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Fear of guilt from behaving irresponsibly in obsessive–compulsive disorder

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Abstract

Previous cognitive models of obsessive–compulsive disorder (OCD) propose that inflated responsibility plays a key role in the maintenance of symptoms (Behav.Res.Ther. 28 (1985) 571).In this manuscript, we propose that this thesis may be improved by emphasizing that instead, OCD may be characterized by a fear of guilt that would result from behaving irresponsibly and/or from not behaving responsibly. We believe that this concept provides a better explanation for the anxious and fearful nature of OCD than do more traditional conceptualizations of inflated responsibility. We support this idea with empirical evidence and propose that OCD symptoms are consistent with patients acting in a *prudential mode* because of their fears of guilt.

Keywords: Responsibility; OCD; Guilt; Beliefs

1. Introduction

The thesis that inflated responsibility plays a crucial role in obsessive–compulsive disorder (OCD) is widely accepted (Salkovskis, 1985, 1996; Salkovskis & Forrester, 2002; Rachman, 1993, 1997, 1998, 2002; Ladouceur, Leger, Rheaume, & Dube, 1996; Freeston, Ladouceur, Gagnon, & Thibodeau, 1993).

Excessive or inflated responsibility was defined as

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"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 & Forrester, 2002).

In this paper, however, it is argued that this definition of responsibility is not wholly adequate for defining the mental state regulating obsessive behaviour.

It is instead suggested that obsessive activity is regulated by the fear of behaving irresponsibly. In our view the obsessive individual is actually more afraid his/her own behaviour will not match up to his/her sense of duty rather than any negative event occurring (Mancini, 2001).

The article is divided into two parts.

In part one, arguments are directed towards demonstrating that (1) the characteristics that according to Salkovskis and Forrester (2002) are necessary and sufficient to define the mental state of the subject who feels responsible are actually neither necessary nor sufficient. We shall point out what, in our view, are the necessary and sufficient ingredients for an individual to feel responsible; (2) responsibility may be inflated also by modulating different ingredients than those mentioned in Salkovskis and Forrester's definition; and (3) Salkovskis and Forrester's definition does not account for the anxiety characterizing the obsessive experience, which can instead be explained in terms of the fear of not living up to one's duties.

In part two we shall present some experimental evidence to support our thesis, namely that the mental state regulating obsessive activity is the fear of behaving irresponsibly.

2. The current definition of inflated responsibility

According to the definition given by Salkovskis and Forrester (2002), inflated responsibility could be considered as a mental state composed of the following ingredients: (1) the threat of a negative outcome, which may be either a *manifest* threat (e.g. a car accident) or a *moral* threat (e.g. "Having unacceptable thoughts means that I am a bad person") (Ladouceur et al., 1996); (2) the prevention of a negative outcome as the primary goal; and (3) the belief in one's personal power to prevent the negative outcome (i.e. being endowed with a pivotal power).

Here, the mental state of the person who perceives inflated responsibility is assumed to differ from a typical sense of responsibility in two quantitative respects. That is, that the goal of preventing the negative outcome is perceived to be of the utmost importance, and that the belief in having the power to prevent the negative outcome is greatly amplified. Rhéaume Ladouceur, Freeston, and Letarte (1995) have suggested that the amount of personal influence perceived by a subject affects the amount of perceived responsibility to a greater extent than the likelihood and harmfulness that has been ascribed to the negative outcome by the subject.

3. The mental state of the "normally" responsible person

The aim of this section is twofold, on the one hand is to demonstrate that the three ingredients (negative outcome, active goal and pivotal power) that, in Salkovskis and Forrester's definition, characterize the mental state of the subject who feels responsible, are neither necessary nor sufficient; on the other, to indicate which ingredients are instead necessary and sufficient.

3.1. Negative outcome

In order for a person to feel responsible for an outcome, it is neither necessary nor sufficient for him/her to consider the outcome harmful to him/herself or to others. By contrast, what is necessary is for the responsible agent to consider the negative outcome morally unjust. That is, an individual's action/inaction may cause harm to someone, and yet the individual may not feel any guilt whatsoever. Perhaps she/he considers the ensuing harm to be right, as in cases of coercion or punishment in which harm has been inflicted in the name of justice.

Additionally, an individual may not feel responsible for the harm inflicted to someone if they do not recognize the victim's right not to be harmed. For example, some of the American soldiers responsible for slaughtering hundreds of civilians at My Lai in Vietnam claimed that the people killed were not human beings and were therefore devoid of the right to live (Poggi, 1994). The soldiers did not feel guilty as a result, like a hunter who does not feel guilty of murder after he has killed his prey.

In the same vein, one may feel responsible for an outcome that is not considered harmful but is considered unjust. For instance, if I give a present to one of my daughters but not to the other, I may well feel guilty towards the latter, even if she is unaware of my preference for the former, because I believe I have behaved unfairly.

3.2. The active goal in the responsible person's mind

Salkovskis (1985, 1996) and Salkovskis and Forrester (2002) suggest that in order for a person to feel responsible for a certain outcome, it would be both necessary and sufficient for an individual to have the prevention of that very outcome as a goal. In our opinion, instead, it is necessary for one to have the active goal of behaving in accordance with one's own moral rules when accepting responsibility for a potential outcome.

According to this conceptualization, the goal of preventing a negative and unfair outcome will be neither a sufficient nor a necessary condition for feeling responsible for an event. Indeed one can feel guilty even if the outcome is a fair and just one, in the event that one's conduct was immoral.

For example, an agent can be judged not guilty and also judge himself not guilty even if he acknowledges that he had the power to prevent an unjust outcome. It is sufficient that the one who judges believes that the agent has used his power in a moral way. Let us, for instance, imagine that a secretary is charged by her boss with the task of changing the date of a meeting. Suppose that she tries conscientiously to

carry out this duty, but does not succeed during her working hours, and for this reason she stays on in her office for half an hour past the end of her working day. In spite of her effort and commitment, however, she is not able to change the date of the appointment, thus causing her boss to waste his valuable time and suffer loss of face. Then again, suppose that if the secretary had stayed not a half an hour but 2 h longer than necessary, she would have succeeded in her endeavour to change the date of the meeting. Here, the secretary did not fail in her duty and therefore does not deserve any blame, even though by staying very late at work, she would have been able to prevent her boss and his reputation being harmed. Hence, in spite of the outcome, she deserves praise for staying on at work longer than was required, and not blame for not having completed her task.

By contrast, it is possible to be judged or to judge oneself guilty of immoral conduct even if through the immoral conduct one may avoid an unjust outcome. For instance, those who steal in order to give to the poor are liable to conviction for theft. One can therefore be judged or judge oneself responsible for immoral conduct even if this conduct does not lead to any negative consequences. For example, an individual might feel guilty for having wished harm to someone who does not deserve it, even if they are certain that their desire for harm will not have any practical consequences.

In conclusion, it is possible to paraphrase Macchiavelli by stating that the end does NOT justify the means but that, at least from a moral standpoint, the means justify the end.

3.3. Power to influence the outcome of an event

Salkovskis (1985, 1996) and Salkovskis and Forrester (2002) suggest that an individual with an inflated perception of responsibility harbours the belief of having the power to cause or prevent a negative outcome. However, there are some cases in which it is possible to assume one has power over an outcome without considering oneself responsible for it. It may be sufficient for the individual to assume that his/her action/inaction was not a free but a "forced" choice. For instance, during an armed robbery, the cashier of a bank may not defend the money that is robbed because he would be jeopardizing a goal of higher value (i.e. his life), and so would probably not be blamed for handing the money over to the burglars.

> "Sometimes we say that we really cannot do a certain action X. Actually we could do it materially, but we choose not to do it because the costs of doing X would be very high; that is, the costs would entail the thwarting of numerous other goals, or goals of greater importance than the discarded X" (Poggi, 1994).

4. In short

The definition proposed by Salkovskis and Forrester (2002) needs some refinement; it is necessary to specify that, to characterize the mental state of the

responsible person it is necessary for (1) the outcome to be considered unjust: in fact, it is neither sufficient nor necessary for it to be considered harmful; (2) the goal of the responsible person for his own conduct to be morally correct, whereas the goal of preventing the outcome is neither sufficient nor strictly necessary; and (3) one's own action/inaction to be considered free from ties and constraints. To assume the existence of a causal relation between one's own action/inaction and an outcome is not a sufficient condition.

To sum up: the responsible person is not simply one who believes that his own action/inaction can cause a negative outcome, but one who believes he should answer for his own conduct and not so much for a certain outcome.

5. The mental state of the over-responsible person

According to the definition of Salkovskis and Forrester (2002), the mindset of the over-responsible person differs from that of a responsible person for two quantitative reasons: the absolutization of the goal to prevent a negative outcome and the belief of having a pivotal power to prevent the negative outcome.

In our view there may be other factors that contribute to the inflation of responsibility and that can come into play in obsessive individuals. Several of these may be related to the degree of freedom one believes one has, the presence/absence of jointly responsible persons and the intentionality of the action/inaction.

The notion of being free from constraints is illustrated by the example of a doctor who is likely to feel more responsible for a patient if he knows that devoting himself to that patient does not conflict with his duty towards other patients. On the contrary, he will feel less responsible towards a single patient if an emergency situation forces him to take care of many patients at the same time.

An individual can have pivotal power over an outcome in at least two ways. In the first case, the individual believes that his action/inaction is a sufficient condition to achieve the outcome, i.e. that there is a strong causal link between one's action/inaction and the outcome. In the second case, the individual considers him/herself alone responsible for the outcome and believes no other persons are jointly responsible. Responsibility may therefore be inflated by the fact that the individual believes she/he is the sole responsible agent. In fact it would seem reasonable to assume that in obsessive patients responsibility is inflated also because they tend to underestimate the role played by other responsible agents.

The action/inaction can be considered intentional or quasi-intentional. Salkovskis and Forrester (2002) suggest that obsessive patients tend to feel more responsible than other people, as they consider not only actions but also omissions to act as the result of a deliberate and conscious choice.

6. The mental state typical of ocd

Understanding the individual with OCD requires an explanation of the intense anxiety that precedes and accompanies the obsessive activity.

Anxiety can be linked to the prediction of harm to oneself or other people. Yet, foreseeing the destruction of one's home and the subsequent death of loved ones as a result of a gas leak, for example, might be a cause of anxiety regardless of any feelings of responsibility for the explosion.

If so, anxiety would persist for as long as the threat loomed, even if the patient did not perceive him/herself as responsible for the potential negative outcome. In spite of this, empirical findings (as well as clinical observations) suggest a different view, in that a lack of perceived responsibility in obsessive patients is usually followed by the disappearance of anxiety. Indeed, Lopatka and Rachman (1995) and Shafran (1997) demonstrated that a decrease in anxiety was obtained by shifting the subject's perceived responsibility for the outcome from their shoulders to the experimenter's. However, no reassuring information was given about either the probability or the severity of the expected negative outcome.

A clinical anecdote may be cited to clarify the role of perceived responsibility in obsessive anxiety. Maria was afraid of being infected with the AIDS virus. Upon finding that she had to move house, she chose movers who would transfer all the objects from her old house to the new one. When Maria set foot in the new apartment after the move was complete, however, she became panic-stricken: She realized that everything—furniture, clothes, kitchen utensils, linen—had been touched by the movers in the course of the relocation. All of her things might therefore have become contaminated and in turn contaminate other things. However, within the space of just a few moments (much less than that required for the extinction of an anxiety response), she realized that the possibility of contamination spreading was so great that any attempt at decontamination was practically useless. Once Maria came to this conclusion, her anxiety subsided and she calmed down completely.

If the level of Maria's anxiety depended on whether or not she risked becoming infected with the AIDS virus, then her calmness would appear paradoxical. That is, if finding herself powerless before the threat of contamination, she should have experienced an increase in anxiety rather than its disappearance. In fact, the real cause of Maria's anxiety may not have been the possibility of contagion but rather her estimation of how responsible she was in avoiding it. When she realized that the prevention of contagion was not up to her, she no longer felt responsible, and her anxiety subsequently disappeared. As the Romans used to say, "Nemo ad impossibilia tenetur" ("No one is bound to do what is impossible"). Thus, both empirical and anecdotal evidence indicates how the removal of perceived responsibility in obsessive patients is a sufficient condition for anxiety reduction, even when the actual threat of harm persists.

It is still necessary, however, to identify what makes an individual with an inflated perception of responsibility experience such high levels of anxiety, particularly in light of the fact that having a sense of responsibility for the outcome of events can be

experienced in a reasonably serene way. For instance, surgeons who feel responsible for the positive outcome of their interventions are neither as obsessive nor as anxious as obsessive subjects.

In our opinion the definition provided by Salkovskis (1985, 1996) and Salkovskis and Forrester (2002) does not account for the considerable anxiety that precedes and accompanies obsessive activity. If the mental state of the obsessive patient was as defined by Salkovskis et al., she/he ought to be quite serene. Indeed if an individual with an inflated perception of personal responsibility (a) has a goal of preventing a negative outcome, and (b) believes s/he has a pivotal influence on the negative outcome, thus regarding the achievement of that goal as entirely self-dependent, what reason would she/he have for being so anxious?

This anxiety may be accounted for by examining the individual's prediction of whether or not she/he exercised his/her power properly.

Indeed it would be reasonable for the obsessive person, like any responsible agent, to formulate hypotheses on the likelihood of their performance measuring up to their sense of duty or not. These predictions may be optimistic, as when the individual believes that his/her behaviour is appropriate. For instance, in the case of the responsible and optimistic surgeon who foresees that his performance will meet the required standards of professional behaviour. Although she/he may be conscious that there is a possibility of him performing poorly, she/he probably considers it only an improbable exception. Or, there may be pessimistic predictions, as when an individual foresees that his/her behaviour will not be in keeping with his/her moral standards, or the potential that she/he will act unfairly in a given situation. Here, we speak of a fear of guilt arising from perceived irresponsibility, and it is this that is associated with anxiety.

The individual with OCD may thus be characterized by an extreme fear of not behaving in a way consistent with their standards of fairness, i.e. the fear of guilt for acting irresponsibly and/or not acting responsibly.

To postulate the existence of this fear in the obsessive subject's mind implies the possibility of explaining also why the obsessive patient endeavours to prevent a negative outcome by concentrating on the repetition of one or more activities useful for this purpose. In other words, why she/he seems more concerned with doing something properly than with investing in different directions, thus improving his/her likelihood of preventing a negative outcome. His/her concern is actually directed more towards the quality of his/her own performance than towards preventing the negative outcome as such.

7. Experimental support

There is convincing evidence that obsessive–compulsive behaviour may be explained by a fear of feeling guilty for having acted irresponsibly. In a recent study by Mancini, D'Olimpio and Cieri (2003), it is shown that a fear of guilt induced in normal participants increases obsessive-like behaviours.

Three groups of non-clinical participants (Personal Responsibility group; Personal Responsibility plus Fear of Guilt group; and Control group) were asked to perform a visual–spatial memory task. The task consisted in rearranging some items to match a target spatial configuration. The instructions stressed the importance of accuracy in reconstructing the target configuration.

By giving slightly different instructions and feedback to each of the three groups, the authors were able to manipulate the participants' perceived personal influence (perceived responsibility) as well as their expectations of poor performance (fear of guilt). In the Personal Responsibility group, therefore, no pessimism was induced regarding the likelihood of one's performance falling short of the moral commitment made by the subjects. Conversely, in the Personal Responsibility plus Fear of Guilt group, the subjects were led to be pessimistic about the likelihood of their performance not being up to their own moral standards. For instance, subjects in the Personal Responsibility group were told that the examiner was a victim of unjust harm, in that the laboratory director had forced him to test a lot of subjects in too short a period of time, as the lab would be the recipient of an important grant only if the experiment was completed within a week and the results obtained were the expected ones. Furthermore, they were told that the examiner would be dismissed if he failed to obtain the required results. Participants were also told that if they wanted to help the examiner they had to perform as best as they could. In this situation, participants would be likely to feel that they had the power to prevent harm to the examiner, who was not responsible for possibly incorrect hypotheses. Participants in the Personal Responsibility plus Fear of Guilt group received the same instructions as the Personal Responsibility group, but were also told that they had performed very poorly, obtaining very low scores both in the training session and in the preliminary attention tests, and that this poor performance could be explained by their inattentiveness. This kind of information was given to make participants pessimistic about the likelihood of their performance falling below their moral standards.

Control subjects were told only that the study involved visual–spatial memory.

These results illustrate that an increase in perceived personal influence (perceived responsibility) induced obsessive-like behaviours. The subjects in the Personal Responsibility and the Personal Responsibility plus Fear of Guilt groups were significantly slower and showed more hesitation and checks during the experimental task than control subjects. Subjects in the Personal Responsibility plus Fear of Guilt group, however, were even slower and showed more hesitations and checks than either the Personal Responsibility group or the Control subjects, thus indicating that a Fear of Guilt exacerbated these tendencies. Hence, this experiment demonstrates that perceived responsibility, particularly the Fear of Guilt regarding irresponsible behaviour, can significantly increase obsessive-like behaviour.

7.1. Fear of Guilt and naïve hypothesis testing

Examining the method by which people test their hypotheses that a dangerous outcome may ensue (the danger hypothesis) may help to identify when a preventive

activity such as compulsive checking ceases. If one's hypothesis-testing method involves confirming the danger hypothesis, the preventive activity is likely to be more persistent and repetitive. By contrast, if hypothesis testing favours the falsification of an imminent threat, the preventive activity will likely conclude at an earlier time. Thus, danger hypothesis testing plays a potentially crucial role in the persistence and repetitiveness of obsessive activity.

Research has clearly demonstrated that in general, an individual's mental state can influence hypothesis testing (de Jong, Mayer, & van den Hout, 1997; de Jong, Haenen, Schmidt, & Mayer, 1998; de Jong Smeets, & Albers, 2002; Evans & Over, 1996; Kirby, 1994; Mancini & Gangemi, 2002a, b; Manktelow & Over, 1991; Smeets,de Jong, & Mayer, 2000). For instance, in a series of recent experiments, de Jong et al. (1997, 1998, 2002) and Smeets et al. (2000), found that people are more likely o selectively search for danger-confirming information when asked to judge the validity of a conditional hypothesis (*if p*, *then q*) in a context of general threats. In particular, the authors found that normal participants adopted a verification strategy in case of danger hypotheses (*if p*, *then danger*) and tended to look for falsifications in the case of safety hypotheses (*if p*, *then safety*). These findings suggest that the mere perception of threat is sufficient to activate a goal-oriented "*better safe than sorry*" reasoning strategy in the participants.

Following these findings, several experiments have demonstrated that the fear of guilt may influence the way in which people control both their danger and safety hypotheses (Mancini & Gangemi, 2002a–c; Gangemi et al., 2002). In particular, these experiments indicate that a fear of guilt may involve a peculiar hypothesis-testing process called the *prudential mode.* Here, individuals focus on their hypothesis of danger, search for examples with which to confirm the determined danger hypothesis, consider counter-examples falsifying the danger hypothesis insufficient, and adhere to the danger hypothesis by continuing to engage in a hypothesis-testing process. As a consequence of this prudential testing method, the individual who is fearful of guilt tends to be dissatisfied with the outcomes they have reached and what they have done to achieve them.

A recent experiment (Mancini & Gangemi, 2003) indicates that fear of guilt leads to prudential hypothesis testing. Perceived responsibility and fear of guilt were manipulated by giving differential instructions to different groups of subjects. Perceived responsibility was manipulated by asking participants to role-play as doctors and to assume that they alone were responsible for diagnosing a patient's medical condition. Fear of guilt was manipulated by further informing one group of participants that they had performed very poorly, and had made serious errors in several diagnoses. We then compared participants' performances in a modified version of the Wason Selection Task[1] (Wason, 1966), under three different

[1] The WST is a paper and pencil problem, which asks subject to verify if a conditional rule of the form *if p*, *then q* has been violated by any of the four instances on which the subject has incomplete information. Originally, each instance was represented by a card. One side of a card shows whether the antecedent is true or false (i.e. whether *p* or *not-p* is the case), and the other side of the card shows whether the consequent is true or false (i.e. whether *q* or *not-q* is the case). The subject was permitted to see only one

conditions: perceived responsibility; perceived responsibility plus fear of guilt; no responsibility.

All participants were faced with an initial hypothesis/diagnosis: Safety hypothesis, a diagnosis of influenza; or Danger hypothesis, a diagnosis of leukaemia. They were asked to say (a) whether they preferred to continue or not in the diagnostic process, and if so, then (b) which hypothesis/diagnosis they wanted to test (safety vs. danger) and (c) by which strategy (verifying vs. falsifying) they intended to test the chosen hypothesis.

The results of this study show that the fear of feeling guilty was the main factor that, in a *prudential* manner, influenced individuals' hypothesis testing. Guilt-fearing participants preferred to carry on with the diagnostic process, even if presented with an initial safety hypothesis. Furthermore, in this kind of experimental condition, individuals showed a significant prudential preference to focus on and to confirm the worst hypothesis (danger diagnosis). Our data demonstrate that perceived responsibility was necessary but not sufficient to induce a prudential attitude in testing hypotheses. Although participants in the perceived responsibility condition showed an interest in applying a *prudential hypothesis-testing approach* (thus focusing on and confirming the worst hypothesis, the danger diagnosis), this group made the prudential choice of continuing with the diagnostic process, particularly if they were faced with unfavourable evidence (the initial danger diagnosis). If, however, they were faced with favourable evidence (the initial safety diagnosis) they opted not to continue with the diagnostic process. Control subjects did not display the prudential hypothesis-testing process.

Taken together, these findings demonstrate that responsibility and particularly the fear of feeling guilty guide individuals' danger and safety hypotheses testing in a *prudential mode*. That is, danger hypotheses tend to be confirmed, and to resist falsifying proof. Moreover, we found, once again, that in normal participants the induction of fear of guilt for having acted irresponsibly entails a greater tendency to persist in preventive activities, as well as to reject reassuring information, than the induction of responsibility alone.

The influence of fear of guilt on the hypothesis-testing process helps to explain ruminations and neutralizing activities in general such as compulsions, which, in their persistence and repetitiveness serve to characterize obsessive behaviour. Indeed, an exaggerated fear of guilt arising from irresponsibility would explain: (a) the general tendency shown by obsessive patients to resist reassuring information provided by others, and thus their resistance to changing danger beliefs; (b) the repetitiveness and persistence of attempts to prevent, neutralize or avoid danger; (c) the tendency to give credit to implausible danger hypotheses; (d) the frequency of threat perception; and finally, (e) the long-term maintenance of OCD.

(*footnote continued*)
side of each card and was asked to say which card(s) he/she would turn over to see if any of them violated the rule. The four cards represented the values *p*, *not-p*, *q*, and *not-q*.

8. General conclusions

In this article it is argued that the cognitive core of OCD is characterized by fear of guilt from having acted irresponsibly.

We raised a number of objections to Salkovskis (1985, 1996) and Salkovskis and Forrester (2002) definition of inflated responsibility, arguing that this definition is insufficient to describe the obsessive mind. On the contrary, the obsessive person's mind can be better defined by the fear of behaving guiltily. Here, the individual who is fearful of guilt regarding his/her perceived responsibility assumes the existence of a causal relationship between his/her own action/inaction and the unjust outcome. In addition, this individual assumes that she/he is free from constraints, in that their choice to act/not act is not a forced one, and that they have a goal to act according to their perceived duty. Finally, the individual who is fearful of guilt foresees that she/he will not behave in accordance with his/her moral standards. The results of several empirical studies show that having a fear of guilt regarding one's potential to act irresponsibly increases obsessive-like behaviours, and that the individuals' hypothesis-testing process might account for this effect. In particular, it is hypothesized that both responsibility and fear of guilt, but particularly the latter, influence subjects' hypotheses-testing process in a *prudential mode*. This *prudential mode* entails focusing on and confirming the worst case, and then reiterating the testing process. We suggest that the *prudential mode* may contribute in such a way as to explain the frequency, repetitiveness and persistence of obsessive–compulsive symptoms.

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