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Brewin and Andrews's (2014) Commentary on our article (Patihis, Ho, Tingen, Lilienfeld, & Loftus, 2014) raises several thoughtful points with which we largely agree, but presents several criticisms that we do not believe withstand careful scrutiny. We respond briefly.

We concur with Brewin and Andrews that attempts to find experimental evidence for unconscious repressed memories have been largely unsuccessful (see also McNally, 2003; Piper, Lillevik, & Kritzer, 2008). Nevertheless, Brewin and Andrews qualify this conclusion somewhat by citing Anderson and Green's (2001) investigation as providing evidence of suppression, which they regard as a variant of repression. In that study, participants were presented with words that they were asked not to think about: The stimuli were not traumatic autobiographical memories. Anderson and Green's findings might provide evidence of retrieval inhibition of words, although they are open to alternative explanations. Anderson and Green framed their study as a test of Freudian repression as early as their opening sentence—an unwarranted assertion that has been echoed by other people.

Brewin and Andrews are concerned that participants in our research may have endorsed a belief in suppression, rather than the type of repression that involves an unconscious process of pushing memories out of awareness. This possibility seems unlikely, as instructions clearly indicated to participants that we were referring to unconscious repressed memories. In both Study 1 and Study 2, participants were told that by "repressed memory" we meant that "the person cannot remember the traumatic event" because of "a defense against painful content." The word *cannot* implied that the items referred to an inability to remember the event, not to a conscious choice to avoid thinking about it. In addition, in Study 2, we defined repressed memory in more depth: The survey began with a case study of a woman who had "never been aware" of memories of abuse before therapy and who then recalls incest in therapy. If she had "never

been aware of the abuse, our questions to participants were not referring to a conscious decision to not think about trauma. On the next page in the survey for Study 2, we defined "repressed memory" as

something . . . that is so shocking that the mind grabs hold of the memory and pushes it underground, into some inaccessible corner of the unconscious. There it sleeps for years, or even decades, or even forever isolated from the rest of mental life. Then, one day, it may rise up and emerge into consciousness. (Patihis et al., 2014, p. 528; originally from Loftus, 1993, p. 518)

This definition, which refers explicitly to unconscious repressed memory, appeared in the survey only three questions before the repressed-memory items displayed in our Table 5. Even with such additional definitions, the percentage of undergraduates agreeing with the repressed-memory statements remained similarly high in Study 2 (78% and 65%) compared with Study 1 (81% and 70%).

Brewin and Andrews cite the British Psychological Society's (2001) report as offering a scientific endorsement of accurate recovery of memory using hypnosis. Nevertheless, that report stated that "what is incontrovertible is that using hypnosis . . . carries a real risk of producing substantial pseudo-memories" (p. 14). Brewin and Andrews also suggest that the statement that "some people have true 'photographic memories'" may be consistent with results reported by LePort et al. (2012). In fact, LePort et al. found that people with superior autobiographical memory do *not* have genuine photographic memories, as demonstrated in a number of laboratory

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memory tests, a finding further supported by Patihis et al. (2013). Brewin and Andrews note that in a factor analysis in Study 1, unusual statements such as “With effort, we can remember events back to birth” did not load on the repressed-memory factor, implying that this factor may be more scientifically respectable than the belief in this unusual statement. Actually, that statement did load on the repressed-memory factor in Study 2, which had a larger and a more varied sample than Study 1.

We agree with Brewin and Andrews that there is a gap between mainstream clinicians and some alternative therapists, a point we mentioned (Patihis et al., 2014, p. 529). But on many items referring to repressed or recovered memories, we also found a sizable gap between mainstream clinicians and the four research-oriented groups we examined (Patihis et al., 2014, Table 5; see also our Supplemental Material, p. DS16 and Tables S2.3, S2.4, and S2.6).

Brewin and Andrews suggest that “dissociation” is a possible mechanism for the forgetting of traumatic events. Nevertheless, a link between past stressors and scores on the Dissociative Experiences Scale (DES; Carlson & Putnam, 1993) does not provide evidence of dissociative amnesia for past trauma, especially because DES items refer to a host of strange experiences other than forgetting. Changing the name “repressed memory” to “dissociative amnesia” may obscure the issue rather than clarify it. Brewin and Andrews’s invocation of dissociation as a mechanism for amnesia may be an explanation in search of a phenomenon given that the scientific evidence for dissociative amnesia is minimal (Lynn et al., 2014; Piper et al., 2008).

We believe that memories, whether of words or even of traumatic events, might not be thought about for a period of time and later remembered, perhaps with a cue. Our skepticism instead concerns the following scenario: A client enters therapy with psychological symptoms, such as those of depression or an eating disorder, and no memory of being abused, but following extended use of suggestive memory techniques (e.g., hypnosis, guided imagery, leading questions), remembers years of severe trauma. We know of no credible scientific evidence that memory works this way.

In conclusion, we stand by our findings given that we adequately defined *repressed memory* and made clear to participants that we were inquiring about beliefs regarding unconscious blocking of traumatic memories. We did not focus on beliefs about memory suppression, deliberate avoidance, or forgetting of trauma via normal memory mechanisms, because these beliefs are less problematic. We believe that the experimental evidence for the

existence of unconscious repression is unconvincing, as do Brewin and Andrews. But we part ways with their assertion that belief in repression is scientifically justified.

Author Contributions

L. Patihis drafted the manuscript, and all four authors provided critical revisions. All authors approved the final version of the manuscript for submission.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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