

Contents lists available at ScienceDirect

Journal of Obsessive-Compulsive and Related Disorders

journal homepage: www.elsevier.com/locate/jocrd





Reassurance and its alternatives: Overview and cognitive behavioural conceptualisation

Brynjar Halldorsson ^{a,b,c}, Paul M. Salkovskis ^{d,e,*}

- a Department of Psychiatry, University of Oxford, Oxford, UK
- ^b Department of Psychology, Reykjavik University, Reykjavik, Iceland
- ^c Landspitali, the National University Hospital of Iceland, Iceland
- d Department of Experimental Psychology, University of Oxford, Oxford, UK
- e Oxford Health NHS Foundation Trust, Oxford, UK

Excessive Reassurance Seeking (ERS) is an under-researched and poorly understood behaviour that maps onto the compulsive behaviours that are typically seen in obsessional problems. ERS can be complex, persistent, extensive, debilitating and may dominate the interactions of those involved. In this paper we review how ERS has been defined in the literature and put forward a new definition for this construct based on a cognitive behavioural theory. We also highlight the important role ERS may play in maintaining different anxiety problems and explore new ways of managing this behaviour clinically by helping patients to shift from seeking reassurance to seeking support.

Seeking reassurance from other people is probably the most common interpersonal reaction to ideas of threat and feelings of distress (Kobori et al., 2014; Kobori & Salkovskis, 2013). This is not surprising given that we learn at an early age that the effects of reassurance can be very positive because we often feel less anxious when someone reassures us, for example, by telling us we do not need to worry. The reasons for the positive effects are currently not fully understood. It has been suggested (Kobori & Salkovskis, 2013) that seeking reassurance works either because someone we trust tells us in a convincing way that our worries are groundless (or less severe than we believe them to be) or if our fears are well-founded it helps us to identify a real threat which we can then deal with or prepare for. The key to understanding these issues is likely to be found in how reassurance-seeking evolves developmentally. In developmental terms, reassurance-seeking is a behaviour established at an early age and evolves across the unfolding lifespan, initially involving the child establishing they are safe through a trusted carer (Bowlby, 1973). Offering reassurance where the child may be concerned about threat is both a common and a logical intervention for carers in various situations that children encounter while growing up, viz: "No need to worry, Mummy/Daddy will make sure you are safe". It is most likely an essential part of developing confidence and a sense of safety in children to confront ambiguous, complicated, and threatening situations.

Unfortunately, this is not always the case. For example, provision of reassurance is considered to play a role in maintaining childhood OCD (Chessell et al., 2021), and frequently reported among parents in this population (Monzani et al., 2020; Peris et al., 2008). However, in the absence of childhood anxiety problems, children typically become less reliant on caregiver's reassurance as they become progressively more confident in their abilities to deal with problematic situations or their consequences. Furthermore, as their understanding of complex situations develops they can also more readily disambiguate the potential for threat themselves (Kobori et al., 2012; Kobori & Salkovskis, 2013). As people progress through adult life, reassurance still serves as a helpful mechanism to control a sense of threat and regulate feelings of anxiety, particularly where the authority of others is apparent (e.g., medical doctors in the context of health matters, supervisors in job situations). Some of the developmental issues is further described in Walters et al. (2020).

There are, however, clear differences between reassurance-seeking in children and adults. In particular, who they seek reassurance from and the reasons for doing so. For example, adults tend to have more responsibilities than children, such as being the breadwinner, keeping their own family safe, etc. Consequently, adults seek reassurance from a much broader range of sources rather than mainly from the primary caregivers as in the case of children. Adults are also more likely than children to have access to (and belief in) 'experts' outside the family with special knowledge about the focus of their fears (e.g., specialist doctors). In non-clinical populations, seeking reassurance from an expert is expected when a person is confronted with high levels of uncertainty, considers threat particularly likely, and simultaneously doubts their own abilities to cope with the threat. Many people would probably agree that a medical expert offers reassurance of better quality for health worries relative to a partner with limited knowledge of physical health problems. Similarly, reassurance from a computer expert

^{*} Corresponding author. Oxford Health NHS Foundation Trust, University of Oxford, Isis Education Centre, Warneford Hospital, Oxford, OX3 7JX, UK. E-mail addresses: Brynjar.halldorsson@psych.ox.ac.uk, brynjarha@ru.is (B. Halldorsson), paul.salkovskis@hmc.ox.ac.uk (P.M. Salkovskis).

regarding internet safety for children is less likely to be doubted compared to a non-expert. Again, when seeking expert reassurance, this experience is likely used to build internal resources and understanding, having the effect that the individual is either less likely to seek reassurance when confronted with a similar threat or decides to rely on the trusted person to deal with similar threats in the future (Kobori & Salkovskis, 2013). Confidence in building one's expertise is probably crucial. Failure to do so may result in excessive reassurance-seeking. Understanding why this 'confidence building' might not happen in those experiencing severe and persistent anxiety is likely to improve all aspects of assessment and treatment of this problem, as well as be helpful to those who provide reassurance to such patients.

1. Defining excessive reassurance-seeking

There is no consensus as to what precisely constitutes ERS. The meaning attached varies according to whether the concept is defined within the context of a single mental health disorder, such as health anxiety or transdiagnostically. Furthermore, there are differences in clinicians' and researchers' emphasis and understanding of threatrelated motivational factors typically thought to underlie reassuranceseeking. For example, within sections of the depression literature (e.g., Covne, 1976a), ERS is commonly associated with social threats (e.g., fears of abandonment/rejection). In contrast, the anxiety literature refers to factors such as harm prevention, intolerance of uncertainty, and dispersion of responsibility (e.g., Cougle et al., 2012; Leonhart & Radomsky, 2019; Parrish & Radomsky, 2010; Rachman, 2002; Rector et al., 2019). Given that there appears to be no widespread agreement on what constitutes ERS at a theoretical level, we will next consider definitions that have historically received the most research and clinical attention and more recent attempts to define the concept.

As early as 1985, Warwick and Salkovskis highlighted the importance of reassurance in the context of anxiety. However, the most cited definition comes from the depression literature, where (Joiner et al., 1999) defined ERS as "... the relatively stable tendency to excessively and persistently seek assurance from others that one is lovable and worthy, regardless of whether such assurance has already been given" (p. 270). This definition was extended from Joiner's (1994) original definition: "... the tendency to excessively seek reassurance from others as to whether they truly care" (p. 289). Notably, neither definition considers the threat-related nature of ERS commonly seen in anxiety disorders (Cougle et al., 2012; Halldorsson & Salkovskis, 2017a; Kobori & Salkovskis, 2013; Parrish & Radomsky, 2010; Rector et al., 2011). Furthermore, the focus on rejection and social loss closely resemble parts of the DSM diagnostic criterion of Borderline Personality Disorder: "Frantic efforts to avoid real or imagined abandonment" (American Psychiatric Association, 2013, p. 663).

Parrish and Radomsky (2010) offer a different approach to defining ERS. They highlight that ERS is a common problem amongst patients with a diagnosis of Generalised Anxiety Disorder (GAD), health anxiety, and Obsessive-Compulsive Disorder (OCD) and define ERS as:" ... the repeated solicitations of safety-related information from others about a threatening object, situation or interpersonal characteristic despite having already received this information" (Parrish & Radomsky, 2010, 211). Their inclusion of the threat-related nature of reassurance-seeking and the transdiagnostic approach to defining the concept is to be applauded. However, we argue that the definition has limitations. Firstly, by focusing their definition on repetitiveness, they appear to exclude the possibility that reassurance-seeking can be sporadic. This is in contrast with clinical experience, particularly in cases of OCD where reassurance-seeking may be of low frequency but still serve to maintain the problem (Kobori & Salkovskis, 2013). Furthermore, it seems they chose to define reassurance only within three anxiety problems rather than more broadly/transdiagnostically.

Notably, the suggestion made by Parrish and Radomsky (2010) that reassurance-seeking involves asking for information that has already

been received has emerged before in the literature. For example, in the 1980s, Salkovskis (1985) and Warwick and Salkovskis (1985) defined reassurance within the context of health anxiety and drew the parallel with OCD as repetitive provision of old information. Similarly, Rachman (2002) noted that reassurance seeking in health anxiety often appeared as requests for information when, in fact, it was an attempt to seek safety from harm. Rachman (2002) also stated that the reassurance requested rarely contained any new information. That is, the person seeking reassurance typically knew the answer beforehand but still asked for reassurance in an attempt to decrease the experienced health anxiety. Rachman (2012) later revisited the concept and offered a 're-construal' of the nature and purpose of compulsive requests for reassurance: "The person is seeking some relief from distress and anxiety, not information as such. Without necessarily recognising it themselves, sufferers are seeking a response, not information as such." (p. 507 [original emphasis]).

In his analysis, Rachman also highlights that although persistent requests for reassurance in health anxious patients resemble compulsive OCD behaviours, there is an essential difference between the two. Specifically, while OCD sufferers typically try to resist their obsessions and compulsions and recognise them as unwanted or irrational, health anxious patients are more likely to feel the opposite. They seek reassurance openly, and from their point of view their fears are rational. Rachman's approach is of great value. However, we argue that the definition lacks in some respect specificity in terms of how reassurance works. Firstly, from a cognitive perspective, when a person seeks reassurance, they are not seeking relief from distress and/or anxiety - it is not anxiety or distress that is being avoided; the person is seeking to procure certainty regarding safety (or confirmation that they are already safe), motivated and driven by the perception of threat (and in some cases also the perception of responsibility), and feelings of anxiety/ distress arise from unresolved threat (Salkovskis, 1996b). Clinically we might see this in an OCD patient who seeks reassurance from his partner by asking if he is clean enough, knowing very well that by requesting reassurance, his anxiety will consequently increase. Still, the rise in anxiety is much more tolerable than the risk of being responsible for poisoning his children (perceived threat). Thus, the individual asks for reassurance to decrease the perception of threat and disperse responsibility for harm. Secondly, we disagree with Rachman's notion that when people seek reassurance they want "a response but not information as such" (Rachman, 2012. p. 507 [original emphasis]). If we assume that Rachman is referring to new information, that is, when reassurance is sought, it is usually the same (or slightly re-phrased) question asked again and again - new information in the strictest sense is not necessarily being sought. However, we argue that in a more technical sense, reassurance-seeking does in fact involve seeking new information. That is not to say that the person providing the reassurance is necessarily required to say something new or different compared to their previous response. The person asking for reassurance may simply want confirmation that nothing has changed, i.e. that the level of threat has remained the same – status quo. For example, when a caregiver is asked for the 100th time "are you sure I locked the door?" and patiently gives the same answer repeatedly, "yes", the carer is not providing new information. However, the absence of a change in a response carries information. Finally, regarding Rachman's argument reassurance-seeking involves seeking a 'response', we argue that people could equally be seeking a non-response when they seek reassurance. For example, a therapist's failure to show any concern (non-response) when an OCD patient describes his intrusive thoughts can be reassuring for the OCD sufferer. Equally, a health anxious patient, fearful of skin cancer, might wear a t-shirt to his doctor's appointment to make the potentially cancerous moles on his arms visible. Although he never mentions his fears to his doctor, he may leave the session feeling reassured as the doctor did not seem concerned or pay any attention to (non-response) the moles.

Finally, Starcevic et al., (2012) define reassurance-seeking

specifically within the context of OCD as "the solicitation of information from others that would provide a sense of security, provide relief and diminish threat" (p. 560). The definition correctly identifies the perception of threat as a motivating factor in reassurance-seeking. However, this same paper has some severe drawbacks that are hard to ignore because the authors quite confusingly argue that reassurance-seeking "is not a type of compulsion, but rather, one of many strategies of coping with obsessions, which also include compulsions and avoidance" (p. 560). Notably, the authors define reassurance specifically within the context of OCD. Compulsions are typically defined as repetitive intentional behaviours or mental acts intended to neutralise anxiety provoked by obsessions (American Psychiatric Association, 2013). The authors' failure to consider that reassurance-seeking and compulsions share common features, and both can be conceptualised as attempts to deal with the perception of threat, leads to a misleading definition. Their argument appears to be based on the idea that compulsions reduce anxiety triggered by obsessions by directly addressing the threat. For example, washing one's hands in response to contamination fears. In contrast, they argue that reassurance-seeking indirectly reduces the perception of threat because the individual is seeking information about the threat via other people. That information is then used to adjust the threat perception. Achieving clarity in terms of what the authors are referring to is difficult, given that it is well established that many OCD patients seek reassurance to deal directly with their threat beliefs. For example, when an OCD patient asks his partner "are you sure my hands are clean?" and feels reassured and consequently less distressed when the partner replies "yes. How is the obsession-related distress not directly reduced? Just because another person is involved in the compulsive behaviour does not make it indirect. Finally, the authors fail to define 'coping strategies'. At best, this is a misleading term. Within the literature (e.g., Salkovskis, 1996a, 1996b; Thwaites & Freeston, 2005) there is a notion that coping strategies are helpful and do not maintain or make emotional problems worse as opposed to safety-seeking behaviours which do. Thus, defining and differentiating adaptive coping strategies from problematic behaviours is of critical clinical significance. Given the role of reassurance-seeking in maintaining or worsening various emotional problems, it becomes essential to clearly distinguish between reassurance-seeking and other interpersonal anxiety-related behaviours that could potentially help the person cope with distress. We suggest here that the construct support-seeking has a critical role to play within this context.

2. Differentiating reassurance as an unhelpful threat-related interaction from other anxiety-related interactions; the special case of support

Requests for reassurance, in whatever form they are, can provide some temporary reduction in the sense of threat and, therefore, anxiety relief (Salkovskis & Kobori, 2015). Still, the effects tend to be short-lived, and reassurance tends to be sought over and over again, resulting not only in the return of threat perception but also its increase (Salkovskis & Warwick, 1986). The resurgence of threat ideas is associated with a further return of distress and the urge to seek further reassurance through processes such as habitual doubting focussed on the reassuring information, increased accessibility and/or elaboration of threat ideas and so on.

With some notable exceptions (Neal & Radomsky, 2020; Rachman, 2002, 2012; Salkovskis, 1985; Salkovskis et al., 2003; Warwick & Salkovskis, 1985), the clinical wisdom is that therapists should simply refuse to reassure patients, and caregivers should be encouraged to do the same. The mechanism of change is considered to be extinction (Foa & Kozak, 1986) or inhibitory learning, whereby learning of new non-threat (i.e. inhibitory) associations interferes with the individual's ability to retrieve previously established fear associated responses (Craske et al., 2014). However, there are reasons to believe that focusing on preventing others from giving reassurance is neither helpful nor

practical. For example, as a response to distress in others, such a reaction (withholding reassurance) would be at best seen inappropriate and at worst experienced as rejecting and interpersonally destructive (Halldorsson et al., 2016). It may also imply blame for those involved in providing reassurance (e.g. family members) as it suggests that it is their fault that the anxiety problem developed or worsened in the first place, due to their providing reassurance. The loved ones of people suffering from problems such as OCD and health anxiety often feel (or may even have been told) that, by providing reassurance, they have worsened the problems. In reality, this was their only option in the face of the distress of their loved one.

In non-clinical situations, a caring person can helpfully respond to someone's distress, for example, by telling the person that their fears are unjustified and they do not need to worry (provision of reassurance). This needs to be combined with empathically identifying the distress itself as being the issue and helping the person refocus and deal with this. This latter approach is best characterised as the provision of support and is the hallmark of mature, emotionally sustaining relationships as opposed to the more skewed approach to offering reassurance. The question we are left with is: how best to define support? It is argued here that support seeking (and equally the provision of support) can be thought of as an:

Interpersonal behaviour, verbal or non-verbal, that is intended to get (or give someone) encouragement, confidence or assistance to cope with feelings of distress.

Note that support seeking is here defined with reference to *coping* with distress but not 'saving' the person from threat as we would expect for safety-seeking behaviours (Salkovskis, 1991). From a theoretical perspective, support seeking is understood to represent the opposite of safety-seeking behaviour, that is, approach supporting behaviour, intended to help the person confront their fears and, in so doing, resolve them. When a person seeks support, the intention is to seek help to cope with the distress, and this interaction influences the sufferer's anxiety problem by providing them with a sense of control, encouragement and/or a belief that they can confront and overcome the distress (or accept the anxiety for what it is). This is entirely different from safety-seeking behaviours focused on 'saving' the person (or others they feel responsible for) from the threat or its consequences (and in some cases transferring responsibility onto another).

The definition of support is also central to how we currently conceptualise cognitive behavioural treatment for anxiety problems such as OCD and health anxiety. That is, the person experiencing severe and persistent anxiety does so because they believe that what is happening to them is more dangerous than it really is, and they are 'stuck' in this belief. Treatment involves helping the person develop a degree of cognitive flexibility to counteract the endless round of safetyseeking perpetuating the sense of threat (D. M. Clark, 1999; Salkovskis, 1999). Clinically, this involves helping the person identify the threat beliefs and associated reactions (understanding this as 'theory A') and contrasting this to an alternative, less threatening explanation ('theory B'). The patient is helped to consider the merits of the competing perspectives and, on that basis, make changes which will help them differentiate them in terms of which is most useful and, therefore, more accurate (Bream et al., 2017). For an OCD patient with violent intrusions about harming their children, theory A might be: 'my problem is that I am a violent and dangerous person'. If you are someone who believes that you are at risk of harming your children and that concerns you, seeking safety, in this case, reassurance from your partner is very logical. If, on the other hand, you are helped to shift your view of the problem away from this idea onto the idea that 'I am a loving father who fears harming my children, which causes me to feel anxious and makes me do things which fix my fears in place" (theory B). A key part of embracing theory B is to seek support when anxiety is generated by the exaggerated sense of threat and focus requests for support on the experience of threat and anxiety rather than seeking to remove all sense of risk (Salkovskis,

1999; Salkovskis & Wahl, 2003). With this in mind, a new approach to defining reassurance-seeking is offered here to provide a conceptual framework for studying the phenomenon across disorders and assessing its psychological significance ('excessive' is defined separately - see below).

Verbal and/or non-verbal interaction with someone, who you perceive has access to potentially threat relieving information, with the intention of increasing your perceived sense of certainty of safety from harm

This definition could usefully be modified to facilitate its application in more specific disorders. For example, the specific identification of 'appraisals of responsibility' as an additional motivational factor in OCD and health anxiety. The responsibility factors are believed to overlap between these two disorders but are not necessarily the same, i.e. there is some difference in specificity (Halldorsson & Salkovskis, 2017a). In addition to dealing with the perception of threat, obsessional patients seek reassurance to disperse (or transfer) any/some responsibility of harm to others. In contrast, in health anxiety, the responsibility factors are less broad. They are specifically focused on the person's health and medical consultations where the individual intends to draw the attention of others to their physical state to allow for the detection of any abnormality (Salkovskis, 1996b).

3. What is excessive reassurance-seeking?

Reassurance-seeking, as defined by this: "Verbal and/or non-verbal interaction with someone, who you perceive has access to potentially threat relieving information, with the intention of increasing your perceived sense of certainty of safety from harm" can be *excessive* in at least three ways. Firstly, there is the idea that reassurance-seeking is a form of special (compulsive) checking behaviour and, as a safety-seeking behaviour, maintains the perception of threat as part of a vicious circle where the perception of threat motivates the reassurance-seeking, which then keeps it going (Salkovskis, 1985, 1991, 1999). In other words, it is excessive because it moves from being helpful to becoming counterproductive.

Secondly, given that reassurance-seeking is purposeful and motivated behaviour, there is another layer of excessiveness which relates to how compulsions within the context of OCD can become excessive (Salkovskis, 1985). In the early stages, sufferers of anxiety problems typically manage to resist urges to seek reassurance. Still, gradually the behaviour becomes 'over-practised or proceduralized' where the meaning attached to the behaviour and the reason they started doing it has become obscured, forgotten, or dropped from awareness. Under such circumstances, the behaviour is considered excessive because although the meaning may be 'hidden' the behaviour still functions as a safety-seeking behaviour. That is, a response intended to deal with the perception of threat and the associated anxiety.

The third sense, in which it can be excessive, is in a more indirect way, which is defined in terms of how it is impacting other areas of the person's life rather than just the distress itself, such as the person's relationships, ability to work and ability to function in daily activities.

4. From who or what is reassurance sought?

A key question relates to who or what the person regards as sufficiently competent to seek reassurance from. Fundamentally, this is like asking what a person with contamination fears regards as 'cleansing'. We argue that the answer will vary from person to person but is best considered in terms of what the person believes will have a longer-term effect of reducing the level of threat or danger or responsibility for these. Note that this is not necessarily what would reduce the person's anxiety. In some cases we know that safety-seeking behaviours can increase anxiety whilst counteracting the sense of threat (D. M. Clark, 1999). The key issue would be the extent to which the sense of threat is diminished, and this requires that the source of information is regarded by the person

as authoritative in terms of speaking to that perceived threat (Salkovskis et al., 1999). Simply getting the same information again in the face of growing doubts may be sufficient because it is perceived to have the potential to reduce the doubt that something may have changed. Carers (family members, friends, partners etc.) are often heavily involved in providing reassurance, particularly in anxiety problems such as OCD, on the basis that they are an authoritative person who is familiar with the sufferer and their problems and may be able to provide an 'external' perspective. There is also another focus of reassurance-seeking, which involves experts such as medical professionals and doctors, and this is particularly the case in health anxiety. Reassurance can also be sought from others regarded as experts in particular specialist areas (e.g. electricians, religious figures). People also seek reassurance from authorities, such as the police, who either have the expertise or are regarded as able to provide information on issues such as responsibility and blame. For example, a person might check traffic police website for information about road safety before travelling. To give a more pathological example, an OCD patient might repeatedly call the police to check if any 'hit and run accidents' had been reported on that day because they fear having killed someone without remembering it.

Some people report seeking reassurance (and feeling successfully reassured) from inanimate objects, such as computers, medical journals or books. The proposed new definition of ERS specifies that reassuranceseeking involves an "interaction with someone" and, as such, might be understood to exclude inanimate objects such as books, computers etc. However, this is not the case. We argue that inanimate objects can provide reassurance because such media can be interpreted as authoritative sources and interpersonal. For example, for someone with health anxiety, reading an article on a medical website describing that skin moles are normal may offer reassurance - "an experienced dermatologist must have written this article ... so it must be true". Nevertheless, this type of reassurance-seeking is more indirect, non-interactive and lacks various non-verbal features seen in face-to-face reassurance, such as a person's tone of voice, which for some people may be necessary for reassurance to have its desired (full) effect (Halldorsson et al., 2016). As a result, this type of reassurance is thought to have a lesser impact on the perception of threat and responsibility and the associated feelings of distress. However, this remains to be tested empirically.

What about self-reassurance? Can people reassure themselves? When a health anxious patient spends hours every day checking his body, or when an OCD patient repeats in their mind "It's off, it's off ... the cooker is off!" is that person seeking reassurance? The answer would probably be yes, based on the current literature and how this is dealt with clinically. For example, Thibodeau et al. (2013) refer to repetitive bodily checking as a form of self-reassurance and D. A. Clark and Beck (2011) give an example of a female patient that repeats certain statements in her mind for self-reassurance. This is in contrast to how reassurance-seeking is understood here, mainly because it excludes any interpersonal elements of authoritative sources. We argue that reassurance must involve someone (or something) else who is considered authoritative if it is to be reassuring. Nonetheless, simply involving an authoritative figure does not guarantee reassurance; some kind of response is required. Thus people's attempts to reassure themselves can only be partially satisfied and is subject to more anxiety and feelings of doubt. Thus, involving others is a necessary requirement but not a sufficient condition of reassurance - some active involvement on behalf of the other person/agent, someone/something who is trusted, is always needed (although this active involvement can be unintentional as in cases of subtle/hidden reassurance-seeking).

We argue that when clinicians refer to self-reassurance, they are typically referring to (i) physical checking (as in the case of body checking) (Rachman, 2012); (ii) mental checking (as in the case of self-statements) (Radomsky & Alcolado, 2010); or (iii) neutralisation which is better understood as a form of restorative behaviour (like washing compulsions) aimed at putting things right that have perhaps already gone wrong. Whereas checking compulsions (like ERS) are a

form of verification in which the person fears that they may be in danger of causing harm (Cougle et al., 2007). This precision in differentiating self-reassurance from other forms of reassurance might seem subtle. However, if we assume that 'dispersion of responsibility' is a motivational factor in reassurance-seeking (Halldorsson & Salkovskis, 2017a; Kobori & Salkovskis, 2013; Rachman, 2002), this analysis becomes very important by providing conceptual clarity. Achieving the transfer of responsibility in self-reassurance is impossible because no other person is directly involved in the process.

5. Why is excessive reassurance seeking important?

Prior research has demonstrated that ERS is a transdiagnostic problem, associated with, for example, depression (Coyne, 1976b), GAD (Woody & Rachman, 1994), panic disorder (Onur et al., 2007), health anxiety (Abramowitz & Moore, 2007; Salkovskis & Warwick, 2001), body dysmorphia (Phillips et al., 2005), social anxiety disorder (Heerey & Kring, 2007) and OCD (Salkovskis, 1999). Notably, in depression, ERS is considered to contribute to interpersonal difficulties among clinically depressed individuals (Coyne, 1976a; Parrish & Radomsky, 2010). In health anxiety, ERS has been associated with unnecessary medical consultations and treatment, resulting in increased cost and burden on the health care system and maintenance of the problem (Salkovskis et al., 2003; Salkovskis & Warwick, 1986; Tyrer et al., 2011, 2014). ERS is a hallmark behaviour in OCD, where patients may repeatedly ask whether something is clean, whether they have done something wrong, and, in some cases, request others to provide reassurance by watching them perform their rituals (Kobori et al., 2012; Kobori & Salkovskis, 2013). Although ERS is generally accepted as a common problem in clinical populations, the link between ERS and emotional disorders is poorly understood.

6. Excessive reassurance-seeking as a safety-seeking behaviour

ERS has been conceptualised from a cognitive behavioural perspective as a high-potency safety-seeking behaviour complicated by its intrinsically interpersonal nature (Kobori & Salkovskis, 2013). Specifically, according to the cognitive behavioural hypothesis, ERS represents a special type of checking behaviour akin to compulsive checking in OCD, a form of verification (as opposed to restitution as in the case of cleaning compulsions) motivated by the perception of threat and is an attempt to achieve safety and share or dilute the responsibility for harm (Halldorsson & Salkovskis, 2017a; Rachman, 2002). Consistent with such a view, a recent experimental study found that reassurance-seeking perceived responsibility and directly transfers reassurance-seeking behaviours (Leonhart & Radomsky, Although ERS can be considered a transdiagnostic phenomenon (Cougle et al., 2012; Rector et al., 2011, 2019) there is emerging evidence that there are disorder-specific cognitive and behavioural processes which motivate and generate reassurance-seeking (Halldorsson & Salkovskis, 2017a; Parrish & Radomsky, 2010). For example, there is evidence to suggest that individuals with OCD seek reassurance and experience the effects and consequences of receiving it differently compared to individuals with other anxiety problems (Halldorsson & Salkovskis, 2017a). This difference has clinical implications as it suggests that a 'one size fits all' treatment approach may not work, requiring clinicians to adapt how they respond to ERS and what they advise carers and patients when managing this complex behaviour across different disorders. The issue of therapeutic intervention in severe and persistent reassurance-seeking was recently illustrated using a single case experimental design with an older adult suffering from severe and chronic OCD. The main conclusions from that study were that a cognitive behavioural therapy which focuses on helping people who engage in ERS to shift from seeking reassurance to seeking support may be beneficial (Halldorsson & Salkovskis, 2017b). Notably, recent work by Neal and Radomsky (2019, 2020) has provided further evidence that, as a treatment intervention, support provision is both effective (Neal & Radomsky, 2019) and acceptable for patients and their caregivers (Neal & Radomsky, 2020).

7. Conclusion

This paper has examined ERS from a cognitive and behavioural perspective in line with theoretical perspectives set out by Salkovskis (1985, 1991, 1999) and Rachman (2002). Both Salkovskis and Rachman conceptualise ERS as a form of safety-seeking behaviour, wiz an obsessional checking behaviour, where the main difference between physical checking and ERS lies in the fact that it has a major interpersonal aspect. Specifically, reassurance seeking is an interactive process intended to reduce the perception of threat and transfer responsibility for danger onto the reassurer - 'a trouble shared is a trouble halved' (Kobori & Salkovskis, 2013). Critically, ERS shares the same functional and long-term characteristics as compulsive checking and other OCD related safety-seeking behaviours. As such, ERS prevents disconfirmation and strengthens the threat related belief and is at best only a temporary solution (and typically counter-productive). It is our hope that the definitions of ERS and support seeking provided in this paper will inform future research and clinical work and opens up new ways of investigating these complex and important behaviours.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Declaration of competing interest

The authors declare no conflict of interest.

Data availability

Data will be made available on request.

References

Abramowitz, J. S., & Moore, E. L. (2007). An experimental analysis of hypochondriasis. Behaviour Research and Therapy, 45(3), 413–424. https://doi.org/10.1016/j. brat.2006.04.005

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Fifth: American Psychiatric Association.

Bowlby, J. (1973). Attachment and loss: Volume II: Separation, anxiety and anger. In *Attachment and loss: Volume II: Separation, anxiety and anger* (pp. 1–429). London: The Hogarth press and the institute of psycho-analysis.

Bream, V., Challacombe, F., Palmer, A., & Salkovskis, P. (2017). Cognitive behaviour therapy for obsessive-compulsive disorder. Oxford University Press.

Chessell, C., Halldorsson, B., Harvey, K., Guzman-Holst, C., & Creswell, C. (2021).
Cognitive, behavioural and familial maintenance mechanisms in childhood obsessive compulsive disorders: A systematic review. *Journal of Experimental Psychopathology*, 12(3), 1–30. https://doi.org/10.1177/20438087211036581

Clark, D. M. (1999). Anxiety disorders: Why they persist and how to treat them. Behaviour Research and Therapy, 37, S5–S27, 0.

Clark, D. A., & Beck, A. T. (2011). Cognitive therapy of anxiety disorders. The Guilford Press.

Cougle, J. R., Fitch, K. E., Fincham, F. D., Riccardi, C. J., Keough, M. E., & Timpano, K. R. (2012). Excessive reassurance seeking and anxiety pathology: Tests of incremental associations and directionality. *Journal of Anxiety Disorders*, 26(1), 117–125. https://doi.org/10.1016/j.janxdis.2011.10.001

Cougle, J. R., Lee, H.-J., & Salkovskis, P. M. (2007). Are responsibility beliefs inflated in non-checking OCD patients? *Journal of Anxiety Disorders*, 21(1), 153–159. https://doi.org/10.1016/j.janxdis.2006.03.012

Coyne, J. C. (1976a). Toward an interactional description of depression. *Psychiatry*, 39 (1), 28–40.

Coyne, J. C. (1976b). Depression and the response of others. *Journal of Abnormal Psychology*, 85(2), 186–193.

Craske, M. G., Treanor, M., Conway, C. C., Zbozinek, T., & Vervliet, B. (2014). Maximizing exposure therapy: An inhibitory learning approach. *Behaviour Research and Therapy*, 58, 10–23.

Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin*, *99*(1), 20.

- Halldorsson, B., & Salkovskis, P. M. (2017a). Why do people with OCD and health anxiety seek reassurance excessively? An investigation of differences and similarities in function. Cognitive Therapy and Research, 41(4), 619–631.
- Halldorsson, B., & Salkovskis, P. M. (2017b). Treatment of obsessive compulsive disorder and excessive reassurance seeking in an older adult: A single case quasi-experimental design. Behavioural and Cognitive Psychotherapy, 45(6), 1–13. https://doi.org/ 10.1017/S1352465817000376
- Halldorsson, B., Salkovskis, P. M., Kobori, O., & Pagdin, R. (2016). I do not know what else to do: Caregivers' perspective on reassurance seeking in OCD. *Journal of Obsessive-Compulsive and Related Disorders*, 8, 21–30.
- Heerey, E. A., & Kring, A. M. (2007). Interpersonal consequences of social anxiety. Journal of Abnormal Psychology, 116(1), 125–134. https://doi.org/10.1037/0021-843x.116.1.125
- Joiner, T. E., Jr. (1994). Contagious depression: Existence, specificity to depressed symptoms, and the role of reassurance seeking. *Journal of Personality and Social Psychology*, 67(2), 287–296.
- Joiner, T. E., Metalsky, G. I., Katz, J., & Beach, S. R. H. (1999). Depression and excessive reassurance-seeking. Psychological Inquiry, 10(3), 269–278.
- Kobori, O., & Salkovskis, P. M. (2013). Patterns of reassurance seeking and reassurancerelated behaviours in OCD and anxiety disorders. *Behavioural and Cognitive Psychotherapy*, 41(1), 1–23. https://doi.org/10.1017/S1352465812000665
- Kobori, O., Salkovskis, P. M., Read, J., Lounes, N., & Wong, V. (2012). A qualitative study of the investigation of reassurance seeking in obsessive-compulsive disorder. *Journal* of Obsessive-Compulsive and Related Disorders, 1(1), 25–32.
- Kobori, O., Sawamiya, Y., Iyo, M., & Shimizu, E. (2014). A comparison of manifestations and impact of reassurance seeking among Japanese individuals with OCD and depression. *Behavioural and Cognitive Psychotherapy, FirstView*, 1–12. https://doi.org/ 10.1017/S1352465814000277
- Leonhart, M. W., & Radomsky, A. S. (2019). Responsibility causes reassurance seeking, too: An experimental investigation. *Journal of Obsessive-Compulsive and Related Disorders*. 20, 66–74.
- Monzani, B., Vidal-Ribas, P., Turner, C., Krebs, G., Stokes, C., Heyman, I., Mataix-Cols, D., & Stringaris, A. (2020). The role of paternal accommodation of paediatric OCD symptoms: Patterns and implications for treatment outcomes. *Journal of Abnormal Child Psychology*, 48(10), 1313–1323. https://doi.org/10.1007/s10802-020-00678-9
- Neal, R. L., & Radomsky, A. S. (2019). How do I say this? An experimental comparison of the effects of partner feedback styles on reassurance seeking behaviour. *Cognitive Therapy and Research*, 43(4), 748–758.
- Neal, R. L., & Radomsky, A. S. (2020). What do you really need? Self-and partner-reported intervention preferences within cognitive behavioural therapy for reassurance seeking behaviour. Behavioural and Cognitive Psychotherapy, 48(1), 25–37.
- Onur, E., Alkın, T., & Tural, Ü. (2007). Panic disorder subtypes: Further clinical differences. Depression and Anxiety, 24(7), 479–486. https://doi.org/10.1002/ da.20253
- Parrish, C. L., & Radomsky, A. S. (2010). Why do people seek reassurance and check repeatedly? An investigation of factors involved in compulsive behavior in OCD and depression. *Journal of Anxiety Disorders*, 24(2), 211–222.
- Peris, T. S., Benazon, N., Langley, A., Roblek, T., & Piacentini, J. (2008). Parental attitudes, beliefs, and responses to childhood obsessive compulsive disorder: The parental attitudes and behaviors scale. *Child & Family Behavior Therapy*, 30(3), 199–214. https://doi.org/10.1080/07317100802275447
- Phillips, K. A., Menard, W., Fay, C., & Weisberg, R. (2005). Demographic characteristics, phenomenology, comorbidity, and family history in 200 individuals with body dysmorphic disorder. *Psychosomatics*, 46(4), 317–325.
- Rachman, S. (2002). A cognitive theory of compulsive checking. Behaviour Research and Therapy, 40(6), 625–639.
- Rachman, S. (2012). Health anxiety disorders: A cognitive construal. Behaviour Research and Therapy, 50(7–8), 502–512.
- Radomsky, A. S., & Alcolado, G. M. (2010). Don't even think about checking: Mental checking causes memory distrust. *Journal of Behavior Therapy and Experimental Psychiatry*, 41(4), 345–351. https://doi.org/10.1016/j.jbtep.2010.03.005
- Rector, N. A., Kamkar, K., Cassin, S. E., Ayearst, L. E., & Laposa, J. M. (2011). Assessing excessive reassurance seeking in the anxiety disorders. *Journal of Anxiety Disorders*, 25(7), 911–917.

- Rector, N. A., Katz, D. E., Quilty, L. C., Laposa, J. M., Collimore, K., & Kay, T. (2019). Reassurance seeking in the anxiety disorders and OCD: Construct validation, clinical correlates and CBT treatment response. *Journal of Anxiety Disorders*, 67, Article 102109. https://doi.org/10.1016/j.janxdis.2019.102109
- Salkovskis, P. M. (1985). Obsessional-compulsive problems: A cognitive-behavioural analysis. Behaviour Research and Therapy, 23(5), 571–583.
- Salkovskis, P. M. (1991). The importance of behavior in the maintenance of anxiety and panic—a cognitive account. *Behavioural Psychotherapy*, *19*(1), 6–19.
- Salkovskis, P. M. (1996a). Avoidance behaviour is motivated by threat beliefs: A possible resolution of the cognitive-behaviour debate. In P. M. Salkovskis (Ed.), Trends in cognitive and behavioural therapies (pp. 25–41). John Wiley & Sons.
- Salkovskis, P. M. (1996b). The cognitive approach to anxiety: Threat beliefs, safety-seeking behavior, and the special case of health anxiety and obsessions. In *Frontiers of cognitive therapy* (pp. 48–74). The Guilford Press.
- Salkovskis, P. M. (1999). Understanding and treating obsessive-compulsive disorder. Behaviour Research and Therapy, 37(Suppl 1), S29–S52.
- Salkovskis, P. M., & Kobori, O. (2015). Reassuringly calm? Self-reported patterns of responses to reassurance seeking in obsessive compulsive disorder. *Journal of Behavior Therapy and Experimental Psychiatry*. https://doi.org/10.1016/j. ibten.2015.09.002
- Salkovskis, P. M., Shafran, R., Rachman, S., & Freeston, M. H. (1999). Multiple pathways to inflated responsibility beliefs in obsessional problems: Possible origins and implications for therapy and research. *Behaviour Research and Therapy*, 37(11), 1055–1072. https://doi.org/10.1016/s0005-7967(99)00063-7
- Salkovskis, P. M., & Wahl, K. (2003). Treating obsessional problems using cognitive behavioural therapy. In Cognitive therapy across the lifespan: Theory, research and practice (pp. 138–171).
- Salkovskis, P. M., & Warwick, H. M. (1986). Morbid preoccupations, health anxiety and reassurance: A cognitive-behavioural approach to hypochondriasis. *Behaviour Research and Therapy*, 24(5), 597–602.
- Salkovskis, P. M., & Warwick, H. M. C. (2001). Making sense of hypochondriasis: A cognitive theory of health anxiety. In S. Taylor, & B. J. Cox (Eds.), Health anxiety: Clinical and reserach perspective on hypochondriasis and related conditions (pp. 46–64). Wiley.
- Salkovskis, P. M., Warwick, H. M. C., & Deale, A. C. (2003). Cognitive-behavioral treatment for severe and persistent health anxiety (hypochondriasis). *Brief Treatment* and Crisis Intervention, 3(3), 353–367.
- Starcevic, V., Berle, D., Brakoulias, V., Sammut, P., Moses, K., Milicevic, D., & Hannan, A. (2012). Interpersonal reassurance seeking in obsessive-compulsive disorder and its relationship with checking compulsions. *Psychiatry Research*, 200(2), 560–567.
- Thibodeau, M. A., Asmundson, G. J. G., & Taylor, S. (2013). Health anxiety. In G. Simos, & S. G. Hofmann (Eds.), CBT for anxiety disorders: A practitioners book (pp. 135–160). John Wiley & Sons.
- Thwaites, R., & Freeston, M. H. (2005). Safety-seeking behaviours: Fact or function? How can we clinically differentiate between safety behaviours and adaptive coping strategies across anxiety disorders? *Behavioural and Cognitive Psychotherapy*, 33, 177–188. https://doi.org/10.1017/S1352465804001985, 02.
- Tyrer, P., Cooper, S., Salkovskis, P., Tyrer, H., Crawford, M., Byford, S., Dupont, S., Finnis, S., Green, J., McLaren, E., Murphy, D., Reid, S., Smith, G., Wang, D., Warwick, H., Petkova, H., & Barrett, B. (2014). Clinical and cost-effectiveness of cognitive behaviour therapy for health anxiety in medical patients: A multicentre randomised controlled trial. *Lancet*, 383(9913), 219–225. https://doi.org/10.1016/S0140-6736(13)61905-4
- Tyrer, P., Cooper, S., Tyrer, H., Salkovskis, P., Crawford, M., Green, J., Smith, G., Reid, S., Dupont, S., Murphy, D., Byford, S., Wang, D., & Barrett, B. (2011). Champ: Cognitive behaviour therapy for health anxiety in medical patients, a randomised controlled trial. *BMC Psychiatry*, 11(1), 99. https://doi.org/10.1186/1471-244X-11-99
- Walters, S. L., Salkovskis, P. M., Halldorsson, B., & Elgie, S. (2020). A preliminary investigation of excessive reassurance-seeking and attachment-related behaviours in adolescents with OCD. *Journal of Obsessive-Compulsive and Related Disorders*, 24, 100503. https://doi.org/10.1016/j.jocrd.2019.100503
- Warwick, H. M., & Salkovskis, P. M. (1985). Reassurance. British Medical Journal, 290 (6474), 1028.
- Woody, S., & Rachman, S. (1994). Generalized anxiety disorder (GAD) as an unsuccessful search for safety. Clinical Psychology Review, 14(8), 743–753. https://doi.org/ 10.1016/0272-7358(94)90040-x