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Memory experts' beliefs about repressed memory

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ABSTRACT

What we believe about how memory works affects the decisions we make in many aspects of life. In Patihis, Ho et al. [Patihis, L., Ho, L. Y., Tingen, I. W., Lilienfeld, S. O., & Loftus, E. F. (2014). Are the "memory wars" over? A scientist-practitioner gap in beliefs about repressed memory. *Psychological Science*, 25, 519–530.], we documented several groups' beliefs on repressed memories and other aspects of how memory works. Here, we present previously unreported data on the beliefs of perhaps the most credible minority in our dataset: memory experts. We provide the statistics and written responses of the beliefs for 17 memory experts. Although memory experts held similarly sceptical beliefs about repressed memory as other research-focused groups, they were significantly more sceptical about repressed memory compared to practitioners, students and the public. Although a minority of memory experts wrote that they maintained an open mind about repressed memories – citing research such as retrieval inhibition – all of the memory experts emphasised the dangers of memory distortion.

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For more than a hundred years, the concept of repressed memory has influenced culture, clinical psychology and the law. It is the idea that a traumatic memory can be stored yet inaccessibly blocked away from conscious knowledge. These beliefs affect all our lives. If, for example, we believe we are carrying repressed traumas from early childhood that may affect our relationships with those who we suspect of perpetrating that trauma (e.g., family, which may lead to estrangement: see Patihis & Pendergrast, 2018). Beliefs about memory also affect decisions made by clinicians in psychotherapy and by judges and juries in cases that involve repressed memory or possible memory contamination. In Patihis, Ho, Tingen, Lilienfeld, and Loftus (2014), we documented the beliefs of relevant groups such as experimental psychologists, members of the Society of Applied Memory and Cognition (SARMAC), practicing clinicians and the public. Although we used experimental psychologists and SARMAC as comparison groups with the most expertise, not all participants in those groups were necessarily memory experts. For example, some members of SARMAC may focus on another area of cognition, and some may not have a doctorate. In this brief report, we address this omission by documenting the beliefs of perhaps the most credible subgroup on the topic of memory: those with doctorates who specialise in memory and were actively involved in research at an accredited university at the time of data collection.

Another area that our original article (Patihis, Ho et al., 2014) did not address was the degree to which the

numeric multiple-choice questions adequately captured the nuance of the beliefs of memory experts. Some of the comments in the original dataset from those with expertise in psychology expressed a wish to qualify their answers with a few sentences of explanation. Indeed, Brewin and Andrews (2014) brought up the possibility that numeric multiple-choice questions may not be adequately capturing the nuanced beliefs of the participants. Though we maintain that the quantitative data do reveal important practical disagreements in psychology (for our reply, see Patihis, Lilienfeld, Ho, & Loftus, 2014), we also acknowledge that much can be learned from the written responses.

Method

Participants

We utilised the dataset from Patihis, Ho et al. (2014; Study 2) of 1376 participants and identified 17 memory experts (7 females) whose self-report met the following definition: they must (1) have a doctorate, (2) be a professor (any rank), lecturer or postdoctoral researcher, (3) must be currently involved in research at an accredited university for at least 10% of their time and (4) be at least 33 years old to allow for as many as 10 years of research experience at the graduate level and above. The age of the memory experts ranged from 34 to 71 years, with a mean age of 45.5 (SD = 9.98). These experts identified were drawn from the following subgroups reported in Patihis, Ho et al. (2014): nine were SARMAC members, seven

experimental psychologists and one clinical psychology researcher (who reported memory as his main area of research). Seventeen self-identified as White/Caucasian, with one identifying as both White/Caucasian and Latino/Hispanic. Of these experts, 12 were from the United States of America, 1 from Australia, 1 from Denmark, 1 from Portugal, 1 from Spain and 1 from the United Kingdom. Of these 17 participants, 11 identified their occupation as professor or academic, 2 as assistant professor (USA, or the equivalent “lecturer” in Australia/UK), 2 as researcher, 1 as a lecturer (USA) and 1 as a postdoctoral researcher. When asked about their area of specialisation, 9 reported “memory”, 2 “cognitive psychology (memory)”, 1 “memory and statistics”, 1 “learning and memory”, 1 “autobiographical memory and eyewitness memory”, 1 “motivation and autobiographical memory” and 1 “eyewitness memory”. The experts spent an average of 45.9% (range 10–70; SD = 21.5%) of their time teaching and an average of 51.2% (range 10–90; SD = 22.9%) of their time researching in an accredited university. For demographics of comparison groups, see Patihis, Ho et al. (2014).

Materials and procedure

As described in more detail in Patihis, Ho et al. (2014; Study 2), individuals were invited by email to participate. These emails were sent to the memory experts by collecting email addresses from websites (e.g., research university websites) and from electronic email lists (e.g., SARMAC; Society for Science in Clinical Psychology, SSCP). The email included a link to the survey which participants could complete online at a place and time of their choosing. The survey took approximately 20 minutes to complete.

Participants first filled out demographic questions, including their level of education, occupation, and for

psychologists, the percentage of time spent on teaching and research tasks. Participants then answered a series of questions about how they believe memory works. Prior to questions on repressed memories, they were given short definitions of that concept. For example, participants were told that by “repressed memory” we meant that “the person cannot remember the traumatic event” because of “a defense against painful content”. Later, they were informed that a “repressed memory” was something “that is so shocking that the mind grabs hold of the memory and pushes it underground, into some inaccessible corner of the unconscious” (from Loftus, 1993, p. 518). As examples, two questions asked to what degree participants agreed with the statements that “traumatic memories are often repressed” and “repressed memories can be recalled in therapy accurately”. The full set of questions are given in Tables S1–S11 in the Supplemental Material. Other questions addressed various aspects of the reliability of memory. Some of these questions were original to Patihis, Ho et al. (2014), whilst others were drawn from Yapko (1994), Golding, Sanchez, and Segio (1996) and Gore-Felton et al. (2000).

Results

Tables 1 and 2 show that the average memory belief scores for memory experts on eight key questions are in alignment with other research-focused groups (e.g., experimental psychologists, SARMAC, SSCP and clinical researchers). Table 1 documents questions relating to the plausibility that abuse happened in a case which involved someone who cannot remember child sexual abuse (CSA; question 1), whether traumatic memories are often repressed (2) and retrievable in therapy (3), as well as a question on the general reliability of memory. Table 2 documents the

Table 1. Mean memory beliefs (SD) of memory experts compared to various participant groups.

Participant group	<i>n</i>	(1) ^a Recovered CSA plausible	(2) ^b Traumatic memories are often repressed	(3) Repressed memories can be retrieved in therapy	(4) Memory can be unreliable
Memory experts	17	2.25 (.68)	2.31 (1.40)	2.06 (1.06)	5.88 (0.34)
<i>Other research-related</i>					
Experimental Psychologist	96	2.16 (.77)	2.68 (1.28)	2.43 (1.14)	5.78 (0.42)
SARMAC	70	2.09 (.70)	2.31 (1.36)	2.11 (1.17)	5.81 (0.49)
SSCP	62	2.15 (.72)	2.37 (1.19)	1.92 (0.98)	5.90 (0.30)
<i>Clinical</i>					
Clin. Psy. Researcher	62	2.16 (.78)	2.44 (1.22)	2.26 (1.14)	5.79 (0.45)
Clin. Psy. Practitioner	58	2.55 (.68)	3.57 (1.40)	3.10 (1.21)	5.36 (0.64)
Psychoanalysts	79	2.58 (.71)	3.99 (1.48)	3.21 (1.35)	5.42 (0.55)
Hypnotherapists	50	2.94 (.59)	4.66 (1.15)	3.62 (1.55)	5.00 (1.13)
<i>Non-professionals</i>					
Undergraduates	406	2.80 (.56)	4.22 (1.09)	3.68 (1.01)	4.73 (1.08)
<i>General public</i>					
United States	112	2.92 (.54)	4.42 (1.12)	4.08 (1.01)	4.30 (1.14)
United Kingdom	112	2.75 (.56)	4.31 (1.04)	3.75 (1.00)	4.94 (1.05)
India	110	2.65 (.77)	3.92 (1.08)	4.22 (0.92)	3.24 (1.25)

Notes: Mean ratings given with standard deviations in parenthesis. ^aQuestion (1) Likert scale: 1 = *very implausible*; 2 = *implausible*; 3 = *plausible*; 4 = *very plausible*. ^bQuestions (2) through (9) Likert scale: 1 = *strongly disagree*; 2 = *disagree*; 3 = *slightly disagree*; 4 = *slightly agree*; 5 = *agree*; 6 = *strongly agree*. SARMAC, Members of the Society for Applied Research in Memory and Cognition; SSCP, Society for a Science of Clinical Psychology; Clin. Psy. Practitioners, Clinical/counselling psychologist members of American Academy of Clinical Psychology (AACP; board-certified); Clin. Psy. Researchers, Professors in clinical psychology at research universities; psychoanalysts, members of psychoanalytic organisations, e.g., The American Academy of Psychoanalysis and Dynamic Psychiatry (AAPDP); Hypnotherapists, Members of National Board for Certified Clinical Hypnotherapists (NBCCH).

statistics for questions relating to the reliability of hypnosis (5), the reconstruction of memory (6), the permanent storage of memory (7), photographic memory (8) and the ability to remember back to birth (9). Using the data in Tables 1 and 2, all *t*-test comparisons on all eight questions revealed no significant differences between our memory experts and these four research groups (all $p > .07$; p ranges from .07 to 1.00). See Tables S3 and S4 for tables showing the corresponding percentage agreement with these nine statements. Table S12 gives the characteristics, the two central repressed memory belief item scores and factor 1 scores for all 17 memory experts individually.

Comparing memory experts to practitioners and the public, there were some differences in memory belief scores (using the statistics in Table 1). For example, on item (1), memory experts found the idea that someone would be a victim of CSA, despite not remembering it, significantly less plausible than did hypnotherapists ($t(65) = 4.01, p < .001$) and the general public (in the USA, UK and India; all $p < .002$). On item (2), memory experts agreed less often with the statement “traumatic memories are often repressed” compared to clinical psychology practitioners, hypnotherapists, undergraduates and the general public ($p < .002$). Similarly, on item (3) memory experts agreed with the statement “repressed memories can be retrieved in therapy accurately” significantly less than those same comparison groups ($p \leq .002$).

Table 3 shows the mean scores on Factor 1, which is a composite factor demonstrating a general belief that memory is repressed, reliable and accurately retrieved. The lower the factor 1 score, the more sceptical participants are of repressed memory and accuracy. Memory experts scored similarly to SARMAC members ($p = .13$). Memory experts’ scores were significantly lower on this factor than experimental psychologists, SSCP members, clinical psychology researchers, clinical practitioners, hypnotherapists, undergraduates and the general public ($p < .04$; with the

Table 3. Means and SDs of Factor 1 (belief in the general accuracy, reliability, and recoverability of memory – including repressed memory) for memory experts and other participant groups.

Participant group	<i>n</i>	<i>M</i>	<i>SD</i>
Memory experts	15	33.4	15.5
Experimental Psychologists	70	44.5	15.3
SARMAC	48	40.5	15.8
SSCP	33	44.2	12.8
Clinical Psychology Researchers	35	43.9	15.5
Clinical Psychology Practitioners	42	57.5	19.3
Psychoanalysts	62	55.9	17.8
Hypnotherapists	42	78.7	26.3
Undergraduates	388	76.7	15.7
US public	99	86.3	18.4
UK public	100	76.4	18.5
India public	103	87.8	14.4

Notes: Factor 1 is a composite measure approximating an overall set of beliefs indicating the reliability of memory in general and of repressed memories. Note that participants who did not complete all the questions in the composite were excluded (hence smaller *n*'s than elsewhere).

general public of the USA and India being the least sceptical about memory on this factor).

Beyond the numbers: written statements by the memory experts

A number of the memory experts in the sample added comments to clarify what they meant by their responses to the multiple-choice questions.

Least sceptical

Let's first examine the written statements of memory expert #13 who was the least sceptical about memory repression and memory reliability, to understand the subtleties of her beliefs. Memory expert #13 scored 78 on factor 1, above the mean for most groups (see Table 3), and indicated she slightly agreed to items 2 (traumas are often repressed) and 3 (repressed memories can be recalled in therapy accurately). She was the only memory

Table 2. Mean scores on memory beliefs (SD) questions for memory experts and various participant groups.

Participant group	<i>n</i>	(5) Hypnosis accurately retrieves memories	(6) Memory is reconstructed	(7) Memory of everything is stored	(8) Photographic memories	(9) Can remember back to birth
Memory experts	17	1.94 (0.93)	5.63 (0.50)	2.00 (1.21)	2.75 (1.44)	1.31 (0.79)
<i>Other research-related</i>						
Experimental Psy.	96	2.21 (1.16)	5.48 (0.79)	2.37 (1.41)	3.35 (1.31)	1.30 (0.72)
SARMAC	70	1.90 (1.04)	5.53 (0.72)	2.30 (1.40)	2.90 (1.61)	1.29 (0.66)
SSCP	62	1.56 (0.84)	5.42 (0.82)	2.06 (1.16)	3.44 (1.35)	1.13 (0.34)
<i>Clinical</i>						
Clin. Psy. Researcher	62	1.92 (0.98)	5.18 (0.98)	2.06 (1.24)	3.63 (1.26)	1.29 (0.66)
Clin. Psy. Practitioner	58	2.76 (1.29)	4.83 (0.86)	3.21 (1.60)	3.95 (1.48)	1.72 (1.14)
Psychoanalysts	79	2.53 (1.17)	5.02 (0.94)	2.78 (1.50)	4.01 (1.31)	1.48 (0.78)
Hypnotherapists	50	3.86 (1.64)	4.44 (1.30)	4.30 (1.34)	4.64 (1.10)	3.20 (1.70)
<i>Non-professionals</i>						
Undergraduates	406	3.19 (1.17)	4.77 (0.97)	3.84 (1.33)	4.50 (1.19)	2.32 (1.16)
<i>General public</i>						
United States	112	3.77 (1.20)	4.18 (0.95)	4.20 (1.37)	4.92 (1.03)	2.76 (1.32)
United Kingdom	112	3.73 (1.10)	4.59 (0.95)	3.64 (1.34)	4.46 (1.25)	2.37 (1.27)
India	110	4.05 (0.94)	4.02 (1.21)	4.54 (1.09)	4.81 (1.00)	3.33 (1.36)

Notes: Mean ratings given with standard deviations in parenthesis. Likert scale: 1 = strongly disagree; 2 = disagree; 3 = slightly disagree; 4 = slightly agree; 5 = agree; 6 = strongly agree.

expert to show some agreement with both statements. She reported teaching 70% of her work time and researching 20%. Despite being the least sceptical, she still wrote “suggestibility of a client can increase through hypnotherapy”. She clarified her primary academic influence on her beliefs was a “lecturer, who I won’t name” and clarified her uncertainty on the issue at the end of the survey by writing: “the jury is still out on whether or not repressed memories that ‘resurface’ during therapy are legitimate, and many are still sceptical. I guess I take the middle ground, but would love to be convinced either way!”

Memory expert #12, in response to the two questions shown in Table S6 regarding the accuracy of repressed memories, wrote:

Repression is not well supported, although we do not know enough to rule it out completely. There is emerging, and convincing evidence, for retrieval inhibition, a lack of rehearsal can also lead to a sense of forgetting; there is the FIA [forgot-it-all-along] effect, and hence spontaneous recovery or rediscovery has happened, clearly outside therapy and possibly within therapy. But such recoveries are rare compared to CSA victims with continuous memories. [words in square brackets added by authors]

Later in the survey, he wrote that he was influenced by the work of “Michael Anderson and others exploring retrieval inhibition”. In response to question 21 (see Table S9), he explains why he changed his mind about the possibility of repressed memories in 2010, writing:

‘repressive-like’ phenomena do exist – retrieval inhibition is one example – and some recent experimental evidence does indicate that participants will demonstrate stronger retrieval inhibition to negative emotional stimuli in comparison to positive stimuli. And so I answered b [“Now I think repressed memories could be true memories”] because I used to believe that something such as retrieval inhibition – even in the case of CSA (which is often uncomfortably but not traumatically experienced), would not be possible.

Later, he typed: “I also believe that there are elements of BTT [betrayal trauma theory] that have merit, especially to the extent to which such models can be tied to experimental data, such as retrieval inhibition”.

Moderate sceptics

Most memory experts had a different view to memory expert #12. For example, memory expert #5 wrote:

The evidence doesn’t preclude the remembering of previously-inaccessible memories, even traumatic ones, but it does place some responsibility for providing supporting evidence (beyond the memory) that a traumatic experience has taken place in the past. ... False memories are very easy to implant and existing memories are very easy to modify. Even our most significant-feeling memories are not necessarily any more accurate than those that feel less significant. Encoding does not occur in a vacuum. It must be reconciled with a person’s existing knowledge and beliefs. Retrieval does not occur in a vacuum. The act of retrieval makes memories vulnerable to modification.

A few experts expressed a similar view: that memory is malleable, while still maintaining an open mind about whether repressed memories can be accurate.

Memory expert #8, a professor specialising in memory spending 60% of his time researching, and who scored 43 on factor 1, noted that he changed his mind about repressed memories in 1995, stating: “I went from being agnostic on the issue to realising that false memory were very common”. He noted that he changed his mind not because of media, which he wrote “has had little influence on me in this regard”, but as a result of being introduced “to the academic literature on false memories”. The lack of influence of the media, and a reliance on peer reviewed research was a common theme expressed by most of our memory experts.

There were a number of clarifying written answers to Golding et al. (1996) question asking whether methods used by therapists to recall repressed memories are legitimate, that they implant false memories, or both (see Table S6 for numeric results). For example, memory expert #5 wrote that:

The role of the therapist in this situation is to balance the psychological reality of the recovered memories the client is experiencing (even if the memory isn’t real, it is still affecting the mental health of the client) with the considerable evidence that false memories are very easy to generate. I’m also suspicious about any episodic memory that predates the typical boundary of infantile amnesia.

Memory expert #6 wrote: “I suspect that therapists assist clients in ‘recalling’ false memories”. A sceptical yet open-minded stance was shared by several memory experts. For example, memory expert #16 – a professor of cognitive psychology and memory specialist – wrote: “memories can be very inaccurate. Therapists can inadvertently plant false memories of abuse. Nonetheless, there are cases where individuals have spontaneously on their own recovered (discovered) memories of long forgotten abuse (Schooler’s work)”.

Most sceptical

Memory expert #4, a professor specialising in memory – who spent 70% of her time on research – scored 29 on factor 1 which indicates a high level of general scepticism towards repressed memory and the reliability of memory. She wrote that her beliefs about memory had been influenced by “peer reviewed journals, books by academics and talks by researchers”. She summarised her viewpoint by writing, “in brief, memory is easily distorted, subject to error and often a combination of fact, bias, post event information and prior knowledge”.

Memory expert #14, a lecturer (equivalent to an assistant professor in the USA), whose area of specialisation is memory, and who spent 30% of her professional time on research wrote that she was influenced by “[Richard] McNally’s book: Remembering Trauma”. She wrote that she believed “traumatic memories are just like normal memories: they’re malleable. They’re more likely to be intrusive and recurring, than buried away”.

In a response to a question asking about which researchers have influenced their beliefs, several scholars

and writers were listed by the memory experts, including: Anderson, Berntsen, Ceci, Garry, Jacoby, Lindsay, Loftus, Lyon, McNally, Pendergrast, Read, Roediger, Schacter, Schooler, Seamon and Tulving. Appendix S1 documents the typed comments of the experts more comprehensively.

Discussion

Our findings illustrate that the memory experts of this study were largely sceptical of repressed memories and of memory reliability in general – about equally so to SARMAC and experimental psychologists. However, in the qualitative portion of the survey, we found that a minority of memory experts were open to the possibility of repressed memory due to some empirical findings (e.g., on retrieval inhibition). Despite this nuance and open-mindedness, memory experts on average were significantly more sceptical about repressed memories and memory reliability – on most of the items we examined – compared to practicing clinicians, the general public in the USA, UK and India, and undergraduate students. In our original paper (Patihis, Ho et al., 2014), we were justified to use SARMAC and/or other research groups (e.g., clinical researchers) as a proxy for experts in our numerical analysis. The written statements of the memory experts exposed here, however, reveal that there are still a number of issues to reach consensus on.

In our sample of memory experts, most disagreed with the statement that traumatic memories are often repressed and that repressed memories can be recalled in therapy accurately. The single memory expert who expressed some agreement with both these statements reported that her views were in part influenced by an unnamed lecturer. Two other memory experts agreed with the former statement (trauma is often repressed), although neither gave an explanation. Interestingly, the memory expert who referred to research on memory inhibition (e.g., Michael Anderson's and colleagues' research) did not agree with the two repressed memory statements. The lack of unanimity in the beliefs of various memory experts indicated there is still some work to be done in understanding memory and the concept of repressed memory (cf. Brewin & Andrews, 2014; Patihis, Lilienfeld et al., 2014).

This study has some limitations that could be addressed with further research. The sample size of 17 memory experts is low, and a larger sample might be identified for follow-up work. For example, future research could examine beliefs of tenured professors who conduct memory-related research (or the equivalent in countries without a tenure system). It might also be of interest to survey other groups who may include researchers or clinicians considered by many to be experts on this topic (e.g., International Society for Traumatic Stress Studies; ISTSS). In addition, because there are several reasons why someone might not remember abuse other than repression, future research could utilise follow-up quantitative questions to

tease apart respondents' responses. Subsequent research could clarify what participants believe in terms of repressed memories versus other mechanisms, such as forgotten abuse that was not encoded strongly, abuse during infantile amnesia, or cases where the individual did not understand that the experience was abusive until adulthood.

A stronger consensus on whether repressed memory is empirically supported may take time, even among memory researchers. Currently, the points of disagreement seem to spring from research findings on trauma and dissociation (e.g., Dalenberg et al., 2012; but see Lynn et al., 2014; Patihis & Lynn, 2017), retrieval inhibition (e.g., Anderson & Green, 2001), and motivated forgetting (e.g., DePrince et al., 2012; but see Patihis & Place, 2018). Academics in these areas should discuss whether these phenomena really should be used to maintain beliefs in repressed memory (or selective dissociative amnesia). In the meantime, we hope that this brief report and supplemental materials are a useful reference for the public, psychologists, and legal professionals.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Table S1

Materials: Question Wordings of Items (1) through (9) and Source of the Questions

Wording used in questionnaire	Source
(1) In this question, we are interested in whether sexual abuse experienced in childhood may influence the person's adult life. There are no correct or incorrect answers. It is your personal opinion that is important. Imagine a person with longstanding emotional problems and a need for psychotherapy. How plausible do you think it is that this person is a victim of childhood sexual abuse, even though the person is unable to remember the abuse? ^a	Rubin & Berntsen (2007)
<i>Instructions:</i> To what extent do you disagree or agree with the following statements: ^b	
(2) Traumatic memories are often repressed (which means the person cannot remember the traumatic event due to a defense against painful content).	new
(3) Repressed memories can be retrieved in therapy accurately.	new
(4) Memory can be unreliable.	new
(5) Hypnosis can accurately retrieve memories that previously were not known to the person.	new
(6) Memory is constantly being reconstructed and changed every time we remember something.	new
(7) The memory of everything we've experienced is stored permanently in our brains, even if we can't access all of it	Lilienfeld et al. (2010) ^c
(8) Some people have true "photographic memories."	Lilienfeld et al. (2010)
(9) With effort, we can remember events back to birth.	Lilienfeld et al. (2010)

Note. ^aQuestion (1) Likert scale: 1 = *very implausible*; 2 = *implausible*; 3 = *plausible*; 4 = *very plausible*. ^bQuestions (2) through (9) Likert scale: 1 = *strongly disagree*; 2 = *disagree*; 3 = *slightly disagree*; 4 = *slightly agree*; 5 = *agree*; 6 = *strongly agree*. ^cLilienfeld, Lynn, Ruscio, & Beyerstein (2010).

Table S2

Question Wordings and Factor Matrix for Memory Belief Questions (from Patihis et al., 2014).

	Factor 1
In your opinion, how accurate are repressed memories?	.813
If a news channel reported a story of an individual undergoing therapy who reports repressed memories, how likely would you believe this story?	.782
Repressed memories can be retrieved in therapy accurately.	.749
If a friend currently undergoing therapy reported repressed memories of sexual abuse, and they had no such memory before therapy, how likely would you be in supporting him/her in this belief?	.745
When someone has a memory of a trauma while in hypnosis, it objectively must have occurred.	-.739
Hypnosis can accurately retrieve memories that previously were not known to the person.	.712
How likely is it that the client in this [recovered memory] case was sexually abused?	.702
Assist the client in retrieving memories of childhood sexual abuse.	.682
Assist the client in retrieving additional sexual abuse memories using techniques such as hypnosis.	.682
At times, the media has reported that the recovery of repressed traumatic memories can be unreliable and has led to the conviction of innocent individuals. Do you believe these memories were really false?	-.659
At some point in treatment, tell the client that you suspect a history of sexual abuse.	.645
Traumatic memories are often repressed.	.634
With effort, we can remember events back to birth.	.624
Hypnosis can be used to recover memories of actual events as far back as birth. (r)	-.617
The memory of everything we've experienced is stored permanently in our brains, even if we can't access all of it.	.585
Memory can be unreliable.	-.570
The inability to recall early childhood events could signify evidence of repressed trauma.	-.529
It is possible to suggest false memories to someone who then incorporates them as true memories.	.491
How plausible do you think it is that this person is a victim of childhood sexual abuse, even though the person is unable to remember the abuse?	.490
Some people have true "photographic memories."	.462
Memory is constantly being reconstructed and changed every time we remember something.	-.459
Encourage the client to seek evidence which supports a history of sexual abuse.	
How has media coverage changed your belief about the repression of traumatic memory?	

Note. Extraction Method: Principal Axis Factoring. 1 factor extracted. 4 iterations required. Factors below .4 were suppressed, and 2 questions dropped out (bottom two rows).

Table S3

Percentage of Participants Agreeing to Some Degree with Various Statements about Memory and Repression

Participant Group	(1) Traumatic memories are often repressed	(2) Repressed memories can be retrieved in therapy accurately	(3) Memory can be unreliable	(4) Hypnosis can accurately retrieve memories that previously were not known to the person
Memory Experts	25.0	12.5	100.0	6.3
Experimental Psych	27.0	24.2	99.0	20.0
SARMAC	25.7	17.1	98.6	12.9
SSCP	17.7	9.7	100.0	4.8
Clin Psy Researchers	19.4	16.1	98.4	7.9
Clin Psy Practitioners	60.3	43.1	100.0	36.2
Psychoanalysts	69.1	47.5	100.0	25.9
Hypnotherapists	82.0	54.0	94.0	66.0
Undergraduates	77.6	64.5	88.0	43.5
US public	83.9	77.7	76.8	64.3
UK public	77.7	67.9	89.4	65.5
India public	71.6	82.6	41.3	78.0

Note. On all these questions, participants had a 6 point Likert scale fully anchored with the following 6 anchors: *strongly disagree*, *disagree*, *slightly disagree*, *slightly agree*, *agree*, and *strongly agree*. Agreeing to some degree means participants chose *slightly agree*, *agree*, or *strongly agree* to the statements.

Table S4

Percentage of Participants Agreeing to Some Degree with Various Statements about Memory and Repression

Participant Group	(5) Memory is constantly being reconstructed and changed every time we remember something	(6) Memory of everything experienced is stored permanently in brains, even if can't access all	(7) Some people have true "photographic memories"	(8) With effort, we can remember events back to birth
Memory Experts	100.0	18.8	37.5	6.3
Experimental Psych	96.0	24.0	49.0	2.0
SARMAC	98.6	22.9	34.3	1.4
SSCP	96.8	16.1	50.0	0.0
Clin Psy Researchers	92.1	14.3	60.3	1.6
Clin Psy Practitioners	98.3	44.8	72.4	8.6
Psychoanalysts	95.1	35.8	79.0	3.7
Hypnotherapists	84.0	78.0	88.0	46.0
Undergraduates	91.6	63.1	83.0	17.2
US public	78.6	69.6	92.9	27.7
UK public	88.5	59.3	81.4	19.5
India public	78.0	84.4	89.9	54.1

Note. On all these questions, participants had a 6 point Likert scale fully anchored with the following 6 anchors: *strongly disagree*, *disagree*, *slightly disagree*, *slightly agree*, *agree*, and *strongly agree*. Agreeing to some degree means participants chose *slightly agree*, *agree*, or *strongly agree* to the statements.

Table S5

Memory Beliefs of Experts vs. Other Groups: Questions Related to the Case Study from Gore-Felton et al. (2000)

Participant group	<i>n</i>	How likely client is it that the client was sexually abused? ¹	How likely are you to: Assist the client in retrieving memories of childhood sexual abuse.	How likely are you to: Encourage the client to seek evidence which supports a history of sexual abuse.	How likely to: At some point in treatment, tell the client that you suspect a history of sexual abuse.	How likely are you to: Assist the client in retrieving additional sexual abuse memories using techniques such as hypnosis.
Memory Experts	17	2.75 (2.08)	1.19 (1.64)	2.31 (1.85)	0.69 (1.20)	0.25 (1.00)
<i>Researchers and science related:</i>						
Experimental Psychologists	104	3.03 (2.02)	1.91 (2.41)	3.14 (3.03)	1.35 (2.04)	0.77 (1.63)
SARMAC	70	3.04 (1.96)	1.54 (2.30)	3.41 (3.36)	1.04 (1.88)	0.64 (1.71)
SSCP	64	3.39 (2.01)	1.31 (1.89)	2.84 (2.76)	1.23 (1.73)	0.08 (0.27)
<i>Clinical-related</i>						
Clin Psy Practitioners	58	4.45 (2.11)	3.17 (2.59)	3.38 (2.76)	2.93 (2.37)	0.83 (1.55)
Clin Psy Researchers	65	3.78 (2.37)	1.31 (1.99)	2.06 (2.15)	1.65 (0.86)	0.22 (0.86)
Psychoanalysts	82	4.38 (2.58)	2.98 (2.72)	2.29 (2.38)	2.27 (2.52)	0.56 (1.47)
Hypnotherapists	50	6.14 (2.52)	4.02 (3.47)	2.88 (3.13)	3.38 (3.29)	3.28 (3.45)
<i>Non-professionals</i>						
Undergraduates	406	6.21 (2.38)	5.77 (2.59)	5.45 (2.75)	4.47 (2.79)	4.50 (2.88)
<i>General Public:</i>						
United States	112	6.58 (2.27)	6.31 (2.49)	5.98 (2.78)	5.99 (2.64)	5.41 (3.07)
United Kingdom	112	5.92 (2.19)	5.44 (2.76)	4.75 (2.67)	4.18 (2.83)	4.42 (3.15)
India	110	6.88 (2.94)	5.01 (3.16)	4.53 (2.99)	4.60 (3.04)	4.89 (3.29)

Notes. These questions were in response to a case study that described in two paragraphs a woman with symptoms of depression and binge eating, who recently began to recall memories about a very upsetting period of being sexually molested by her father at age 2; and that prior to several weeks ago, she has never been aware of these memories. All five questions had a Likert scale from 0 to 10, where 0 = *not likely at all*; 5 = *somewhat likely*; 10 = *extremely likely*.

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Table S6

Comparing Expert Beliefs to Other Groups: Questions from Golding et al. (1996)

Participant group	<i>n</i>	In your opinion, how accurate are repressed memories? ^a <i>M (SD)</i>	(16) Some people feel therapists go through legitimate psychological methods to get individuals to recall repressed memories while others feel therapists implant "false" memories in their clients. How do you feel?		
			(a) Therapists use legitimate methods	(b) Therapists implant "false" memories	Both (a) and (b)
Memory Experts	16	2.63 (1.50)	0.0%	12.5%	87.5%
<i>Researchers and science related:</i>					
Experimental Psychologists	58	2.97 (1.54)	6.2 %	19.6 %	74.2 %
Society Memory & Cogn. (SARMAC)	70	2.84 (1.51)	1.5 %	18.2 %	80.3 %
Society Science Clinical Psych (SSCP)	63	2.71 (1.49)	3.2 %	38.1 %	58.7 %
<i>Clinical:</i>					
Clinical Psychology Researchers	64	2.91 (1.52)	1.6 %	17.7 %	80.6 %
Clinical Psychology Practitioners	58	3.97 (1.74)	10.3 %	6.9 %	82.8 %
Psychoanalysts (AAPDP; CIP)	82	4.56 (2.04)	6.4 %	10.3 %	83.3 %
Hypnotherapists – (NBCCH)	50	5.38 (2.02)	13.3 %	0.0 %	86.7 %
<i>Non-professionals</i>					
Undergraduates	406	5.39 (1.88)	12.3 %	5.9 %	81.8 %
<i>General Public:</i>					
United States	112	6.13 (2.06)	25.0 %	4.5 %	70.5 %
United Kingdom	112	5.20 (1.95)	21.4 %	7.1 %	71.4 %
India	110	6.53 (2.00)	36.4 %	10.0 %	53.6 %

Notes. Participants read that a repressed memory occurs when "something happens 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." ^aThis questions had a Likert scale anchored with 1 = *never accurate*; 10 = *always accurate*.

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Table S7

Beliefs about Memory in Experts vs. Other Groups: Questions Related to Yapko (1994)

Participant group	n	(17) When someone has a memory of a trauma while in hypnosis, it objectively must have occurred.				(18) Hypnosis can be used to recover memories of actual events as far back as birth.				(19) It is possible to suggest false memories to someone who then incorporates them as true memories.			
		Agree Strongly	Agree Slightly	Disagree Slightly	Disagree Strongly	Agree Strongly	Agree Slightly	Disagree Slightly	Disagree Strongly	Agree Strongly	Agree Slightly	Disagree Slightly	Disagree Strongly
Memory Experts	16	0.0	0.0	12.5	87.5	0.0	12.5	0.0	87.5	93.8	6.3	0.0	0.0
<i>Researchers and science related:</i>													
Experimental Psychologists	99	0.0	4.0	18.2	77.8	1.0	0.0	9.1	89.9	88.9	11.1	0.0	0.0
SARMAC	70	0.0	1.4	17.1	81.4	0.0	5.7	7.1	87.1	92.9	7.1	0.0	0.0
SSCP	64	0.0	0.0	12.9	87.1	0.0	0.0	6.5	93.5	95.2	4.8	0.0	0.0
<i>Clinical-related:</i>													
Clinical Psychology Practitioners	58	1.7	10.3	41.4	46.6	1.7	6.9	27.6	63.8	67.2	29.3	1.7	1.7
Clinical Psychology Researchers	61	0.0	4.9	18.0	77.0	1.6	1.6	4.9	91.8	88.5	9.8	1.6	0.0
Psychoanalysts	81	1.2	9.9	24.7	64.2	1.2	1.2	8.6	88.9	80.2	16.0	0.0	3.7
Hypnotherapists	50	12.0	24.0	34.0	30.0	24.0	28.0	22.0	26.0	64.0	32.0	0.0	4.0
<i>Non-professionals</i>													
Undergraduates	406	2.2	41.7	42.0	14.1	2.2	20.0	37.0	40.7	56.8	35.3	6.9	1.0
<i>General Public:</i>													
United States	112	7.1	52.7	26.8	13.4	4.5	27.7	42.9	25.0	54.5	38.4	4.5	2.7
United Kingdom	112	4.5	35.7	42.0	17.9	2.7	24.1	42.0	31.2	43.8	51.8	4.5	0.0
India	110	12.7	66.4	19.1	1.8	14.5	45.5	21.8	18.2	14.5	54.5	26.4	4.5

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Table S8

Participants' Beliefs Specifically About Repressed Memory: (Means and Percentages Given for Planned Comparisons)

Participant group	If a news channel reported a story of an individual undergoing therapy who reports repressed memories, how likely would you believe this story? ^a			If a friend currently undergoing therapy reported repressed memories of sexual abuse, and they had no such memory before therapy, how likely would you be in supporting him/her in this belief? ¹			The inability to recall early childhood events could signify evidence of repressed trauma.				
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	% Agree Strongly	% Agree Slightly	% Disagree Slightly	% Disagree Strongly
Memory Experts	15	1.07	1.44	15	1.67	1.63	16	0.0	6.3	12.5	81.3
<i>Researchers and science related:</i>											
Experimental Psychologists	116	1.86	2.07	116	2.35	2.12	99	0.0	19.2	16.2	64.6
SARMAC	78	1.69	2.15	78	1.93	1.95	70	0.0	7.1	20.0	72.9
SSCP	70	1.43	2.06	70	2.28	2.00	64	0.0	12.9	19.4	67.7
<i>Clinical-related:</i>											
Clin Psychology Researchers	71	1.68	2.02	71	2.45	2.30	61	1.6	24.6	21.3	52.5
Clin Psychology Practitioners	62	2.84	2.11	62	3.96	2.28	58	8.6	36.2	25.9	29.3
Psychoanalysts	90	2.82	2.54	90	3.95	2.53	81	9.9	44.4	11.1	34.6
Hypnotherapists	53	4.65	3.22	53	6.02	2.79	50	24.0	42.0	20.0	14.0
<i>Non-professionals</i>											
Undergraduates	407	4.69	1.97	407	5.39	2.18	401	4.9	43.2	33.1	18.8
<i>General Public:</i>											
United States	112	5.32	2.46	112	6.11	2.53	112	10.7	46.4	25.9	17.0
United Kingdom	113	4.58	2.33	113	5.57	2.34	112	5.4	37.5	38.4	18.8
India	109	5.54	2.41	109	5.73	2.36	110	5.5	51.4	33.9	9.2

Note. ^aLikert scale from 0 to 10, where 0 = *not likely at all*; 5 = *somewhat likely*; 10 = *extremely likely*.

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Table S9

Did Your Beliefs about Repression of Memory Ever Change, and if so, When and How did Your Beliefs change?

Participant group	<i>n</i>	(20) Have your beliefs about the repression of traumatic memory ever changed? % Yes (<i>n</i> Yes)	(21) If yes, indicate how your beliefs changed:		(22) If yes, when did your beliefs change? Mean year (SD)	(23) If yes, what sources of information influenced that change in opinion? (free response ^a) % (number)				
			% Now I think repressed memories could be false memories. (<i>n</i>)	% Now I think repressed memories could be true memories. (<i>n</i>)		% Research	% Psychology Classes	% Clinical Experience	% Case Study or Legal Case	% Own/ others' personal experience ^b
Memory Experts	15	46.7 (7)	75.0 (3)*	25.0 (1)*	1994 (9.7)	42.8 (3)	42.8 (3)	0.0 (0)	14.3 (1)	0.0 (0/7)
<i>Research- related:</i>										
Experimental Psychol.	99	56.6 (56)	94.6	5.4	1989 (12.1)	60.3 (35)	24.1 (14)	0.0 (0)	5.2 (3)	3.4 (2/58)
SARMAC	68	51.5 (35)	96.4	3.6	1996 (10.7)	50.0 (17)	41.2 (14)	0.0 (0)	2.9 (1)	5.9 (2/34)
SSCP	60	43.3 (26)	100.0	0.0	1996 (11.3)	44.0 (11)	40.0 (10)	0.0 (0)	12.0 (3)	0.0 (0/25)
<i>Clinical-related:</i>										
Clin Psy Researchers	56	50.0 (28)	83.3	16.7	1997 (7.4)	10.7 (3)	35.7 (10)	0.0 (0)	3.6 (1)	14.3 (4/28)
Clin Psy Practitioners	49	57.1 (28)	87.0	13.0	1987 (10.7)	69.2 (18)	3.8 (1)	23.1 (6)	3.2 (1)	7.7 (2/26)
Psychoanalysts	76	46.1 (35)	85.0	15.0	1985 (11.4)	45.2 (14)	0.0 (0)	32.3(10)	3.2 (1)	12.9 (4/31)
Hypnotherapists	46	58.7 (27)	82.6	17.4	1993 (10.6)	20.0 (5)	0.0 (0)	40.0 (10)	8.0 (2)	16.0 (4/25)
<i>Non-professionals</i>										
Undergraduates	401	28.7 (115)	78.2	21.8	2008 (3.9)	4.5 (5)	73.0 (81)	0.0 (0)	1.8 (2)	10.8 (12/111)
<i>General Public:</i>										
United States	105	21.4 (22)	60.9	39.1	1994 (10.9)	0.0 (0)	22.2 (4)	0.0 (0)	11.1 (2)	22.2 (4/18)
United Kingdom	105	14.3 (15)	75.0	25.0	2002 (6.8)	28.6 (4)	14.3 (2)	0.0 (0)	0.0 (0)	35.7 (5/14)
India	109	27.5 (30)	52.5	47.5	2001 (11.9)	11.1 (3)	0.0 (0)	0.0 (0)	11.1 (3)	40.7 (11/27)

Note. ^aOpen ended question with typed answers: data later coded into categories. ^bIn parenthesis is the number who indicated this category followed by the number of people who gave an answer. *See quotations for nuanced answers to this question.

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Table S10

Memory Beliefs in Experts and Other Groups: Media and Beliefs about Repression by Participant Group

Participant group	n	(24) Media has reported repressed traumatic memories can be unreliable and led to conviction of innocent individuals. Do you believe these memories were really false?					(25) How has media coverage of repression and recovery of traumatic memories in the media changed your belief?			
		% No	Probably no %	Probably yes %	% Yes	% Other (please specify)	% More sure repressed memories can be recalled accurately	% Less sure repressed memories can be recalled accurately	% Never seen or heard repressed memories mentioned	% Other (please specify)
Memory Experts	15	0.0	6.6	46.7	26.7	20.0	1.7	26.7	20.0	46.7
<i>Research-related:</i>										
Experimental Psychol.	96	0.0	3.1	57.3	19.8	19.8	1.1	43.2	12.6	43.2
SARMAC	67	0.0	1.5	59.7	22.4	16.4	3.1	37.5	23.4	35.9
SSCP	60	0.0	5.1	55.9	28.8	10.2	1.8	60.0	12.7	25.5
<i>Clinical-related:</i>										
Clin Psy Researchers	55	0.0	1.8	50.9	23.6	23.6	0.0	51.8	16.1	32.1
Clin Psy Practitioners	49	0.0	8.2	57.1	4.1	30.6	4.2	47.9	16.7	31.2
Psychoanalysts	75	1.3	10.7	45.3	9.3	33.3	4.2	41.7	8.3	45.8
Hypnotherapists	45	2.2	28.9	24.4	4.4	40.0	11.1	33.3	13.3	42.2
<i>Non-professionals</i>										
Undergraduates	387	1.0	34.4	55.3	2.8	6.5	8.9	50.8	36.6	3.7
<i>General Public:</i>										
United States	100	4.0	38.0	47.0	4.0	7.0	12.0	51.0	30.0	7.0
United Kingdom	100	2.0	33.0	51.0	4.0	10.0	9.2	42.9	39.8	8.2
India	107	11.2	55.1	29.0	3.7	0.9	22.4	49.5	27.1	0.9

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Table S11

Percentage of Participants Indicating Various Sources of Information Influenced Their Opinion about Memory Repression: by Participant Group

		(26) What sources of information influenced your current opinion about memory repression? (Check all that apply) %																	
Participant group	n	Docum	Fiction	TV	Broads	Tabloi	Magaz	Radio	TV	Online	Websit	Peer	Person	Friend	Teache	Psych	Nonfic	Fiction	
		entary	films	talk	heet	d news	ines		news	news	es	review	al	r/profe	textbo	tion	books	books	
Memory Experts	16	31.3	0.0	12.5	18.8	0.0	6.3	6.3	6.3	12.5	12.5	87.5	31.3	12.5	50.0	62.5	43.8	0.0	
<i>Research-related:</i>																			
Experimental Psych	99	20.2	4.0	1.0	27.3	0.0	9.1	10.1	10.1	9.1	11.1	86.9	16.2	8.1	54.5	70.7	15.2	3.0	
SARMAC	67	25.0	4.4	4.4	19.1	0.0	8.8	5.9	13.2	16.2	13.2	85.3	16.2	8.8	58.8	77.9	27.9	2.9	
SSCP	60	23.3	6.7	5.0	23.3	1.7	5.0	3.3	15.0	8.3	11.7	90.0	6.7	1.7	73.3	80.0	18.3	3.3	
<i>Clinical-related:</i>																			
Clin Psy Researchers	56	16.1	3.6	7.1	10.7	1.8	10.7	7.1	16.1	3.6	0.0	89.3	21.4	3.6	33.9	82.1	8.9	0.0	
Clin Psy Practitioners	49	16.3	6.1	12.2	32.7	0.0	4.1	4.1	14.3	12.2	10.2	81.6	36.7	12.2	38.8	61.2	16.3	8.2	
Psychoanalysts	76	17.1	1.3	3.9	19.7	1.3	9.2	1.3	6.6	7.9	5.3	80.3	50.0	10.5	46.1	55.3	15.8	7.9	
Hypnotherapists	46	21.7	0.0	4.3	15.2	0.0	2.2	0.0	13.0	2.2	17.4	71.7	60.9	13.0	43.5	60.9	10.9	4.3	
<i>Non-professionals</i>																			
Undergraduates	401	38.9	19.5	26.7	14.7	3.7	11.2	6.5	30.9	24.4	16.2	21.9	21.7	16.0	61.6	75.1	6.5	3.2	
<i>General Public:</i>																			
United States	103	38.9	19.5	26.7	14.7	3.7	11.2	6.5	30.9	24.4	16.2	21.9	21.7	16.0	61.6	75.1	6.5	3.2	
United Kingdom	105	50.5	18.1	25.7	25.7	1.9	15.2	13.3	21.0	22.9	23.8	11.4	22.9	19.0	15.2	22.9	15.2	13.3	
India	109	32.1	22.9	56.0	15.6	3.7	46.8	9.2	33.9	25.7	26.6	6.4	19.3	28.4	13.8	33.9	7.3	9.2	

Note. SARMAC = Members of the Society for Applied Research in Memory and Cognition.

SSCP = Society for a Science of Clinical Psychology

Clin Psy Practitioners = Clinical/counseling psychologist members of American Academy of Clinical Psychology (AACCP; board-certified).

Clin Psy Researchers = Professors in clinical psychology at research universities.

Psychoanalysts = Members of psychoanalytic organizations, e.g., The American Academy of Psychoanalysis and Dynamic Psychiatry (AAPDP)

Hypnotherapists = Members of National Board for Certified Clinical Hypnotherapists (NBCCH)

Table S12

Memory Expert Characteristics, Beliefs about Repressed Memory, and Overall Factor 1 Score

Expert #	Group	Gender	Occupation	Area of Specialization	Traumatic memories are often repressed ¹	Repressed memories can be retrieved in therapy accurately ¹	Factor 1
1	Cl. Research	Male	Professor	Memory	(1) Strongly disagree	(1) Strongly disagree	16
2	Experimental	Male	Professor	Memory	Slightly agree	(3) Slightly disagree	54
3	Experimental	Female	Assistant Professor	Cognitive psychology (memory)	(1) Strongly disagree	(1) Strongly disagree	20
4	Experimental	Female	Professor	Memory	(2) Disagree	(2) Disagree	29
5	Experiment	Male	Lecturer in a Department of Psychology	Memory	(2) Disagree	(3) Slightly disagree	32
6	Experimental	Male	Professor	Memory & Statistics	(2) Disagree	(2) Disagree	28
7	Experimental	Male	Professor	Memory			
8	Experimental	Male	Professor	Learning and Memory	(2) Disagree	(2) Disagree	43
9	SARMAC	Female	Professor	Memory	(5) Agree	(3) Slightly disagree	33
10	SARMAC	Male	Academic	Memory	(2) Disagree	(2) Disagree	34
11	SARMAC	Male	Researcher	Psychology - Memory	(2) Disagree	(4) Slightly agree	31
12	SARMAC	Male	Professor	Autobiographical and eyewitness memory	(1) Strongly disagree	(1) Strongly disagree	28
13	SARMAC	Female	Casual Teacher / Researcher	Eyewitness memory	(4) Slightly agree	(4) Slightly agree	78
14	SARMAC	Female	Lecturer	Memory research	(1) Strongly disagree	(1) Strongly disagree	18
15	SARMAC	Female	Professor	Memory	(5) Agree	(2) Disagree	
16	SARMAC	Female	Professor	Cognitive psychology (memory)	(2) Disagree	(1) Strongly disagree	26
17	SARMAC	Male	Postdoctoral researcher	Motivation and Autobiographical Memory	(1) Strongly disagree	(1) Strongly disagree	31

Note. Groups from Patihis et al., (2014a): Cl. Research = Clinical Psychology Researcher. Experimental = Experimental Psychologists. SARMAC = Society for Applied Research in Memory and Cognition.

Appendix S1

Text answers given by memory experts to various questions/prompts (some of which are included in the main article)

Following Golding et al.'s (1996) questions (see Table S6):

Expert #5: I'm not a therapist, but in my opinion the role of the therapist in this situation is to balance the psychological reality of the recovered memories the client is experiencing (even if the memory isn't real, it is still affecting the mental health of the client) with the considerable evidence that false memories are very easy to generate. I'm also suspicious about any episodic memory that predates the typical boundary of infantile amnesia.

Expert #6: I suspect that therapists assist clients in "recalling" false memories

Expert #9: I'm using this opportunity to clarify my answer to #1. The question didn't ask about the likelihood of the memory she reported being true. It asked how likely it is that she had been sexually abused in childhood. I find her reported memory to be unreliable, but she may be blending in an incident from later that she does legitimately remember some details of. I'm also trying to factor in base rates of childhood sexual abuse. If your question was intended to refer to THAT reported memory, my answer is 1.

Expert #12: Both of these questions are not answerable with closed-ended response options. Repression is not well supported, although we do not know enough to rule it out completely. There is emerging, and convincing evidence, for retrieval inhibition, a lack of rehearsal can also lead to a sense of forgetting; there is the FIA effect, and hence spontaneous recovery or rediscovery has happened, clearly outside therapy and possibly within therapy. But such recoveries are rare compared to CSA victims with continuous memories.

“Have your beliefs about the repression of traumatic memory ever changed?” and in response to how they have changed, some wrote the following into a text-box “Other (please specify)”:

Expert #5. I used to not think about it much at all, and my first exposure was in false memory research. My view began as extremely prejudiced against any notion of recovered memories, but I've relaxed that stance since. It's not so much that I believe more in recovered traumatic memories, just that I have a greater respect that many memories can be inaccessible in one context or task but accessed when the context or task switches.

Expert #8. I went from being agnostic on the issue to realizing that false memory were very common

Expert #10. I did not know much about them until a reading group I attended and a conference.

Expert #12. Again -- I do not necessarily believe in repression, as this term is too loaded. But "repressive-like" phenomena do exist -- retrieval inhibition is one example--and some recent experimental evidence does indicate that participants will demonstrate stronger retrieval

inhibition to negative emotional stimuli in comparison to positive stimuli. And so I answered b because I used to believe that something such as retrieval inhibition -- even in the case of CSA which is often uncomfortably but not traumatically experienced -- would not be possible.

Sources of information that influenced any change in opinion:

Expert #1: College

Expert #5: My stance on memory isn't so much about recovered memories of traumatic experiences, but just a better appreciation encoding-retrieval matches and the idea that every act of retrieval is an act of encoding and every act of encoding is an act of retrieval.

Expert #8: Research Studies

Expert #9: I took a memory course in college.

Expert #10: Lots of reading, talking to people. Looking up cases.

Expert #12: The work of Michael Anderson and others exploring retrieval inhibition.

Expert #17: Taking a cognition class

Researchers who influenced any change in opinion:

Expert #1: Loftus Schacter. Roediger

Expert #3: Loftus, Lindsey

Expert #4: Beth Loftus

Expert #5: Tulving, Loftus, Roediger, Ceci, Seamon, Jacoby, and others. The authors of the book, "The Courage to Heal" certainly didn't help the cause of recovered memories. I can't recall the names of the researchers, but there have also been studies linking recovered memories to high levels of dissociation, which can be linked to things like ease of hypnosis, reports of UFO encounters, and so on.

Expert #6: Several scientists (e.g., Loftus) have reinforced my views; not "changed" them

Expert #8: Elizabeth Loftus

Expert #9: EF Loftus and many many others.

Expert #10: Loftus the most, but others on both so-called sides. I have learned from reading Tom Lyon. Pendergrast's Victim of Memory was influential. Schooler's famous talk in LA at Psychonomics and Loftus' rebutting some of the hostile reactions

Expert #11: Yes. E. Loftus. D. Schacter and the Seven Sins book.

Expert #12: I also believe that there are elements of BTT that have merit, especially to the extent to which such models can be tied to experimental data, such as retrieval inhibition.

Expert #14: Loftus, Garry, McNally, Geraerts

Expert #16: Loftus, Schooler, Lindsay, Read, Geraerts & McNally

Expert #17: Dorthe Berntsen

**Media has reported repressed traumatic memories can be unreliable and led to conviction of innocent individuals. Do you believe these memories were really false? (see Table S10)
Other (please specify):**

Expert #4: Yes the memories were false, but I have no opinion regarding the innocence of the perpetrators (e.g., may have been guilty of subsequent abuse or not).

Expert #9: I can't speak to probable innocence, especially in cases where eyewitness testimony isn't the only evidence. So my inclusion of "probably innocent" is a reluctant tag-along to my real answer about memory reliability.

Expert #12: I would like to know more about specifics of cases before making a judgment. But that there are false memories of CSA cannot be disputed, in my view -- and the cases that the press would focus on are likely those in which the evidence strongly favors a false memory interpretation.

**How has media coverage of repression and recovery of traumatic memories in the media changed your belief?
Other (please specify):**

Expert #4: I trust media coverage as much as I trust repressed memories, that is, not at all.

Expert #5: I don't really pay attention to the media side of the issue. Empirical studies on the topic certainly show that false memories are easily formed and can be quite vivid. The evidence doesn't preclude the remembering of previously-inaccessible memories, even traumatic ones, but it does place some responsibility for providing supporting evidence (beyond the memory) that a traumatic experience has taken place in the past.

Expert #6: media coverage has been largely irrelevant to my views on repressed memories

Expert #8: Media has had little influence on me in this regard.

Expert #12: I do not rely on media to form my opinions of what are essentially scientific issues.

Expert #14: I don't pay much attention to media coverage unless it features sound scientific evidence.

Name the primary media source that influenced your current beliefs about the repression of traumatic memories.

Expert #1: Scientific press releases

Expert #2: none

Expert #3: academic journal articles

Expert #4: none unless you consider peer-reviewed journals media

Expert #5: None. Unless you count peer-reviewed memory studies as a form of media. Journal articles and predisposition

Expert #7: Media has had little influence on me in this regard.

Expert #8: Shari Finkelstein's piece on the Cotton case was great. Otherwise, just news stories over the years.

Expert #10: ? stories from the web and news sent to me

Expert #11: As far as I can remember, I have never seen or heard false memories or repressed memories mentioned in the media. It was always in scientific papers.

Expert #12: television documentaries (but years ago)

Expert #13: none

Expert #14: None.

Expert #15: not applicable

Expert #16: TV

Now describe what you learned from that media source.

Expert #1: False memory creation

Expert #5: As above, nothing outside of studies.

Expert #6: the need for credible, corroborating evidence

Expert #8: Media has had little influence on me in this regard.

Expert #9: Witnesses can be credible and sure, and that juries rely heavily on them. But even when you don't have classic look-alike suspects, it's very easy for witnesses to mistake one person for another.

Expert #10: Mostly case studies

Expert #12: Nothing specifically, I do not rely on media sources to inform what are essentially scientific issues. But there are cases that prop up now and then -- such as a recent (and ongoing?) case in Kansas....

Expert # 17: A documentary on false memories on TV

Name the primary academic source that influenced your current beliefs about the repression of traumatic memories.

Expert #1: Journals

Expert # 2: 30 years studying memory

Expert #3: articles on the question of whether recovered memories were reliable or not

Expert #4: peer reviewed journals, books by academics, and talks by researchers

Expert #5: Many peer-reviewed journal articles.

Expert #6: I've read quite a bit in this area; I can't really blame my views on a single source

Expert #8: Elizabeth Loftus

Expert #9: I couldn't tell you offhand. But again, it was exposure to Beth's early work, so I'm guessing my radical change in beliefs happened not long after I declared the Psych major.

Expert #10: Loftus

Expert #11: E. Loftus's papers

Expert #12: I am an expert in this area

Expert #13: Lecturer - won't name

Expert #14: McNally's book: Remembering trauma

Expert #16: Scholarly research articles and books by above names researchers

Expert #17: Dortha Berntsen

Now describe what you learned from that academic source.

Expert #1: False memory creation

Expert #2: Read my 75 journal articles. Name redacted

Expert #3: Recovered memories have been shown to occur, but VERY rarely. Most recovered memories likely stem from poor therapeutic methods, "regular" memory operation (forgetting that you remembered before), and/or the suggestibility of the person in question.

Expert #4: In brief, memory is easily distorted, subject to error, and often a combination of fact, bias, post event information, and prior knowledge.

Expert #5: False memories are very easy to implant and existing memories are very easy to modify. Even our most significant-feeling memories are not necessarily any more accurate than those that feel less significant. Encoding does not occur in a vacuum. It must be reconciled with a person's existing knowledge and beliefs. Retrieval does not occur in a vacuum. The act of retrieval makes memories vulnerable to modification. Importantly, memory in a declarative sense may simply be an act of our consciousness "borrowing" a phenomenal signal that emerges from brain processing that is present at encoding or retrieval but may not be directly responsible for the processing of the memory. Examples of this include assuming a name is famous because it's familiar, or feeling positive affect toward something that has been incidentally/implicitly experienced. When applied to recovered traumatic experiences, this implies that imagination, dissociation, pain, or a host of other unrelated processes with phenomenal characteristics may be incorporated into a memory either during encoding or retrieval. Again, academic sources don't rule out the possibility of accurate recovered memories, but they do suggest many plausible alternatives that should also be considered.

Expert #6: Corroborating evidence is important to disentangling issues about repression, suppression, veracity of memories

Expert #8: She introduced me to the academic literature on false memories.

Expert #9: Memory is highly suggestible. We rely on simple evaluations about memories to assess their truth value, and we infuse memories with a lot of assumptions and details we're exposed to after the fact. We reconstruct memories at retrieval.

Expert #10: That memory is in part constructive, and we can systematically affect people's memories.

Expert #11: Repressed memories are unreliable and are often obtained by means of inappropriate techniques.

Expert #12: I am an expert in this area

Expert #13: Suggestibility of a client can increase through hypnotherapy

Expert #14: Traumatic memories are just like normal memories: they're malleable. They're more likely to be intrusive and recurring, than buried away.

Expert #16: Memories can be very inaccurate. Therapists can inadvertently implant false memories if abuse. Nonetheless, there are cases where individuals have spontaneously on their own recovered (discovered) memories of long forgotten abuse (Schoolers' work)

Expert #17: The existence of false memories and suggestibility

Final Comments

Expert #12: It is about time that we moved beyond emphasizing the concept of repression -- it contains too many meanings, and I suspect that your results will make it difficult to gain a full understanding of specific nuances that people have when they think of this concept.

Expert #13: It's an interesting topic, and worthy of research! Let's face it, the jury is still out on whether or not repressed memories that 'resurface' during therapy are legitimate, and many are still skeptical. I guess I take the middle ground, but would love to be convinced either way!