 4.5 above.

## **5. General and interacting factors**

### *5.1. Criticism and blame*

An experience of systematic criticism and/or scapegoating may contribute to the development of an inflated sense of responsibility. The criticism may be parental in origin, or may occur at school. It may also occur later in life at work or in the context of marriage. It is postulated that criticism will increase the subjective cost of being responsible, for example, “If I make a mistake, people will blame me”. That is, there is an additional consequence to not

acting in a responsible manner. Note that this does not imply that criticism alone is sufficient to create an inflated sense of responsibility.

### *5.2. Increased levels of responsibility*

In people who already predisposed, a situational increase in responsibility may lead to an inflated sense of responsibility. There are at least two patterns. In the first, the number of responsible roles gradually creeps up incrementally where the person acquires additional obligations or duties. These obligations or duties may be imposed, but among those who already have a strongly developed sense of responsibility, they may willingly accepted or actively sought out. In the second, the level of responsibility may jump rapidly with a change in circumstances such as leaving home, marriage, the birth of children, or a new job or promotion (see, for example, Neziroglu, Anemone, & Yaryura Tobias, 1992).

### *5.3. Activating or coincidental events*

As stated above, incidents involving real or perceived responsibility or blame for events causing harm, or even near misses, or coincidental events that are interpreted causally, are probably capable of creating an inflated sense of personal responsibility by themselves. However, in combination with the patterns of development discussed above, such events or additional events of these types may further inflate responsibility. Such events have previously been characterised as “critical incidents”. Such incidents would not, in themselves, necessarily trigger obsessional problems. However, these events (they are often, but not only, adverse life events) can combine and “mesh” with pre-existing attitudes and assumptions to trigger responsibility appraisals and the factors which may serve to maintain such appraisals.

Consider the following examples where early-developed styles were combined with inflating factors. In the first case, a 40-year old female secretary had been brought up by fearful and anxious parents who provided a sheltered environment. She left home only in her mid-thirties. Although she had not been exposed to parental criticism, a previous superior had adopted a military-like critical style that “terrorised” the secretarial staff. Shortly before leaving home, her parents had sold a property which was damaged through failure to close the main water supply. The damage resulted in legal action, although she was not personally targeted. The onset of extensive checking behavior coincided with moving to her first home and an increase in responsibility when she was assigned as secretary to a department which handled sensitive information. This example combines an overprotected style since childhood together with at least three factors that could further inflate a sense of responsibility, namely, criticism, a deeply felt vicarious experience of not being careful enough, and two changes in circumstances that sharply increased her level of responsibility. Of course, promotion to a more responsible position and leaving the parental home to go to one’s own home are increases in responsibility that most people accept willingly and do not cause a problem. For this person, however, her previous experience or lack of experience with responsibility made her vulnerable to these increases. It is impossible to know how many of these factors are necessary and/or sufficient in this case. However, all these experiences point in the same direction. Note also that the

Table 1  
Speculations on how the origins of responsibility may be reflected in the subsequent development of OCD

	1. Broad responsibility since childhood	2. Rigid and extreme codes of conduct and duty	3. Over-protective and critical parents	4. Actual incident affecting others' health or welfare	5. Incident which appears to bring about harm but is actually coincidental
Most common critical period for belief to develop	Childhood	Childhood into puberty	Childhood into later adolescence	Adolescence/adulthood	Across ages
Speed of onset of OCD	Gradual	Gradual	Gradual	Sudden	Sudden
Specific identifiable trigger	No	No	Sometimes	Yes	Yes
Association with depression	If criticism and/or guilt involved	Weak	Yes	Yes, via guilt	No, but may predispose
Predicted response to CBT	Below average	Below average	Average	Very variable	Above average
Symptoms likely to be over-represented	Broad based rituals to protect others, including strangers. Ordering and arranging?	Particularly rumination and perfectionism	Specific checking and washing to protect loved ones	Broad checking procedures to protect others' health and welfare	Many checking and idiosyncratic compulsions to protect others, including strangers

development of neutralising (checking) behaviours, selective attention and so on were also crucial to the development of the disorder.

The reader is referred to Rhéaume, Freeston, Léger, & Ladouceur (1998) for further examples of this type. In particular, case 5 describes a person with fearful anxious parents, one of whom was severely critical, also experienced a powerful coincidental event that led to ideas about thought–action fusion. The person later developed severe obsessions around the theme of causing and not preventing harm to others. Further, case 8 describes a man who had been mandated since an early age to look after his family and then acquired a high level of responsibility in his job at a young age. His level of responsibility was resented by co-workers who deliberately played tricks on him which increased the need for checking and led to excessive checking. When he finally asked to be demoted, he resolved to stop checking. On the first day he suffered a serious accident at work which could have been prevented if he had checked.

The likelihood of developing OCD after critical and/or coincidental incidents may be increased in people with an early developed and broad sense of responsibility since childhood, or people raised by over-protective but critical parents. Nevertheless, the phenomenology of the disorder may vary according to the different origins of responsibility. Table 1 speculates on how the different origins of responsibility may be reflected in the form of the disorder.

Two other aspects of inflated responsibility need to be considered. In the first place, the sense of responsibility, inflated or not, tends to be demarcated by personal boundaries. In general it is intensified if the person has a sense of belongingness, and is decreased in “alien” territory. For this reason it is sometimes possible to watch the development of increasing responsibility as the person becomes accustomed to new surroundings and develops a sense of belongingness (e.g., Ladouceur et al., 1996). For example, when patients with checking compulsions are first hospitalized, there is often an initial remission in symptoms as they do not perceive themselves to be responsible for the ward or other patients. However, in time, a sense of belongingness will inflate perceived responsibility and checking behaviour re-emerges after its brief holiday.

One other aspect of inflated responsibility that needs to be addressed is the connection between unwanted intrusive thoughts and personal responsibility. It has been remarked that the sense of responsibility extends beyond overt behaviour to thinking, and if a person is prone to fuse thought and action, the possibilities of an intensification of that sense of inflated responsibility are multiplied considerably. Feeling an intense sense of responsibility for unwanted obsessional thoughts adds an extra and less accessible dimension to the experience of inflated responsibility (see Rachman, 1993). There may also be a further link between the occurrence of intrusive cognitions and the perception of responsibility. Salkovskis (1996) analysed the sensitivity shown by many patients suffering from obsessional problems to worry excessively about potential harm arising from possible omissions. He suggested that this observation actually arose from the occurrence of intrusive thoughts about harm which have the effect of transforming situations which required no decision into situations involving active choice concerning harm prevention. For example, a person who walks over a sharp piece of glass could be regarded as having omitted to render the glass safe. In our daily lives, such situations abound. However, consider the person who walks over a sharp piece of glass and has the intrusion “A child might fall on that and be blinded”. He or she now has to choose

whether or not to seek to avert this possibility, transforming an omission situation into one where a choice has to be exercised (to act or not to act). This corresponds to what is described as a sense of “agency”, which is by definition absent in omissions of the type described above. In a recent experiment carried out by the Oxford group, it was found that non-clinical participants regarded their responsibility and likelihood of acting as being considerably increased by the occurrence of harm intrusions. By definition, many people suffering from OCD will experience such intrusions more frequently than those who do not. This analysis can be extended further to apply to the development of obsessional problems by considering the circumstances under which harm arising from an omission is likely to be regarded as blameworthy. If I see that a donkey is not tied up and walk on, I would not usually be blamed for its escape. However, if my job is to stable donkeys, the situation changes considerably. That is, if I regard myself as having a *duty* to ensure the security of the donkey, then I could reasonably be regarded as being responsible for an omission which led to its escape. This analysis suggests that having a sense of duty to identify and prevent harm (such as by foreseeing all that *could* go wrong in a given situation) is likely to predispose to the development of obsessional problems.

## 6. Clinical implications

The therapeutic implications of present and future work on the origins of OCD and related beliefs are relatively limited. We are not proposing that any particular emphasis should be placed on identifying such factors early in therapy. It is important to note that both behaviour therapy and cognitive-behaviour therapy have made most progress by concentrating on maintaining factors (Salkovskis, 1996). However, it is not uncommon for patients to ask, during the clinical assessment, about the importance of the origins and whether it is possible to deal with the problem without dealing with the “causes”. The following metaphor is helpful for both patient and therapist.

“Imagine you have woken in hospital with a broken leg. You have no recollection of how you broke it. There is no need to know the cause of the fracture in order to mend the break. In fact, the leg usually heals itself; what the doctors do is identify and deal with anything which might slow down or prevent the normal healing process. Once you are back on your feet, however, you might want to consider how the leg got broken. It may have been a complete accident, so that you stumbled and fell for no obvious reason. However, it might be that you tripped because there is a section of loose stair carpet, so that one day soon it will all happen again. If that’s the case, you would want to fix the carpet.” Our experience is that, in some cases, there are general and enduring belief factors which may have made the patient prone to developing OCD, and which do not fully change in the course of treatment, and that it can be helpful to identify and deal with these.

Over the past decade, the version of cognitive therapy developed in Oxford has emphasised the importance of providing the person with a clear, convincing and less threatening alternative explanation of their problem (Salkovskis, 1996; Salkovskis et al., 1998b). Thus, the person who believes that their intrusive thoughts indicate that they could be a child molester is asked to consider the alternative that they are particularly *worried* about being a child molester, and

that they react to these worries in counterproductive ways which have led them to develop obsessional problems. This formulation based cognitive-behavioural approach can, we believe, be enhanced by the clear identification of beliefs and the experiences, situations and critical incidents which have led to and interacted with these to produce their present problems. The crucial alternative explanation is strengthened by having a clear account not only of what is happening to maintain the beliefs and obsessional reactions but also how such beliefs developed in the first place.

## **7. Research implications**

Some thought should be given as to likely strategies for collecting information relevant to the ideas described here. Methods that have proven useful in establishing associative learning events in phobia research have not been successful in identifying direct conditioning, vicarious learning, or transmission of information events in the etiology of compulsive washing (Jones & Menzies, 1998). Likewise, data on parenting styles in OCD has produced little evidence of a particular parenting style. However, based on the current analysis more than one parenting style could contribute to an inflated sense of responsibility; an implication of the present analysis is that, if both being given too much responsibility and too little responsibility can contribute, then measures taken from these hypothesised subgroups could well cancel each other out in an overall analysis. Inflated responsibility or sensitivity to it may, in many instances, develop after childhood and so would be relatively independent of parenting style. It may be more useful to use cluster analysis or other techniques to establish meaningful profiles. Finally, development of an inflated sense of responsibility may for some people best be modeled as accumulating experiences that individually may have little effect. Such a model would provide a serious challenge to researchers. Some of these experiences may map onto obsessional behaviour itself, with attempts to prevent oneself from being responsible for harm resulting in an increasing sense of being responsible. For example, if the person who has concerns about security for a building tries to allay his responsibility fears by gathering the keys from his colleagues and doing all the locking up, he is likely to end up with a stronger sense of responsibility than he previously had.

Longitudinal studies in which people who are likely to experience an increase in responsibility are assessed for vulnerability and then followed up after the critical event are likely to be particularly informative. For example, women who are expecting a child and/or young adults who have to meet demands for greater autonomy (e.g., because they are leaving home, taking up employment with an element of personal responsibility) could be followed up. Similar studies could be carried out on vulnerable individuals who are likely to experience a reduction in responsibility (e.g., returning home, hospital admission).

More complex research methodologies may be required in order to evaluate contributing factors, as there may be multiple interacting levels of influences. This suggests that larger scale studies will be required to tease out the important elements involved.

## 8. Conclusion

To conclude, five types of onset of inflated responsibility are proposed. Given this framework, it should be possible to undertake a systematic collection of information from affected people and on that basis evaluate the validity and usefulness of the proposed classification. The present paper addresses the possible origins of responsibility beliefs in terms of predisposing factors. Such factors are, we believe, neither necessary nor sufficient for the development of OCD, but rather represent a preliminary statement of what we hypothesise are likely to be psychological vulnerability factors which may predispose to the development of the disorder. However, we believe that these factors are likely to be crucial in many instances for the development of exaggerated responsibility beliefs. Once these beliefs are present, they are likely to interact with a range of other factors such as life events, prolonged stress, and depressed mood to provoke obsessional disorders.

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