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Memory Recovery Techniques in Psychotherapy

Problems and Pitfalls

Memory recovery techniques that are widely used in psychotherapy including hypnosis, age regression, guided imagery, dream interpretation, bibliotherapy, and symptom interpretation can distort or create—rather than reveal—allegedly repressed traumatic memories.

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In 1997, Nadean Cool won a $2.4 million malpractice settlement against her therapist in which she alleged that he used a variety of suggestive memory recovery procedures to persuade her that she had suffered horrific abuse and harbored more than 130 personalities including demons, angels, children, and a duck. Prior to therapy, Nadean recounted problems typical of many women including a history of bulimia, substance abuse, and mild depression. During her five-year treatment, Nadean's therapist allegedly maintained that she could not improve unless she uncovered repressed traumatic memories. To do so, Nadean participated in repeated hypnotic age regression and guided imagery sessions, and was subjected to an exorcism and

fifteen-hour marathon therapy sessions. Nadean recalled frightening images of participating in a satanic cult, eating babies, being raped, having sex with animals, and being forced to watch the murder of her eight-year-old friend after these interventions, and her psychological health deteriorated apace. Eventually Nadean came to doubt that the recovered memories were "real," terminated treatment with her therapist, and recouped much of the ground she had lost.

Although Nadean Cool's therapy strayed far beyond conventional practice, her therapist is in the company of many professionals who perform so-called "memory work" to help clients retrieve memories of ostensibly repressed abuse. Poole, Lindsay, Memon, and Bull (1995) reported that 25 percent of licensed doctoral level psychologists surveyed in the United States and Great Britain indicated that they: (a) use two or more techniques such as hypnosis and guided imagery to facilitate recall of repressed memories; (b) consider memory recovery an important part of treatment; and (c) can identify patients with repressed or otherwise unavailable memories as early as the first session (see Polousny and Follette 1996 for similar findings). In addition, over three-quarters of the U.S. doctoral-level psychotherapists reported using at least one memory recovery technique to "help clients remember childhood sexual abuse." In this article we consider a number of widely used memory recovery procedures, and whether they can distort or create, rather than reveal, traumatic memories.

Clinical Techniques

Guided Imagery

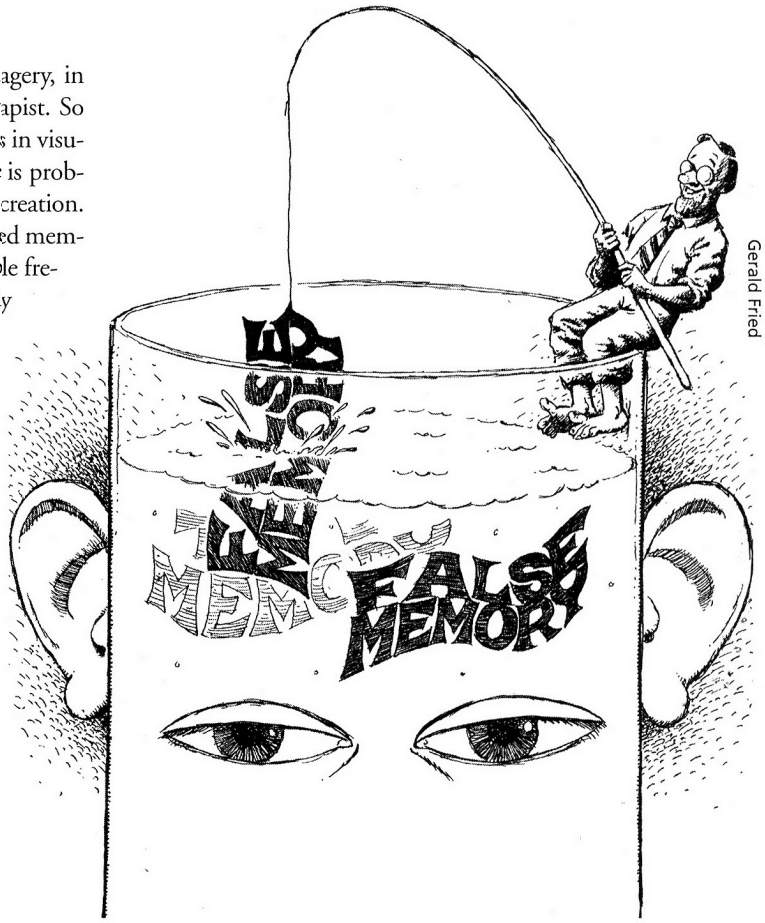
One important class of techniques relies on guided imagery, in which patients imagine scenarios described by the therapist. So long as imagery techniques focus on current problems, as in visualizing pleasant scenes to develop relaxation skills, there is probably little cause for concern about false memory creation. However, the use of imagery to uncover allegedly repressed memories is controversial and warrants concern because people frequently confuse real and imagined memories, particularly when memories are initially hazy or unavailable. Roland (1993), for example, proposed using visualization to jog "blocked" memories of sexual abuse, and a "reconstruction" technique for recovering repressed memories of abuse. According to Poole et al. (1995), 32 percent of U.S. therapists report using "imagery related to the abuse."

Suggesting False Memories

Memory errors are not random. What is recalled depends on current beliefs, inferences, guesses, expectancies, and suggestions. People can clearly be led by suggestions to integrate a fabricated event into their personal histories. In Loftus's research (Loftus, Coan, and Pickrell 1996; Loftus and Pickrell 1995), twenty-four participants were asked by an older sibling to remember real and fictitious events (e.g., getting lost in a shopping mall). The older sibling initially provided a few details about the false event, such as where the event allegedly occurred, after which the subjects were interviewed one to two weeks apart. A quarter of the subjects claimed to remember the false event; some provided surprisingly detailed accounts of the event that they came to believe had actually occurred. Similar studies with college students have shown that approximately 20–25 percent report experiencing such fictitious events as: (a) an overnight hospitalization for a high fever and a possible ear infection, accidentally spilling a bowl of punch on the parents of the bride at a wedding reception, and evacuating a grocery store when the overhead sprinkler systems erroneously activated (Hyman et al. 1995); and (b) a serious animal attack, serious indoor accident, serious outdoor accident, a serious medical procedure, and being injured by another child (Porter, Yuille, and Lehman 1998).

Hypnosis

Many therapists endorse popular yet mistaken beliefs about hypnosis. Yapko's (1994) survey revealed that 47 percent of a sample composed of professionals had greater faith in the accuracy of hypnotic than non-hypnotic memories, 54 percent believed to some degree that hypnosis is effective for recovering memories as far back as birth, and 28 percent believed that hypnosis is an effective means of recovering past life memories. If hypnosis were able to accurately retrieve forgotten memories, confidence in its use for recovering memories would be warranted. But this is not the case. The following conclusions are based on major reviews of the literature[1]:



Gerald Fried

(1) Hypnosis increases the sheer volume of recall, resulting in both more incorrect and correct information. When the number of responses is statistically controlled, hypnotic recall is no more accurate than nonhypnotic recall.

(2) Hypnosis produces more recall errors and higher levels of memories for false information.

(3) False memories are associated with subjects' levels of hypnotic suggestibility. However, even relatively non-suggestible participants report false memories.

(4) Hypnotized persons sometimes exhibit less accurate recall in response to misleading questions compared with nonhypnotized participants.

(5) In general, hypnotized individuals are more confident about their recall accuracy than are nonhypnotized individuals, and an association between hypnotizability and confidence has been well documented.

(6) Even when participants are warned about possible memory problems associated with hypnosis, they continue to report false memories during and after hypnosis, although some studies indicate that warnings decrease pseudomemories.

(7) Contrary to the claim that hypnosis facilitates the recall of emotional or traumatic memories, hypnosis does not improve recall of emotionally arousing events (e.g., films of shop accidents, depictions of fatal stabbings, a mock assassination, an actual murder videotaped serendipitously), and arousal level is not associated with hypnotic recall.

(8) Hypnosis does not necessarily produce more false memories or unwarranted confidence in memories than highly suggestive nonhypnotic procedures. However, simply asking participants to focus on the task at hand and to do their best to recall specific events yields accurate recall comparable to hypnosis, but with fewer or comparable recall errors.

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Our dour assessment of hypnosis for recovering memories has been echoed by professional societies, including divisions and task forces of the American Psychological Association and the Canadian Psychiatric Association. The American Medical Association (1994) has asserted that hypnosis be used only for investigative purposes in forensic contexts. However, even when hypnosis is used solely for investigative purposes, there are attendant risks. Early in an investigation, the information obtained through hypnosis could lead investigators to pursue erroneous leads and even to interpret subsequent leads as consistent with initial and perhaps mistaken hypnotically generated evidence.

Searching for Early Memories

According to Adler (1931), "The first memory will show the individual's fundamental view of life. . . . I would never investigate a personality without asking for the first memory (p. 75)." More recently, Olson (1979) articulated a belief shared by many therapists (Papanek 1979) that "[Early memories] when correctly interpreted often reveal very quickly the basic core of one's personality . . . and suggest . . . bedrock themes with which the therapist must currently deal in treating the client" (p. xvii).

Most adults' earliest reported memories date back to between 36 and 60 months of age. Virtually all contemporary memory researchers agree that accurate memory reports of events that occur before 24 months of age are extremely rare (see Malinoski, Lynn, and Sivec 1998), due to developmental changes that influence how children process, retrieve, and share information. Adults' memory reports from 24 months of age or earlier are likely to represent confabulations, condensations, and constructions of early events, as well as current concerns and stories heard about early events (Spanos 1996). Although certain early memories might well have special significance,[2] such memories are highly malleable. Malinoski, Lynn, and Green (1999) examined early memories in a study in which interviewers probed for increasingly early memories until participants twice denied any earlier memories. Participants then received "memory recovery techniques" similar to those advocated by some therapists (e.g., Farmer 1989, Meiselman 1990). Interviewers asked participants to see themselves "in their mind's eye" as a toddler or infant, and "get in touch" with memories of long ago. Participants were informed that most young adults can retrieve memories of very early events—including their second birthday—if they "let themselves go" and try hard to visualize and concentrate. Interviewers then asked for subjects' memories of their second birthdays and reinforced increasingly early memory reports.

The average age of the initial reported memory was 3.7 years: Only 11 percent of individuals reported memories at or before age 24 months, and 3 percent reported a memory from age 12 months or younger. However, after receiving the visualization instructions, 59 percent of the participants reported a memory of their second birthday. After interviewers pressed for even earlier memories, the earliest memory reported was 1.6 years, on average. Fully 78.2 percent of the sample reported at least one memory that occurred at or earlier than 2 years, outside the boundary

of infantile amnesia. More than half (56 percent) of the participants reported a memory between birth and 18 months of life; a third (33 percent) reported a memory that occurred at age 12 months or earlier; and 18 percent reported memories dated from six months or earlier. Remarkably, 4 percent of the sample reported memories from the first week of life!

Age-regression

Age-regression involves "regressing" a person back through time to an earlier life period. Subjects are typically asked to mentally recreate events that occurred at successively earlier periods in life, or to focus on a particular event at a specific age, with suggestions to fully relive the event. A televised documentary (*Frontline* 1995) showed a group therapy session in which a woman was age-regressed through childhood, to the womb, and eventually to being trapped in her mother's Fallopian tube. The woman provided a convincing demonstration of the emotional and physical discomfort that one would experience if one were indeed stuck in such an uncomfortable position. Although the woman may have believed in the veracity of her experience, research indicates that her regression experiences were not memory-based. Instead, age-regressed subjects behave according to situational cues and their knowledge, beliefs, and assumptions about age-relevant behaviors. According to Nash (1987), age-regressed adults do not show the expected patterns on many indices of development, including brain activity (EEGs) and visual illusions. No matter how compelling, "age regressed experiences" do not represent literal reinstatements of childhood experiences, behaviors, and feelings.

Hypnotic Age-regression

Although hypnosis is often used to facilitate the experience of age regression, it can distort memories of early life events. Nash, Drake, Wiley, Khalsa, and Lynn (1986) attempted to corroborate the memories of subjects who had participated in an earlier age regression experiment. This experiment involved age regressing hypnotized and role-playing (control) subjects to age three to a scene in which they were in the soothing presence of their mothers. During the experiment, subjects reported the identity of their transitional objects (e.g., blankets, teddy bears). Third-party verification (parent report) of the accuracy of recall was obtained for fourteen hypnotized subjects and ten control subjects. Hypnotic subjects were less able than were control subjects to identify the transitional objects actually used. Hypnotic subjects' hypnotic recollections matched their parent's reports only 21 percent of the time, whereas control subjects' reports were corroborated by their parents 70 percent of the time.

Sivec and Lynn (1997) age-regressed participants to the age of five and suggested that they played with a Cabbage Patch Doll (if a girl) or a He-Man toy (if a boy). These toys were not released until two or three years after the target time of the age regression suggestion. Half of the subjects received hypnotic age regression instructions and half received suggestions to age regress that were not administered in a hypnotic context. While none of the nonhypnotized persons was influenced by the suggestion, 20 percent of the hypnotized subjects rated the memory as real and were confident that the event occurred at the age to which they were regressed.

Past Life Regression

The search for traumatic memories can extend to well before birth (see Mills and Lynn 2000). "Past life regression therapy" is based on the premise that traumas that occurred in previous lives contribute to current psychological and physical symptoms. For example, psychiatrist Brian Weiss (1988) published a widely publicized series of cases focusing on patients who were hypnotized and age regressed to "go back to" the origin of a present-day problem. When patients were regressed, they reported events that Weiss interpreted as having their source in previous lives.

Vivid and realistic experiences during age regression can seem very convincing to both patient and therapist. However, Spanos, Menary, Gabora, DuBreuil, and Dewhirst (1991) determined that the information participants provided about specific time periods during their hypnotic age regression was almost "invariably incorrect" (p. 137). For example, one participant who was regressed to ancient times claimed to be Julius Caesar, emperor of Rome, in 50 B.C., even though the designations of B.C. and A.D. were not adopted until centuries later, and even though Julius Caesar died decades prior to the first Roman emperor. Spanos et al. (1991) informed some participants that past life identities were likely to be of a different gender, culture, and race from that of the present personality, whereas other participants received no prehypnotic information about past life identities. Participants' past life experiences were elaborate, conformed to induced expectancies about past life identities (e.g., gender, race), and varied in terms of the pre-hypnotic information participants received about the frequency of child abuse during past historical periods. In summary, hypnotically induced past life experiences are fantasies constructed from available cultural narratives about past lives and known or surmised facts regarding specific historical periods, as well as cues present in the hypnotic situation (Spanos 1996).

Symptom Interpretation

Therapists often inform suspected abuse victims that their symptoms suggest a history of abuse (Blume 1990, Fredrickson 1992). Examples of symptom interpretation can be found in many popular psychology and self-help sources (e.g., Bass and Davis 1992). Some popular self-help books on the topic of incest include lists of symptoms (e.g., "Do you use work or achievements to compensate for inadequate feelings in other parts of your life?") that are presented as possible or probable correlates of childhood incest. Blume's "Incest Survivors' Aftereffects Checklist" consists of thirty-four such correlates. The scale instructions read: "Do you find many characteristics of yourself on this list? If so, you could be a survivor of incest." Blume also indicates that "clusters" of these items predict childhood sexual abuse, and that "the more items endorsed by an individual the more likely that there is a history of incest." Many of the characteristics on such checklists are vague and applicable to many non-abused individuals. Much of the seeming "accuracy" of such checklists could stem from "P.T. Barnum effects"—the tendency to believe that highly general statements true of many individuals in the population apply specifically to oneself (Emery 2002).

Although there may be numerous psychological correlates of sexual abuse (but see Rind, Tromovitch, and Bauserman 1998, for a competing view), no known constellation of specific symptoms, let alone diagnosis, is indicative of a history of abuse. Some genuine victims of childhood incest experience many symptoms, others only some, and still others none. Moreover, nonvictims experience many of the same symptoms often associated with sexual abuse (Tavris 1993). Nevertheless, Poole et al. (1995) found that more than one-third of the U.S. practitioners surveyed reported that they used symptom interpretation to recover suspected memories of abuse.

Bogus Personality Interpretation

For ethical reasons, researchers have not directly tested the hypothesis that false memories of childhood abuse can be elicited by informing individuals that their personality characteristics are suggestive of such a history. However, studies have shown that personality interpretation can create highly implausible or false memories. Spanos and his colleagues (Spanos, Burgess, Burgess, Samuels, and Blois 1999) informed participants that their personality indicated that they had a certain experience during the first week of life. After participants completed a questionnaire, they were told that a computer-generated personality profile based on their responses indicated they were "High Perceptual Cognitive Monitors," and that people with this profile had experienced special visual stimulation by a mobile within the first week of life. Participants were falsely told that the study was designed to recover memories to confirm the personality test scores. The participants were age regressed to the crib; half of the participants were hypnotized and half received non-hypnotic age regression instructions. In the non-hypnotic group, 95 percent of the participants reported infant memories and 56 percent reported the target mobile. However, all of these participants indicated that the memories were fantasy constructions or they were unsure if the memories were real. In the hypnotic group, 79 percent of the participants reported infant memories, and 46 percent reported the target mobile. Forty-nine percent of these participants believed the memories were real, and only 16 percent classified the memories as fantasies.

DuBreuil, Garry, and Loftus (1998) used the bogus personality interpretation paradigm and non-hypnotic age regression to implant memories of the second day of life (crib group) or the first day of kindergarten (kindergarten group). College students were administered a test that purportedly measured personality and were told that, based on their scores, they were likely to have participated in a nationwide program designed to enhance the development of personality and cognitive abilities by means of red and green moving mobiles. The crib group was told that this enrichment occurred in the hospital immediately after birth, and the kindergarten group was told that the mobiles were placed in kindergarten classrooms. Participants were given the false information that memory functions "like a videotape recorder" and that age regression can access otherwise inaccessible memories. Participants were age regressed (non-hypnotically) to the appropriate time period and given suggestions to visualize themselves at the target age. Twenty-five percent of the kindergarten group and 55 percent of the crib group reported the target memory. All kindergarten participants believed that their memories corresponded to real events. In the crib group, 33 percent believed in the reality of their memories, 50 percent were unsure, and 17 percent of participants did not believe in the reality of their memories.

Dream Interpretation

Viewed by Freud as the "royal road to the unconscious," dreams have been used to provide a window on past experiences, including repressed traumatic events. For example, van der Kolk, Britz, Burr, Sherry, and Hartmann (1984) claimed that dreams can represent "exact replicas" of traumatic experiences (p. 188), a view not unlike that propounded by Fredrickson (1992), who argued that dreams are a vehicle by which "Buried memories of abuse intrude into . . . consciousness" (p. 44).

The popularity of dream interpretation has waned in recent years. However, survey research indicates that at least a third of U.S. psychotherapists (37–44 percent) still use this technique (see also Brenneis 1997, Polusny and Follette 1996). These statistics are noteworthy given that no data exist to support the idea that dreams can be interpreted as indicative of a history of child abuse (Lindsay and Read 1994). When dreams are interpreted in this manner by an authority figure such as a therapist, rather than as reflecting the residues of the day's events or as the day's concerns seeping into dreams, it can constitute a strong suggestion to the patient that abuse actually occurred.

Mazzoni and her colleagues simulated the effects of dream interpretation of stressful yet non-abuse-related life events. Mazzoni, Lombardo, Malvagia, and Loftus (1997) had participants report on their childhood experiences on two occasions, three to four weeks apart. Between sessions, some subjects were exposed to a brief (half hour) therapy simulation in which an expert clinician analyzed a dream report that they had brought to the session. No matter what participants dreamed, they received the suggestion that their dream was indicative of having experienced certain events (e.g., being lost in a public place or abandoned by parents) before the age of three. Although subjects had indicated that they had not experienced these events before age three, many individuals revised their accounts of their past. Relative to controls who had not received the personalized suggestion, "therapy" participants were far more likely to develop false beliefs that before age three they had been lost in a public place, had felt lonely and lost in an unfamiliar place, and had been abandoned by their parents.

Mazzoni, Loftus, Seitz, and Lynn (1999) extended this paradigm to a memory of having been bullied as a child; dream interpretation increased participants' confidence that the event (being bullied or getting lost) had occurred, compared with control participants who were given a brief lecture about dreams. Six of the twenty-two participants in the dream interpretation condition recalled the bullying event and four of the five participants in the dream interpretation condition recalled getting lost. In conclusion, it is possible to implant childhood memories using personality and dream interpretation.

Bibliotherapy

Many therapists who treat patients with suspected abuse histories prescribe "survivor books" or self-help books written specifically for survivors of childhood abuse to provide "confirmation" that the individual's symptoms are due to past abuse and to provide a means of gaining access to memories. The books typically provide imaginative exercises and stories of other survivors' struggles, as well as potential support for actual abuse survivors. However, the fact that the writers interpret current symptoms as indicative of an abuse history and include suggestive stories of abuse survivors may increase the risk that readers will develop false memories of abuse. Some of the most influential popular books of this genre include Bass and Davis' (1988) *Courage to Heal*, Fredrickson's (1992) *Repressed Memories*, and Blume's (1990) *Secret Survivors: Uncovering Incest and Aftereffects in Women.*

Mazzoni, Loftus, and Kirsch (2001) provided a dramatic illustration of how reading material and psychological symptom interpretation can increase the plausibility of an initially implausible memory of witnessing a demonic possession. The study was conducted in Italy, where demonic possession is viewed as a more plausible occurrence than in America. However, in an initial testing session, all of the participants indicated that demonic possession was not only implausible, but that it was very unlikely that they had personally witnessed an occurrence of possession as children. A month after the first session, participants in one group read three short articles indicating that demonic possession is more common than is generally believed and that many children have witnessed such an event. Participants were compared with individuals who read three short articles about choking and with individuals who received no manipulation. Participants exposed to one of the manipulations returned the following week and, based on their responses to a fear questionnaire they completed, were informed (regardless of their actual responses) that their fear profile indicated that they had probably either witnessed a possession or had almost choked during early childhood.

When the original questionnaire was completed in a final session, 18 percent of the students indicated that they had probably witnessed possession. No changes in memories were evident in the control condition. In summary, events that were not experienced during childhood and initially thought to be highly implausible can, with sufficient credibility-enhancing information, come to be viewed as having occurred in real life.

Hypothesized Path of False Memory Creation

Imaginative narratives of sexual abuse that never occurred and past life reports arise when patients come to believe that the narrative provides a plausible explanation for current life difficulties. The narrative can achieve a high degree of plausibility due to many factors:

> (1) the prevalent belief that abuse and psychopathology are associated; (2) the therapist's support or suggestion of this interpretation; (3) the failure to consider alternative explanations for everyday problems; (4) the search for confirmatory data; (5) the use of suggestive memory recovery techniques that increase the plausibility of abuse and yield remembrances consistent with the assumption that abuse occurred; (6) increasing commitment to the narrative on the part of the client and therapist, escalating dependence on the therapist, and anxiety reduction associated with ambiguity reduction; (7) the encouragement of a "conversion" or "coming out" experience by the therapist or supportive community (e.g., therapy group), which solidifies the role of "abuse victim," and which is accompanied by reinforcing feelings of empowerment; and (8) the narrative's provision of continuity to the past and the future, as well as a sense of comfort and identity.

People are not equally vulnerable to the potentially suggestive influences of memory recovery procedures. At the very least it is necessary to believe that at least some memories remain intact indefinitely so that they can be retrieved, and that memory recovery techniques can retrieve these stored memories. In addition, fantasy prone, imaginative, compliant, as well as highly hypnotically suggestible people appear to be especially vulnerable to suggestive influences and to the development of false memories.

The evidence provides little support for the use of memory recovery techniques in psychotherapy. Contrary to the idea that people repress memories in the face of trauma, traumatic events are highly memorable (Shobe and Kihlstrom 1997). Even if a small percentage of accurate memories can be recovered in psychotherapy, there is no evidence for a causal connection between non-remembered abuse and psychopathology. In addition, the mere experience of painful emotions, when not tied to attempts to bolster positive coping and mastery, can be harmful (Littrell 1998). Indeed, there is no empirically supported psychotherapy that relies on the recovery of traumatic memories to achieve a positive therapeutic outcome. Adshead (1997) argued that if memory work with trauma patients is not effective, then "it would therefore be just as unethical to use memory work for patients who could not use it or benefit by it, as it would be to prescribe the wrong medication, or employ a useless surgical technique" (p. 437).

Before concluding, let us be clear about what the findings reviewed do not mean as well as what they do mean. First, all memory recovery techniques are not necessarily problematic. For example, the "cognitive interview" (Fisher and Geiselman 1992), which incorporates a variety of techniques derived from experimental research on memory (e.g., providing subjects with retrieval cues, searching for additional memorial details), holds promise as a method of enhancing memory in eyewitness contexts. Second, we do not wish to imply that all uses of hypnosis in psychotherapy are problematic. Controlled research evidence suggests that hypnosis may be useful in treating pain, medical conditions, and habit disorders (e.g., smoking cessation), and as an adjunct to cognitive-behavioral therapy (e.g., anxiety, obesity). Nevertheless, the extent to which hypnosis provides benefits above and beyond relaxation in such cases remains unclear (Lynn, Kirsch, Barabasz, Cardena, and Patterson 2001). The questionable scientific status of hypnosis as a memory recovery technique has no bearing on the

therapeutic efficacy of hypnosis, which must ultimately be investigated and judged on its own merits. Finally, we do not wish to claim that all memories recovered after years or decades of forgetting are necessarily false. We remain open to the possibility that certain recovered childhood memories are veridical, although further research is needed to document their existence and possible prevalence. These important and unresolved issues notwithstanding, the conclusion that certain suggestive therapeutic practices can foster false memories in some clients appears indisputable.

Notes

1. The following reviews were used as sources: Erdelyi 1994; Lynn, Lock, Myers, and Payne 1997; Lynn, Neuschatz, Fite, and Rhue 2001; Nash 1987; Spanos 1996; Steblay & Bothwell 1994; Witehouse, Dinges, E.C. Orne, and M.T. Orne 1988.

2. Some therapists do not assume that early memories reports are necessarily accurate but posit that such memories nevertheless provide a window into clients' personalities; the claim of these therapists is not of concern to us here.

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