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Lawrence Patihis
University of Portsmouth

Ryan S. Wood
University of Southern Mississippi

Mark H. Pendergrast
COLCHESTER

Mario E. Herrera

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Lawrence Patihis[1], Ryan S. Wood[2], Mark H. Pendergrast[3], & Mario E. Herrera[2]
[1]University of Portsmouth, [2]University of Southern Mississippi
[3]Independent scholar and writer, Colchester, Vermont, CT

Corresponding Author:
Lawrence Patihis, Department of Psychology, University of Portsmouth, King Henry I Street
Portsmouth, PO1 2DY, United Kingdom
E-mail: Lawrence.Patihis@port.ac.uk
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Abstract

Psychologists have debated the wisdom of recovering traumatic memories in therapy that were previously unknown to the client, with some concerns over accuracy and memory distortions. The current study surveyed a sample of 576 undergraduates in the south of the United States. Of 188 who reported attending therapy or counselling, 8% reported coming to remember memories of abuse, without any prior recollection of that abuse before therapy. Of those who reported recovered memories, 60% cut off contact with some of their family. Within those who received therapy, those who had a therapist discuss the possibility of repressed memory were 28.6 times more likely to report recovered memories, compared to those who received therapy without such discussion. These findings mirror a previous survey of US adults and suggest attempts to recover repressed memories in therapy may continue in the forthcoming generation of adults.

Keywords: Recovered memory, childhood abuse, psychotherapy, memory wars, repressed memory, dissociative amnesia

Introduction

There is an ongoing debate concerning the authenticity of recovered memories of abuse that were previously unknown to the person recovering them—often defined to be repressed memories or dissociative amnesia (for definition comparisons see Otgaar et al., 2019). Some believers in the concept of repressed memories maintain that traumatic memories of abuse can result in the involuntary repression of those memories, rendering them inaccessible to the individual, yet they believe that these memories can be accurately recovered through various therapeutic memory recovery techniques (see Breuer & Freud, 1955/1985; Blume, 1990; Brewin & Andrews, 2014; Fredrickson, 1992). Conversely, skeptics maintain there is a lack of empirical research that supports the idea that traumatic memories are repressed (McNally, 2005; Lindsay & Read, 1994; Loftus, 1993; Patihis, Ho, Loftus, Herrera, 2019). There is emerging evidence that a minority of therapists continue to discuss the recovery of repressed memories in therapeutic practice, and clients continue to recover purported abuse memories in therapy (abuse they report not knowing about before therapy; see Patihis & Pendergrast, 2019; Dodier, Patihis, & Payoux, 2019). There is also some suggestion of a persistent belief in the theory of repressed memories among clinicians, students, and the general public (Patihis, Ho, Tingen, Lilienfeld, & Loftus, 2014). In the current study, we test whether Patihis & Pendergrast (2019) replicates and document the prevalence of reports of recovered memories of abuse—previously unknown before therapy—in an undergraduate sample. We were motivated to find out to what extent the decades-long potentially harmful practice of recovering memories (see Lilienfeld, 2007) was continuing in young adults today.

To determine whether the recovery of purportedly repressed memories is currently still an issue for young adults and undergraduates, we can examine three areas. First, we can examine recent evidence that some of the public and therapists hold some belief in the idea that memories of trauma can be repressed, then later retrieved. This would support the idea that there may be potential for a demand (from the public) and supply (from clinicians) in society as a whole for memory recovery in therapy. Second, for this issue to generalize to undergraduates we would expect at least some students to believe in repressed memories. Third, there should be recent evidence that some clients report recovering alleged memories of abuse for which they were not aware before therapy. We examine each one of these in turn below.

Beliefs in Repression in Clinicians, Public, and Undergraduates. A number of studies have found that a significant number of mental health professionals believe in the possibility of traumatic memories being repressed (e.g., Yapko, 1994; Dammeyer, Nightingale, & McCoy, 1997; Merckelbach & Wessel, 1998; Poole et al., 1995; Magnussen & Melinder, 2012; Kagee and Breet, 2015; Ost, Easton, Hope, French, & Wright,

2017). For example, Patihis et al. (2014) found 60% (n = 35) of clinicians agreed that these traumatic memories are often repressed. Surveys have also revealed the public believe that traumatic memories can be repressed (Lynn, Evans, Laurence, & Lilienfeld, 2015; Magnussen et al., 2006). For example, Patihis et al., (2014) found that 84% of sample from the general public in the U.S. agreed to some degree with the statement "repressed memories can be retrieved in therapy accurately." Boag (2016) noted that some introductory psychology texts had some problematic dissemination on the topic of repression. Indeed, Patihis et al. (2014) found that 65% of undergraduates endorsed the idea that repressed memories can be accurately retrieved in therapy (see also Golding, Sanchez, and Sego, 1996). In the entirety of the research on beliefs about memory, there appears to be a proportion of both the public, students, and practitioners that might sustain a demand (and supply) for memory recovery in therapy. Most relevant for the current study: There seems to have been a steady belief in repression among undergraduates (and therapists) that might translate into a demand for therapy that involves memory recovery of events not known to the client before therapy.

Prevalence of Recovered Memories in Therapy

Patihis and Pendergrast (2019) surveyed an age-representative sample of adults in the United States. They found that approximately one in nine people who sought therapy reported that their therapist discussed the possibility of repressed memories of child abuse, and one in five who attended therapy later on came to believe that they had recovered previously forgotten memories of abuse. Individuals whose therapist discussed with them the possibility of repression were 20 times more likely to recover memories of abuse in comparison to those individuals who did not have a therapist suggest the idea of repression. The association of recovered repressed memories existed in nearly every therapy type within the sample. Nearly half of individuals who reported recovering memories of abuse have ceased contact with their family. The majority of individuals who reported memory recovery continued to believe the purported memories to be accurate. The prevalence in reports of recovered memories from the general public has the potential to generalize to undergraduates.

The Current Study

The current study is a conceptual replication in the sense that it utilizes the materials of Patihis and Pendergrast (2019) in a different sample (undergraduate)—examining the same research questions. Given the recent findings of the persistent belief in the theory of repression, as well as reports of recovered memories in therapy, we have reasonable evidence to hypothesize that recovered memories in therapy will continue in the next generation of young adults (e.g. undergraduates). Due to the impact that recovered memories often had on individuals in the past—such as severed family relations, lost careers, broken marriages, suicide attempts—we set out to investigate whether reports of recovered memories generalized to young adults in the Deep South of the United States. In the current study, we sought to investigate the occurrences of therapists' discussion of repressed memories, as well as reports of recovered memories in various therapy types. To further investigate this prevalence within an undergraduate sample (i.e., younger adults), we formulated the following research questions (which are deliberately formulated similarly to Patihis & Pendergrast, 2019, for comparison purposes and clarity).

Research Questions on Prevalence Overall

In general, we hypothesized that the percentage among undergraduates who answered many of the following questions positively may be lower than in the public sample, on account of age differences (less time in life reduces the chances of the undergraduates experiencing these issues). This general hypothesis applies to many of the following questions.

Research Question 1: What percentage of therapists discuss repressed memories with the undergraduates? Patihis and Pendergrast, (2019) found that of the 1,082 who reported receiving therapy in their general public sample, 20.1% (217) reported that their therapist discussed the possibility that they, the client, may have been abused in their childhood but had repressed the memories. With this research question we compare percentages in undergraduates to those in the public.

Research Question 2: What proportion of undergraduates remember in therapy abuse that they were not previously aware of? Patihis and Pendergrast (2019) found 11.3% (122) of the public who had received therapy reported of recovering memories of abuse during therapy. In the current study, we investigate the equivalent percentages in undergraduates.

Research Question 3: What proportion of those who recover memories of abuse also develop DID? Barden (2016) described a decline in the diagnosis of Multiple Personality Disorder (now called Dissociative Identity Disorder; MPD/DID) in recent years in light of the memory wars (Crews, 1995; a debate over repressed memory and MPD) and the lawsuits that occurred, resulting in closure of some practices specializing in MPD/DID. Patihis and Pendergrast, (2019) found that 13.1% (16) of the 122 participants reporting recovered memories in therapy, indicated that they also came to believe they suffered from MPD/DID. Given these

findings, we predicted that the prevalence of MPD/DID diagnosis in therapy would be very low in undergraduates—who would be younger, have had less therapy, and started their therapy within a clinical psychology professional that has likely changed.

Research Questions on Associations

Research Question 4: Associated therapy types. Patihis and Pendergrast (2019) found that common therapy types known for active attempts to recover client traumas, such as attachment therapy, eye movement desensitization reprocessing (EMDR), and emotion focused therapy are significantly correlated with the recovery of repressed memories. Given their findings, we expect to find similar percentages for the therapy types among an undergraduate dataset.

Research Question 5: Associated types of abuse. Patihis and Pendergrast (2019) found that among the U.S. public sample, emotional abuse was the most prevalent type of abuse associated with recovered memories, followed by physical, sexual, neglect, and satanic ritual abuse. We explored whether we would find similar results in the undergraduate sample.

Research Question 6: Differences in gender. Patihis and Pendergrast (2019) found no significant gender difference between male and female clients in reports of a therapist discussing the possibility of repressed memories. Additionally, there was no significant difference between the portion of male and female therapists discussing the possibility of repression to clients. However, their study did find that clients who came to believe they had MPD/DID disproportionally had male therapists. We explore whether we would find similar patterns in an undergraduate sample.

Research Question 7: Proportion that become estranged from family. Patihis and Pendergrast (2019) found of the 122 reporting recovering memories of abuse in therapy, 42.6% (52) reported that they had cut off contact with family members as a result of the new memories. Of these 122, when asked if they believe that their recovered memories are accurate, 92.6% chose 'yes'. We compared these results to our undergraduate sample.

Research Question 8: What is the association between therapists discussing repressed memory and recovered memories of abuse? In Patihis and Pendergrast (2019), of the 217 participants whose therapists discussed the possibility of repression, 46.5% (101) reported that during therapy, they came to recover memories of abuse, which had not previously been known. This difference was statistically significant, and participants were 20 times more likely to recover memories if they had a therapist discuss the possibility. We explored whether there is a similar association in undergraduates.

Research Question 9: How the reported abuse was recalled. Patihis and Pendergrast (2019) investigated the setting in which the memories were recovered (i.e., outside, inside or both outside and inside of a therapy session). Their study found that equal portions of the U.S. public sample reported recovering memories inside and outside of therapy, 29.5% (36). A slightly larger portion reported recovering the memories both inside and outside of a therapy session 41% (50). Patihis and Pendergrast (2019) also examined the methodologies associated with the recovered memories (i.e., flashbacks, panic attack, guided imagery, etc.). We examined whether undergraduates would report where and how the memory recovery occurred in similar percentages.

Research Question 10: Socioeconomic status. Patihis and Pendergrast (2019) found that higher SES individuals reported a higher rate of MPD/DID compared to lower SES. We investigated whether this is also found in an undergraduate sample.

Method

Participants

In the current study, 576 undergraduate participants were recruited from a southeastern university in the U.S., and completed the study for optional course credit in an undergraduate psychology course. The participants' age ranged from 18 to 68 (M_{age} = 21.3; *SD* = 5.95). Within this sample, there were 81.9% (472) females, 17.9% (105) males, and .2% (1) chose "other (please specify)," with a typed response of "Trans Man". Ethnic backgrounds were reported as 95.3% (549) Not Hispanic or Latino, and 4.5% (26) Hispanic or Latino. Racial distribution reported 1% (6) American Indian or Alaska Native, 2.1% (12) Asian, .2% (1) Native Hawaiian or Other Pacific Islander, 22.4% (129) Black or African American, 70.5% (406) White, 3.5% (20) chose more than one race. The mean for self-reported socioeconomic status was 5.47 (*SD* = 1.44; range 1–10 using the 10 rung ladder Scale of Subjective Status (Ostrove, Adler, Kuppermann, & Washington, 2000), and the shape of the distribution of SES can be found in Table S1 in the supplemental materials. All procedures were approved by the Institutional Review Board of the University of Southern Mississippi (IRB protocol 17022106).

Materials and Procedure

Undergraduates elected to participate after seeing a posting for a 10-minute study called "Life Experiences" on the institution's Sona System. Participants read and consented to an informed consent form, and then answered various demographic questions and then answered questions about whether they had ever received counseling or therapy. If they chose "yes," they were then asked several follow-up questions, such

as which year the therapy started and what type of therapy they received. They were allowed to choose more than one therapy type. Then participants were asked: "During the course of counseling or therapy, did your therapist ever discuss the possibility that you might have been abused as a child but had repressed the memories?" Then they were asked the central question, worded to capture the definition of repressed memories without relying on any technical terms (such as "repression," due to concerns over misinterpretation): "During the course of therapy, did you come to remember being abused as a child, when you had no previous memory of such abuse?" The response options were "Yes," "No," and "Don't know/not sure." We also asked questions about where and how abuse was remembered, what type of abuse, the duration of the abuse, their current beliefs about the accuracy of the recovered memories, whether the recovered memories subsequently led to the development of MPD/DID, and if they had cut off contact with their families following the remembering of the alleged memories. Participants we able to skip any of the questions, are were asked once if they would like to answer them if they did skip them. For a full set of the question wordings used, see the Supplemental Materials, Appendix A.

We then also asked similarly worded questions (as in Patihis & Pendergrast, 2019) pertaining to family members and acquaintance (the data is not reported in this article for focus; a future article will report and discuss these data). The survey took an average of 9 minutes to complete (median time = 6.8 minutes). All materials and data are available at https://osf.io/y57cb/.

Statistical Analysis

The analysis was done in SPSS and involved calculating percentages and Chi-squared analyses (the *p values* being Fisher's exact on all Chi squared analysis), with $\alpha = .05$ set as the *p*-value criteria, and further details are given below in the Results section.

Results

Descriptive Statistics

From the sample of 576 participants, 32.6% (*n* = 188) reported having received therapy or counseling at some time in their lives. Of those 188, the average year in which they first received therapy was 2011 (*SD* = 5.87; range 1982–2017). The most prevalent therapy type of therapy reported was emotion focused 26.1% (49 of 188), followed by behavioral therapy 22.9% (43), cognitive behavioral therapy (CBT) or cognitive therapy 21.3% (40), Christian based therapy 9.6% (18), internal family systems 8.5% (16). Other therapy types amounted to less than 4% of the sample, and 21.8% (41) selected the choice "I don't know (please elaborate)."

Research Questions on Prevalence

Research Question 1: Percentage of therapists discussing repressed memories with their clients. Of the 188 who received therapy or counseling, 16.5% (*n* = 31) reported that their therapist mentioned the possibility that they, the client, might have been abused in their childhood but had repressed the memories. This amounts to 5% of our total sample of 576 undergraduates. The mean year in which those who reported that a therapist discussed the possibility of repression was 2010 (*SD* = 5.9; range 1994–2017).

Research Question 2: Proportion of people remembering abuse in therapy that they were not previously aware of. Of the 188 who received therapy or counseling, 8% (15) of participants reported coming to remember being abused as a child during the course of therapy, when they had no previous memory of such abuse. This amounts to 2.6% of our total sample of 576. However, one participant later in the survey reported being aware of the memories, explicitly stating they were not repressed. Adjusting for this error, 7.5% (14) participants recovered memories of abuse, which then amounts to 2.4% of our total sample.

Research Question 3: Proportion of those who recovered memories of abuse who also developed DID. Of the 15 reporting recovered memories of abuse in therapy, 6.7% (1) reported that they also came to believe they suffered from MPD/DID. This was 0.2% of our total sample of 576.

Research Questions on Associated Factors

Research Question 4: Associated therapy types.

Therapist discussing the possibility of repressed memories. Table 1 shows the frequency of therapist suggesting the possibility of repressed memories by therapy types and organized from highest percentage of "yes" responses to lowest. Therapies that are not shown due to zero prevalence of "yes" responses are mentioned in the note under the table. Attachment therapy had the highest prevalence, though only one participant reported this mode of therapy. For comparisons between the current student sample, and the US public sample in Patihis & Pendergrast (2019), see Supplemental Materials, Figure S2.

Recovery of abuse memories. Table 2 shows the prevalence of recovered memories of abuse within the therapy types. Therapies are ordered from the highest percentage of "yes" responses to the lowest. Therapies that are not shown due to zero prevalence of "yes" responses are mentioned in the note under the table. Once again, Attachment Therapy had the highest prevalence of recovered memories, while Emotion Focused Therapy had the lowest. For comparisons by therapy type between the current student sample, and the

US public sample in Patihis & Pendergrast (2019), see Supplemental Materials, Figure S3.

MPD/DID. The one participant who reported coming to believe they had MPD/DID, reported having Behavioral Therapy and did not report any other therapy type.

Research Question 5: Associated types of abuse. Participants were able to choose more than one category for the types of recovered abuse memories. Emotional abuse was most prevalent (93.3%, $n = 14$), followed by a tie between sexual and neglect (46.7%, $n = 7$) and physical abuse (40%, $n = 6$). A full comparison between a U.S. public sample from Patihis and Pendergrast (2019) can be found in Figure 1.

Research Question 6: Gender.

Gender of client. Within those who had attended therapy, we found no significant difference between male and female on their reports of a therapist discussing the possibility of repressed memories (21.4% of males; vs. 16.6% of females), $\chi^2(1, N = 179) = .392$, $p = .531$, Odds Ratio (OR) = 0.73 [0.27, 1.98]. There were no statistically significant gender differences on reporting recovered memories of abuse during therapy (3.4% of males; vs. 9.1% of female)s, $\chi^2(1, N = 184) = 1.127$, $p = .569$. Only one participant reported coming to believe they had MPD/DID, and she self-reported as female.

Gender of therapist. There was no significant difference between the number of male and female therapists who mentioned the possibility of repressed abuse, $\chi^2(1, N = 184) = 1.13$, $p = .287$, OR = 5.0 [0.2, 117.9]. Among the 14 participants who reported having recovered memories of abuse, 71.4% (10) reported having a female therapist who mentioned the possibility of repression.

Research Question 7: Proportion that became estranged from family. In the survey, participants who recovered memories of child abuse were asked if they cut contact from the family. Of the 15 who reported remembering repressed memories of abuse, 60% (9) cut off contact with family members, 11.1% (1) subsequently resumed full contact, 55.6% (5) have limited contact, and 33.3% (3) have not resumed contact with family members, as a result of the new memories. Of the 15, when asked if they still believe that their recovered memories of abuse are accurate, 93.3% (14) chose 'yes' and 6.7% (1) chose 'no.'

Research Question 8: Relationship between therapists discussing repressed memory and recovered memories of abuse. Of the 188 who received therapy or counseling, 8% (15) of participants reported coming to remember being abused as a child during the course of therapy. Of those 15, 80% (12) reported having a therapist who suggested the possibility that some memories of abuse might have been repressed, while only 13.3% (2) who reported recovering repressed memories, reported not having a therapist discuss repression. A cross tabulation analysis was used to evaluate the relationship between a therapist mentioning the possibility of repression and the client coming to remember child abuse, which can be seen in full in Table 3. The analysis on these two variables in dichotomous form (yes, not yes) was significant, $\chi^2(1, N = 188) = 47.7$, $p < .001$, odds ratio OR = 32.4, 95% CI = [8.4, 125.3], point by serial correlation $r_{pb} = .504$. Of those whose therapist discussed the subject of repressed memories, 38.7% (12/31) recovered memories. Of those whose therapist did not discuss the subject of repressed memories, 1.4% (2/148). Therefore, when participants' therapist had discussed repressed memories they were 28.6 times more likely to recover repressed memories of abuse, compared to those who reported their therapist did not discuss repressed memories (see Supplementary Appendix B in the Supplemental Materials for more detail of these odds ratio and relative risk calculations).

Research Question 9: How the reported abuse was recalled. Of those reporting recovered memories of abuse during the course of therapy, 46.7% (7) reported remembering the abuse both inside and outside of a therapy session, 40% (6) reported outside of therapy, and 13.3% (2) reported inside a therapy session. When asked how they came to remember the formerly forgotten abuse, participants were allowed to select more than one option. The most common method of retrieval was flashbacks 40% (6), followed by a tie between guided imagery and panic attacks 13.3% (2), and a tie between body memories and triggered by someone else's memory 6.7% (1). It is important to note that one participant chose "Other – Text", and the typed response was, "I never forgot them, they were always present, not repressed."

Research Question 10: Socioeconomic status. Table S1 in the supplemental materials shows the cross tabulation in full between lower SES (self-reported on rung 5 or less) and higher SES (self-reported on rung 6 or more) and the key questions presented in the study. There were no significant relationships between SES and reports of therapists discussing the possibility of repression, $\chi^2(2, N = 188) = 2.80$, $p = .247$, and reports of coming to remember abuse in therapy with no previous memory of such abuse, $\chi^2(2, N = 188) = 2.26$, $p = .323$.

Participants' Comments

Following the survey, participants were given the option to comment in a couple of optional open-ended questions. For example, they were asked whether they or people they know have been impacted by repressed memories. These comments can be found collectively in the Supplemental Appendix C in the

Supplemental Materials; and here are three participants' comments as examples of the many informative responses:

> "My sister has many repressed memories that she said was caused by emotional abuse in our house. I didn't ever recall this emotional abuse and it has caused all of my family to not communicate any longer, including outside family. This makes me think that maybe I have repressed memories as well...I'm currently in counseling."
>
> "I sometimes suspect I have repressed sexual abuse but have no proof other than being overly modest with actions and conversations of such matters. I always disregard it as something everyone suspects/wonders occasionally."
>
> "My half-brother experienced the abuse from infancy until the age of 5 and through years of intensive therapy he has been able to remember and deal with his emotions and presumed PTSD."

Discussion

The current study investigated the prevalence of purported recovered memories of child abuse in therapy, finding that 33% of undergraduates had attended therapy or counseling, and 8% of those reported recovering memories of child abuse of which they did not know about before therapy. Additionally, those whose therapist discussed the possibility of repression were 28.6 times more likely to recover memories of abuse compared to those whose therapist did not. This prevalence in young people may be indicative of current and future continuance of traumatic memory recovery in therapy of previously unknown abuse—a series of events that mirror the definition of repressed memory and some types of dissociative amnesia (see Otgaar et al, 2019 for definition comparisons). Such memory recovery has been plagued by concerns of memory distortions and a debate over accuracy (Otgaar et al., 2019).

Research Questions 1–3

In our undergraduate sample we found of those who attended therapy, 16% reported that a therapist discussed the possibility of repressed memories of abuse (compared to 20% in Patihis & Pendergrast, 2019).

The most important question of the survey revealed that of those who had therapy, 8% of our student sample recovered memories of abuse of which they did not know about (compared to 11% in the US public sample in Patihis & Pendergrast, 2019). These findings indicate that although fewer undergraduates had done therapy, compared to an older US public sample, still a similarly sized minority reported recalling previously unknown recovered memories in therapy. These comparisons can be seen in Figure 2.

In the current study, only 7% (1) of those reporting recovered memories reported a development of MPD/DID (compared to 13% in Patihis & Pendergrast, 2019) which is a non-zero finding, but $n = 1$ is too small to interpret further here.

Association Research Questions 4–10

Associations of Therapy Type to Reports of Therapist Discussing Repressed Memories.

When examining the prevalence of therapists discussing repressed memories within therapy types, the current study yielded similar results to Patihis and Pendergrast (2019). All participants who reported using attachment therapy, EMDR, and emotional freedom techniques reported that their therapist discussed the possibility of repressed memories of abuse (although $n = 4$). The small subsample size in the current study alone would preclude strong conclusions. In the current undergraduate sample, we also found a high prevalence of therapists discussing repressed memories in acceptance and commitment therapy (ACT), survivors' group, and psychodynamic therapy. A comparison of therapy types can be found in Figure S2 in the supplemental materials, which shows some replication of overall patterns between the current and past study, with exceptions.

Associations of Recovered Memories of Abuse by Therapy Type.

The current study also found consistent associations of recovered memories of abuse among the therapy types as in Patihis and Pendergrast (2019), as shown in Figure S3. All undergraduates who reported using attachment therapy reported coming to remember instances of abuse in their childhood that they did not remember before therapy (they also reported that their therapist discussed repression during therapy). Compared to Patihis and Pendergrast (2019), the prevalence of recovered memories of abuse doubled among emotional freedom techniques and was four times more prevalent in marriage counseling. We note though, that the subsample size was small in the current study.

We also investigated the frequency of different types of abuse that had been recovered in therapy. Participants were able to select more than one category for the types of abuse. Within the current study, neglect abuse doubled in prevalence of abuse type among undergraduates, in comparison to the U.S. public sample, 47% and 22%, respectively. Other increases were noted, such as emotional (93%) and sexual abuse (47%), with emotional abuse being the most common reported abuse type among undergraduates. There was a moderate decline in physical abuse from those found in

the U.S. public sample and undergraduates, 40% and 51%, respectively.

We found that a higher proportion of undergraduates who reported recovered memories had cut off communication with their families, compared to the U.S. public sample in Patihis and Pendergrast (2019). The average age of those who have cut off contact with family and remain disconnected was 19 years old in the current undergraduate sample. There are potential consequences for such students who become estranged from family, such as less emotional and financial support.

In the current study, participants were about 29 times more likely to recover repressed memories of abuse when their therapist had suggested the possibility (compared to a relative risk of 20 in Patihis & Pendergrast, 2019). One possible explanation here could be that therapists discussing repression may result in memory distortion. Another possibility is that this correlation could be due to the reverse causal direction: i.e., genuinely traumatic histories provide the impetus to discuss repressed memories. Nevertheless, given the lack of credible evidence for unconsciously repressed memories (see Otgaar et al., 2019), this does not negate our concern of iatrogenesis—whether suggestions of repression occur from therapist, or whether the client is the first to raise the possibility (as a result, perhaps of prior reading of books, websites, etc).

There are some limitations within our study. One possible source of error within the dataset could be the misunderstanding of what was meant by the questions. This was illustrated in one participant who reported having recalled repressed memories, yet at the end of the survey he acknowledged he was aware of the memory before therapy. Nevertheless, we took care to ask the question about recovered memories of abuse in a way that contained the definition of repression, but without using the word (repressed) in the question itself. Nonetheless, participants' qualitative comments at the end of the survey when asked about theirs' and others' experience with repressed memories, reassured us that there was both an understanding of the phenomena, and that the concept of repressed memories does affect a lot of individuals lives in contemporary society. The replication of similar percentages to Patihis and Pendergrast (2019) in the current study is reassuring, but in the current study some subgroup sample sizes are too small to generalize from (e.g., only one participant reported using attachment therapy). Future research could ask about (1) who first raised the topic of repressed memories (therapist or client), (2) amount of time the client spent in psychotherapy, (3) whether recovered memories are occurring in the absence of any therapy exposure, and (4) the extent of the recalled abuse (i.e., did it involve isolated instances or years of abuse?).

To help address the potential problem of undergraduates recovering repressed memories in therapy leading to memory distortions, university instructors might consider covering relevant research in psychology courses such as introductory psychology. Research on trauma and memory, memory distortions, and the potential hazards of attempting to recover repressed memories might be discussed. The current study reveals a considerable proportion reported recovered memories that were not known about before the students attended therapy. If our questions were clearly understood by the participants, it appears that the belief in and practice of repressed memory recovery has persisted and will continue to do so as long as there is some portion of the public and therapists who believes in the concept. We hope this article helps to bring light to the ongoing potentially iatrogenic practice in the next generation of young adults.

The current study's results replicate Patihis and Pendergrast (2019) on most of the research questions with the following patterns: Although fewer undergraduates had engaged in therapy, 8% of those who had reported recovered memories of previously unknown abuse. In the past, attempts to recover repressed memories have raise questions about their accuracy and the detrimental effects it has on individuals as well as their families (see Lilienfeld, 2007; Loftus, 1997). This is not to say all recovered memories are false, rather that memory of distant autobiographical information involves decision making based on current cognitions and reconstruction (e.g., see Johnson, Hashtroudi, & Lindsay, 1993; Loftus, 2005). As alluded to in Patihis and Pendergrast (2019), a possible safeguard to increase the accuracy of these recovered memories would be for the American Psychological Association to require clinical training that includes recent and relevant research on trauma and memory, memory distortions, and the potential hazardous outcomes of recovering repressed memories. In addition, dissemination to the public and undergraduates might help educate individuals, including young adults, about these hazardous outcomes. Our findings that some young adults are recovering traumatic memories, without having any prior memory of such abuse, may be indicative of a continuation of repressed memory exhumation in upcoming generations.

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Table 1
Prevalence of Therapists Discussing Repressed Memories within Therapy Types: Raw Count Numbers with Row Percentages in Parentheses (Ordered Descending by Percent Yes)

	During the course of counseling or therapy, did your therapist ever discuss the possibility that you might have been abused as a child but had repressed the memories?						
	Yes		No		Don't know		Row Total
.							
Attachment Therapy	1	(100%)	0	(0%)	0	(0%)	1
EMDR	1	(100%)	0	(0%)	0	(0%)	1
Emotional Freedom Techniques	2	(100%)	0	(0%)	0	(0%)	2
Survivors Group	3	(75%)	1	(25%)	0	(0%)	4
Accept. & Commitment (ACT)	2	(66.7%)	1	(33.3%)	0	(0%)	3
Psychodynamic	1	(50%)	1	(50%)	0	(0%)	2
Behavioral Therapy	12	(27.9%)	29	(67.4%)	2	(4.7%)	43
Christian-based therapy	5	(27.8%)	11	(61.1%)	2	(11.1%)	18
Emotion Focused Therapy	13	(26.5%)	35	(71.4%)	1	(2%)	49
Marriage Counseling	1	(25%)	3	(75%)	0	(0%)	4
Twelve-step program	1	(25%)	3	(75%)	0	(0%)	4
Cognitive Behavioral Therapy	7	(17.5%)	30	(75%)	3	(7.5%)	40
Internal Family Systems	2	(12.5%)	14	(87.5%)	0	(0%)	16
Don't know (please elaborate)	4	(9.8%)	35	(85.4%)	2	(4.9%)	41
Other (please specify)	2	(9.1%)	20	(90.9%)	0	(0%)	22
Column Total	57	(22.8%)	183	(73.2%)	10	(4%)	250

Note. Attachment-based Therapy, Exposure Therapy, Feminist Therapy, Hypnosis, Neurolinguistics Programming, Primal Therapy, Rebirthing-breathwork, Scientology auditing, Sexual Identity Therapy, and Thought Field Therapy are not included due to a zero-prevalence rate of "yes" responses to target question.

Table 2
By Therapy Type: The Prevalence of Recovering Memories of Childhood Abuse in Therapy that was Previously Not Remembered (Ordered Descending by Percent Yes)

	During the course of therapy, did you come to remember being abused as a child, when you had no previous memory of such abuse?						
	Yes		No		Don't know		Row Total
Attachment Therapy	1	(100.0%)	0	(0%)	0	(0%)	1
Emotional Freedom Techniques	1	(50.0%)	1	(50%)	0	(0%)	2
Marriage Counselling	2	(50%)	2	(50%)	0	(0%)	4
Survivors Group	1	(25%)	3	(75%)	0	(0%)	4
Twelve-step program	1	(25%)	3	(75%)	0	(0%)	4
Behavioral Therapy	7	(16.3%)	36	(83.7%)	0	(0%)	43
Cognitive Behavioral Therapy	6	(15%)	33	(82.5%)	1	(2.5%)	40
Christian-based therapy	2	(11.1%)	14	(77.8%)	2	(11.1%)	18
Emotion Focused Therapy	5	(10.2%)	43	(87.7%)	1	(2.1%)	49
Don't know (please elaborate)	2	(4.9%)	39	(95.1%)	0	(0%)	41
Other (please specify)	1	(4.5%)	21	(95.5%)	0	(0%)	22
Column Total	29	(12.7%)	195	(85.6%)	4	(1.7%)	228

Note. Attachment-based Therapy, Exposure Therapy, EMDR, Feminist Therapy, *Hypnosis, Neurolinguistic Programming, Primal Therapy, Psychodynamic, Rebirthing-breathwork, Scientology auditing, Sexual Identity Therapy, and Thought Field Therapy are not included due to a zero prevalence rate of "yes" responses to target question.

Table 3

Cross Tabulation of Therapist Discussing Repressed Memories with Recovered Memories of Abuse in Therapy

		During the course of therapy, did you come to remember being abused as a child, when you had no previous memory of such abuse?							
		Yes		No		Don't know		Total	
During the course of counseling or therapy, did your therapist ever discuss the possibility that you might have been abused as a child but had repressed the memories?	Yes	12	(38.7%)	18	(58.1%)	1	(3.2%)	31	(100%)
	No	2	(1.4%)	145	(98%)	1	(0.7%)	148	(100%)
	Don't know	1	(11.1%)	6	(66.7%)	2	(22.2%)	9	(100%)
	Total	15	(8%)	169	(89.9%)	4	(2.1%)	188	(100%)

Note. Percentages shown are row percentages.

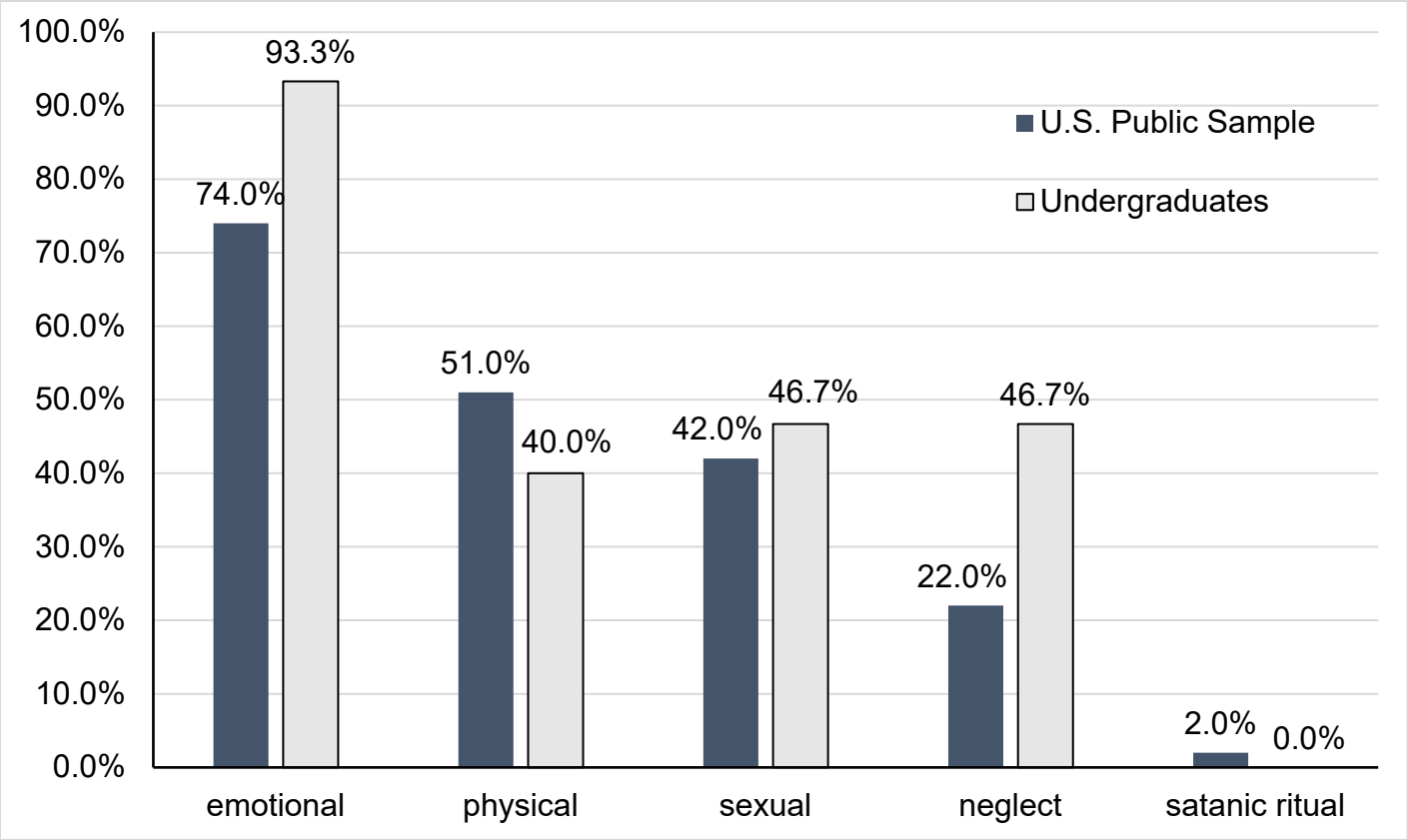

Figure 1. A comparison of various types of abuse of recovered memories between a U.S. public sample (dark grey [navy on color versions] bars); AMT; (Patihis & Pendergrast, 2019), and the current articles undergraduate sample (light grey bars). Percentages are within the subsample who reported recovered memories of abuse.

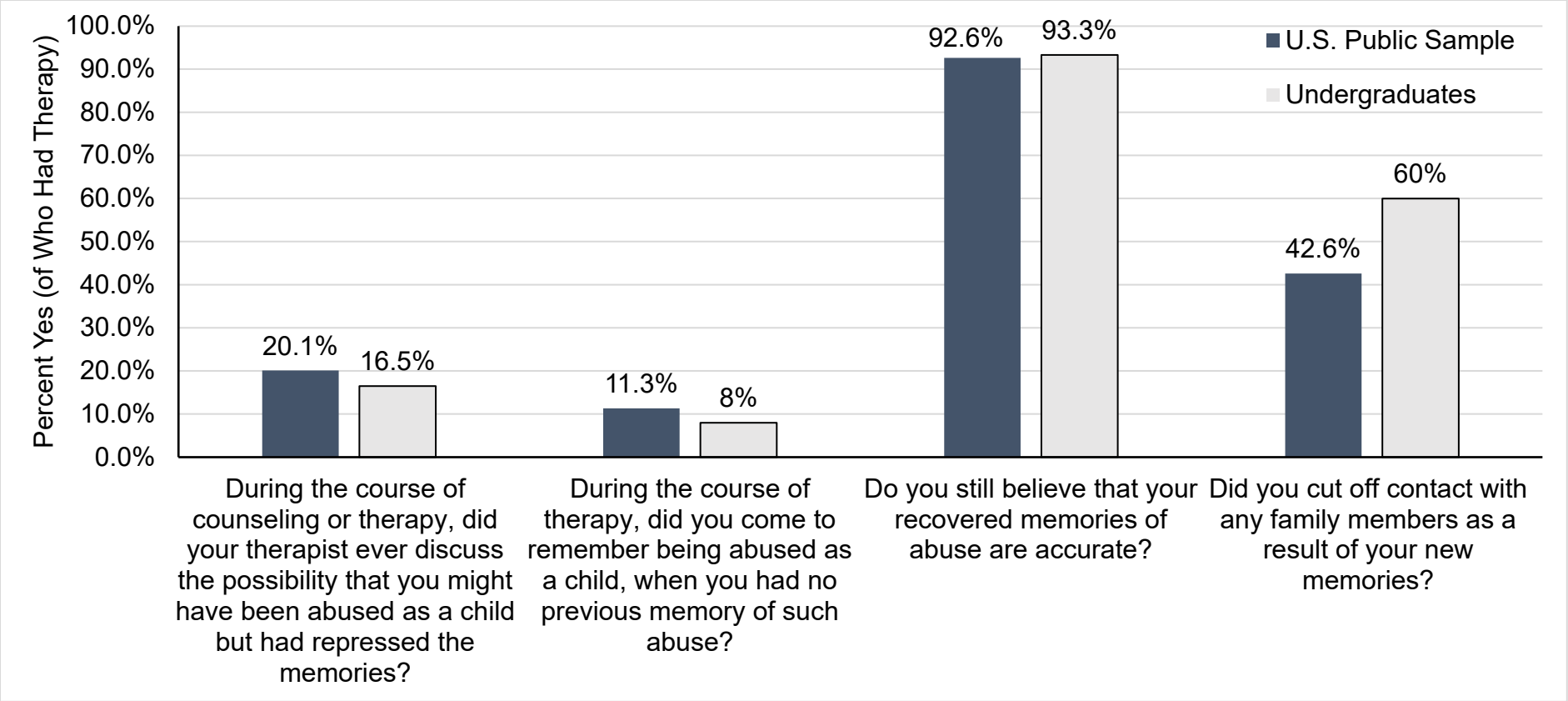

Figure 2. A comparison of percentage yes responses of those who had therapy in a U.S. public sample (dark gray/[navy] bars; AMT; from Patihis & Pendergrast, 2019) and the current article's undergraduate sample (light gray/[silver] bars).