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REPLY

On Repression, and Avoiding Red Herrings

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In this response to Otgaar et al. (2020), we point out that their concern with the notion of unconscious repression is a classic example of a red herring, as it has never been endorsed as an explanation of recovered memories. We also note that Otgaar et al. have misunderstood the purpose of our article (Brewin, Li, Ntarantana, Unsworth, & McNeilis, 2019). Its aim was to demonstrate that many of the claims made by psychologists about the public's views on memory do not rest on sound methodology. Beliefs about repression featured as one example, but it was not our objective to establish what the public do think about repression. We welcome Otgaar et al.'s additional data but regret that they have repeated the basic error we highlighted, the reliance on a single questionnaire item to assess beliefs about highly complex topics. Nevertheless, their and our findings clearly indicate that understanding of the public's views on repression remains extremely limited, and insufficient to meaningfully contribute to legal processes.

Keywords: trauma, forgetting, repression

In their commentary, Otgaar et al. (2020), make an argument that we view as wholly unsustainable. This argument, first introduced by Loftus (1993), equated the forgetting and subsequent recovery of memories of traumatic events with the psychoanalytic mechanism of repression, a supposedly unconscious form of psychological defense. This was a category error, confusing the observed phenomenon (forgetting of trauma) with a possible mechanism (Brewin & Andrews, 1998; Lindsay & Briere, 1997). It was also a red herring (i.e., an idea that distracts people from the central point being considered), in that no publications by clinicians that endorsed unconscious repression as responsible for this forgetting were cited by Loftus at the time or have come to light subsequently (Brewin, 2020). Today there is no debate, either among professional bodies or independent commentators, over the fact that recovered memories of traumatic events may be true, false, or a mixture of the two (Belli, 2012; Lindsay & Read, 1995; McNally & Geraerts, 2009). What mechanisms are responsible remains poorly understood but that question is of more academic than legal interest.

It is against this background that the commentary by Otgaar et al. (2020) needs to be understood. Our article (Brewin, Li, Ntarantana, Unsworth, & McNeilis, 2019) was intended to demonstrate that in several areas psychologists' characterization of the public's beliefs about memory rested on insecure foundations. By manipulating the wording of several standard survey items used to measure the belief that memory is like a video camera, the perceived relation between confidence and accuracy, and the existence of repression, we demonstrated that prevalent assumptions about the public's beliefs were incorrect or, at the least, only partially correct. The main purpose of the article was to caution psychologists, particularly those acting in legal settings, against making premature claims about the public's beliefs on the basis of single survey items, and to encourage more detailed explorations of those beliefs. It was not to establish what those beliefs might in fact be.

One of the survey items we addressed (in Study 3) concerned beliefs about repression. We had noted that an important and well-known distinction between conscious and unconscious types of repression was not reflected in the standard survey items employed and that, as a consequence, conclusions frequently advanced in the literature (Benton, Ross, Bradshaw, Thomas, & Bradshaw, 2006; Lynn, Evans, Laurence, & Lilienfeld, 2015; Magnussen, Melinder, Stridbeck, & Raja, 2010; Patihis, Ho, Tingen, Lilienfeld, & Loftus, 2014) concerning the public's beliefs in unconscious repression were not soundly based. We therefore added an item concerning conscious repression and found that it was endorsed at the same rate as the standard item that did not distinguish between different types of repression. Contrary to Otgaar et al.'s suggestion, we did not conclude that when people are asked to indicate their belief in repressed memory, they actually think of deliberate memory suppression rather than unconscious repressed memory. We could not draw such a conclusion because we did not ask them about the latter. Instead, as in a previous article (Brewin & Andrews, 2014), we simply noted that there was an alternative interpretation of the existing survey data.

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We are pleased that Otgaar et al. have taken the findings forward by asking additional questions but are disappointed that, once again, they appear to have taken responses to single survey items at face value. In our article we stressed that understanding lay beliefs about memory required detailed investigation to ensure the nuances of those beliefs were appreciated. Simply including another item referring to memory being "unconsciously repressed" is not the end of the story, but the beginning. Given that unconscious repression is a complex, technical notion it is important to know how adequate, comprehensive, and comprehensible the existing items are, how the general public interpret them, and whether the distinctions drawn by psychologists are meaningful to them. This requires detailed qualitative and quantitative work.

Otgaar et al. (2020) also suggest that we have overstated the evidence on deliberate suppression of memories. The appreciation that forgetting is essential if memory is to operate efficiently goes back to the 19th century, with experimental demonstrations of intentional forgetting becoming commonplace from the 1970s onward (Geiselman, Bjork, & Fishman, 1983). This has included research on the suppression of stimuli rich in sensory elements such as autobiographical memories and images (Barnier et al., 2007; Barnier, Hung, & Conway, 2004; Benoit, Davies, & Anderson, 2016; Hu, Bergström, Bodenhausen, & Rosenfeld, 2015; Joslyn & Oakes, 2005; Küpper, Benoit, Dalgleish, & Anderson, 2014; Noreen & MacLeod, 2013; Noreen, O'Connor, & MacLeod, 2016). Intriguingly, having a trauma history may make people more able to suppress unwanted information, as has been demonstrated with simple laboratory materials (Hulbert & Anderson, 2018).

Intentional forgetting is a particularly attractive mechanism to explain inability to recall childhood abuse for several reasons. First, adults often describe having actively tried to forget abuse when they were children (Ghetti et al., 2006). Second, it has been argued that there are two types of recovered memories: those that gradually return in recovered memory therapy and those that are spontaneously recovered outside the context of therapy (Geraerts et al., 2007; McNally & Geraerts, 2009). In practice the distinction is not so clear-cut, as memories may also be recovered spontaneously within therapy without patients being encouraged to do so (Andrews et al., 1999). The fact that memories may return in different ways and different contexts strengthens the argument that there may be a variety of mechanisms involved. For example, it has been reported that those who recovered their memories gradually in therapy showed an increased proneness to associative illusions in the Deese–Roediger–McDermott paradigm, whereas those who spontaneously recovered memories outside therapy had a heightened tendency to forget prior incidents of remembering (Geraerts et al., 2009). Thus intentional forgetting would not need to explain all instances of recovered memories, only some of them.

Otgaar et al. (2020) try to cast doubt on intentional forgetting by noting that a different paradigm, thought suppression, leads to an increase rather than a decrease in unwanted thoughts. In these experiments participants are told not to think of an object such as a white bear and to report when it comes to mind. What is notable is that simply remembering the purpose of this task conflicts with the required goal, rendering it effectively impossible. In contrast intentional forgetting studies simply require participants to suppress awareness of memories without those memories needing to be kept constantly in mind (Engen & Anderson, 2018). These basic differences in methodology do not undermine the exceptionally well-replicated finding that memory can be deliberately made worse as well as better. Indeed thought suppression researchers have noted that techniques such as focused distraction can be effective in blocking unwanted thoughts (Wegner, 2011).

More generally, it has been known for many years that the ability to retrieve even very well-learned material can fluctuate greatly over time, and is highly responsive to the context obtaining at retrieval (Bjork & Bjork, 1992; Hasher & Griffin, 1978). This, together with 50 years of evidence for deliberate memory suppression, offers a plausible account of many memory recovery experiences. Otgaar et al. are correct that these processes have not yet been demonstrated to be responsible for the recovery of childhood memories of trauma. Just as with the experimental literature on memory implantation, a considerable gap between the laboratory and real life remains (Brewin & Andrews, 2017). But it is clear that there is no necessary contradiction between clinical observations of memory recovery and the science of memory.

What function might be served by pursuing the red herring of unconscious repression? A clue comes toward the end of Otgaar et al.'s article where they say "it is still important to seek testimony from memory experts in cases involving 'recovered' memories" (p. 1999). One of us (C. B.) has read dozens of reports produced by memory experts on behalf of defendants accused of sexual abuse on the alleged basis of recovered memories. Almost all of these failed to report the professional and scientific consensus on the forgetting of trauma cited above and framed their argument exclusively in terms of the disputed concept of repression. This would have created an impression in the uninformed reader that the scientific consensus concerning recovered memories was not open-minded, as is the case, but was in fact highly skeptical.

A key element in the argument made by these defense experts is that most therapists, lawyers, and members of the public have a faulty understanding of memory, overestimating its reliability and accepting notions such as unconscious repression that have not been supported by science. We have previously shown that many of these claims concerning the unreliability of memory are exaggerated (Brewin, Andrews, & Mickes, 2020). The new findings reported by ourselves and by Otgaar et al. (2020) have severely weakened the second claim that the public believes in unconscious repression. The fact that the public endorses different potential mechanisms to an equal extent, coupled with the failure of questionnaire items to reflect the different contexts in which memories may be recovered and the lack of detailed research into the nature of their beliefs, indicates that current knowledge is far too limited to advise the courts. In any case, courts are concerned with whether or not forgetting has occurred, not with the underlying mechanism.

To sum up, in this debate the notion of unconscious repression has been a red herring only ever paraded by those who are skeptical of recovered memories of abuse. Having first produced it they have been swift to decry it as a myth, despite the fact that it has not been disproved. Their approach has been largely devoid of developmentally- and environmentally informed considerations about the situation and natural response of children threatened with repeated abuse. Our research, and the subsequent studies reported by Otgaar et al. (2020), suggests that the general public does not discriminate between different possible mechanisms of forgetting,

possibly because they do not fully understand them in the way they have been presented.

Rather than continuing to assert that "the belief in the scientifically controversial phenomenon of repressed memory remains widespread among the general public" (p. 1999), we urge Otgaar et al. to reflect on the fact that recovered memories are a reasonably common therapeutic phenomenon that does not invariably involve sexual abuse, and is largely unrelated to therapists' beliefs in repression or use of inappropriate therapeutic techniques (Andrews et al., 1999; Brewin, 2020; Brewin & Andrews, 1998; Dodier, Patihis, & Payoux, 2019). Given this, and the technical nature of the subject, it is not surprising that the attempt to reduce complex situations to simple questionnaire items with limited response options has not been productive and has not led to meaningful results.

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