Delayed Traumatic Recall in Adults: A Synthesis with Legal, Clinical, and Forensic Recommendations

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Despite considerable consensus on what is known and unknown about delayed traumatic recall in adults, this topic remains one of the most polarized issues within both forensic psychiatry and society as a whole. Competing priorities of values contribute to this polarization. So do often subtle confusions of categories: experiential with substantive realities; clinical with legal priorities and criteria; distinctions between explicit and implicit with declarative and procedural memory; conditioned avoidance with declarative knowledge; and prediction of traumatic sequelae from known traumatic events with postdiction of possible traumatic events from symptoms that may imply prior traumatization. Memories are rendered more vulnerable to falsification through social influence and intrinsic suggestibility—and probably more so when suggestive input bypasses conscious scrutiny. Legal, clinical, and forensic guidelines are proposed to sort out these complexities, balance conflicting professional duties and priorities, balance protection of children with defending legitimate social structures such as the family, and better use our growing knowledge about the vicissitudes of human memory.

Preventing child abuse and helping trauma victims reclaim optimum mental

health are top social priorities. Many clinicians view conditions such as dissociative, posttraumatic, and borderline personality disorders as the sequelae of child abuse. Recall of alleged prior traumatic events may occur at times in psychotherapy many years or decades later, after prolonged periods of reported non-recall. For this reason, nearly half of the states now permit tolling the statute of limitations to begin not at the time of an actionable incident, but at its first recall. This has led to a spate of litigation seeking criminal prosecution and/or civil compensation for these remote events.

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Some courts have accepted patients' reports of prior non-recall and the pattern of current symptoms as evidence for the alleged incident's truth.

Coupled with the decay of tangible evidence over extended time, this precedent puts the defense of innocent defendants at a disadvantage. Some are concerned about this threat to the presumption of innocence and to the institution of the family. There are significant data indicating that distorted or wholly false memories can arise through suggestion and social influence, which may occur in therapeutic settings. Another spate of litigation now targets psychotherapists for undue influence, slander, malpractice, or implantation of false memories. The factual data needed to resolve the questions at issue are often lacking or vulnerable to misinterpretation.

Many professional organizations, including the American Psychiatric and Medical Associations (APA, AMA), have published position statements on the subject of delayed traumatic recall.^{1, 2} With varying emphasis, all acknowledge the uncertainties of current data, the potential for both accurate and false recall, the need to take patients' self-reports seriously, and the need for corroborating data when questions of legal fact are at issue.

The authors herein offer a synthesis designed to differentiate more clearly the paradigms that guide clinical practice, forensic work, scientific truth, and legal justice. Each paradigm has differing substrates, goals, assumptions, methodology, and criteria.

The forensic psychiatric evaluator's charge differs fundamentally from the cli-

nician's. Each must keep many different paradigms clearly in mind and carefully clarify how these paradigms mutually intersect. Experiential reality differs from substantive reality in several key particulars.^{3–5} These realities are easily confused, leading to untoward and sometimes tragic outcomes. On the one hand, viewing experiential realities as substantive can lead to inappropriate attribution of memory veracity. On the other, to judge psychological reality by substantive standards can deny the level at which most of life is lived and psychotherapy necessarily operates.

Presumptions also differ in different settings, and which presumption best fits which setting is often confused. Clinicians grant the highest priority to establishing a therapeutic alliance, judicious patient advocacy, and a desirable therapeutic outcome. In law, these priorities are superceded by factual truth, due process safeguards for all parties, and justice. In clinical work, it is common practice to accept as true whatever content material the patient presents unless proven otherwise ("affirmation"). Hence, a "therapeutic presumption" usually favors a patient over significant others. In law, by contrast, the presumption of innocence favors the defendant unless proven otherwise, with a far more rigorous standard upheld in criminal than in civil litigation.

When a patient becomes an accuser, these paradigms openly clash. Competing sociopolitical priorities then come into play: on the one hand, the priorities are to minimize child abuse, respect patients, and provide effective treatment; and on the other, to defend the integrity of families, respect other interested parties, and support the integrity of justice for those accused of wrongdoing. The authors affirm the importance of all of these priorities and emphasize the need to find a balance when they conflict.

The law uses scientific data to resolve conflicts, and forensic psychiatrists are often the fact finders charged with clarifying these complexities for the court. There is now a growing consensus on four basic facts: (1) child abuse occurs widely and is widely believed to have pathogenic effects; (2) some memories of abusive incidents are true, some false, and others are distorted or in-between; (3) false memories are more likely to occur in settings of strong social influence and in patients with a high susceptibility to hypnosis or dissociation; and (4) all factors are profoundly affected by the psychosocial context (e.g., concurrent child custody battles, parents' status, and the prevailing social climate).⁶⁻⁸

Most controversy occurs regarding these factors' relative significance. Specific questions include: (1) the nature of memory; (2) the nature of temporary forgetting; (3) the veracity of traumatic recall, and whether patterns of symptomatology can be used adequately to infer a specific prior trauma; (4) to what degree narrative content is shaped by trauma, subsequent events, and prolonged periods of non-recall (e.g., dissociative amnesia); and (5) to what extent persons' narrative histories can be revised through suggestive communication and social influence, both in and outside of psychotherapy.

The Nature of Memory

Different types of memory occur.⁹ As most commonly used, *memory* denotes *declarative* memory: of factual content. This type of memory encompasses most language-mediated concepts and its formation and consolidation requires an intact limbic hippocampus. Content is subject to ongoing revision through subsequent experience; this is a "constructional" model,¹⁰ contrasted with the more intuitive idea that memory is like a video recorder that records factual events verbatim.

Procedural memory, for slowly acquired skills like bicycle riding, develops through prolonged operational feedback, largely outside of awareness, and is widely distributed throughout the cerebral cortex.

Conditioned avoidance, such as flinching from a stimulus that had been paired with an electric shock, is partly mediated by the amygdala via two routes: a fast thalamic pathway for learned survival responses, and a slow cortical one for adapting to the environmental milieu.¹¹ To a degree that is disputed, it may be indelibly imprinted. If so, "recovery" from its effects does not represent extinction but learned suppression, probably by the frontal cortex.^{11, 12} Conditioned avoidance is sometimes referred to as emotional memory¹¹ or body memory.¹² These must not be confused with factual content, which remains declarative.¹¹ Cerebral pathways for the two systems remain discrete; although they can reciprocally influence one another,¹¹ they also can be manipulated independently.¹³

These types of memory are easily and often confused. Their interactions are not well understood. All types of memory are important to mental health and psychopathology. At the same time, *only declarative memory for factual content is relevant to questions of truth or falsity.*

Temporary Forgetting and Reported Amnesia for Child Abuse

Memory for personal events (episodic memory) is complicated by the question of temporary forgetting. All humans experience temporarily forgetting a name, fact, or minor personal decision, despite great conscious effort to remember, only to have the content "pop into mind" at a later time. We may or may not know that there is an item available, but not retrievable at that moment. Such lapses can be motivated or seemingly random. When they are prolonged enough to cause concern, we use the word dissociation. When they extend for years, especially when a plausible motivator is present, some use the term repression. Its content is "unconscious," and actions that seem to just happen are "involuntary."

Psychogenic amnesia is similar. These words denote profound experiential realities that have been observed in many eras and cultures. At the same time, rigorous scientific scrutiny fails to define any substantively distinct mechanisms.^{14, 15} There is also no clear boundary between what is conscious and unconscious or voluntary and involuntary.¹⁶ "Conscious" and "voluntary" are determined by hidden processes, and conversely, experienced "involuntariness" is often a result of active strategic planning.¹⁴ All of these concepts are thus subjective.

Relevant questions for the delayed recall debate are: what is the state of temporarily forgotten memories?; are they less or more susceptible to ongoing reconstruction and suggestive influence?; how are they affected by the trauma response? In attempting to answer these questions, experiential and substantive realities are often confused.

Implicit Memory Implicit memory is defined as what is not immediately accessible to conscious retrieval by voluntary effort—a subjective criterion.¹⁷ It is often confused with nondeclarative memory (i.e., procedural memory and/or conditioned avoidance). The APA statement, for example, cites separate cerebral pathways for explicit and implicit memory¹ that are accurate only for declarative and procedural types of memory.⁹ This error is often used to imply that repressed material (implicit by definition) is nondeclarative, thus somehow exempted from the rules of ongoing reconstruction that apply to all declarative memory, and thus, more accurate. Data in eyewitness research, however, suggest that memory becomes even more vulnerable to suggestive modification when the contaminating information is not subject to conscious scrutiny (i.e., when it is implicit).¹⁸ In summary, it is unlikely that a temporarily forgotten name has been moved to another brain system. No tangible data yet support the belief that a temporarily forgotten memory is nondeclarative or exempt from suggestive influence.

Incidence of Child Abuse and Subsequent Amnesia Incidence of child

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abuse and amnesic effects remain highly controversial. For sexual abuse, reported incidence figures range from 3 to 31 percent in boys and 6 to 62 percent in girls.¹⁹ The wide range is probably due to variations in how sexual abuse is defined and reported. Subsequent amnesia is even less clear. Clinical studies, based on retrospective report, identify distinct patterns of recall and nonrecall.²⁰ The first methodologically sound prospective study was published in 1994. After 17 years had elapsed from a documented episode of child abuse, 38 percent of subjects did not remember the incident.²¹ Many did recall other abusive incidents. The accuracy of the content of delayed recall was not addressed;²¹ nor were there sufficient data to require the existence of any substantive "mechanism" beyond extended inattention or simple forgetting.²² How temporary forgetting occurs remains unexplained.

Veracity of Traumatic Recall

True, false, and distorted memories of traumatic events have each been demonstrated through anecdotal case reports, confirmed by factual evidence. Prospective studies of victims of known traumata show that patterns of posttraumatic avoidance and reenactment often become rigid-ified²³ and closely linked to the nature of the trauma.²⁴ War veterans, for example, may avoid loud noises and fireworks at the very same time that they are drawn toward recreational and defensive use of firearms. Central features of declarative content are often recalled accurately; peripheral details are easily distorted.^{25, 26}

Despite strong claims otherwise,²⁷

there is no hard evidence that it is valid to work backward, assuming the truth of a recovered memory from either its form or the accompanying pattern of symptomatology. Most retrospective studies that report independent corroboration do not adequately test for external validity, and satisfactory validation is often limited to only a few anecdotal reports.²⁸ "Recovered memory therapy" can also elicit implausible events like alien abduction, memories of past lives, and large-scale social conspiracies;^{29, 30} and the current patterns of symptomatology are likely to be consistent with these alleged but implausible events. In addition, there can be many causal paths to the same clinical outcome.³¹ Thus, while patterns of symptomatic behavior may provide useful leads for further investigation, they cannot be used reliably as evidence for the truth of what is being recalled. Also supporting this conclusion is the nonspecific nature of the psychiatric sequelae of child sexual abuse: pathogenic consequences may occur, but do not fall into any one pathognomonic pattern.^{32, 33} At present, we can not reliably differentiate between traumatic memories that are true, false, or distorted without corroboration through tangible external evidence.

Shaping Influences

Content of declarative memory both influences and is influenced by how it is interpreted within its social milieu. Hypnotic transactions provide a well-studied research paradigm. When used to access memories, modest increases in accurate information are likely to be masked by poorly understood distorting processes. At present, we cannot distinguish true from false components, and the newly modified content is often experienced with such conviction that it becomes convincing to third parties and resistant to cross-examination. For these reasons, posthypnotic testimony is excluded from evidence by many courts and repudiated by the AMA Council on Scientific Affairs.³⁴ Other truth-seeking devices, such as interviews conducted using Amytal³⁵ and polygraphy,³⁶ have similar pitfalls and are subject to similar admissibility restrictions for the very same reasons.

Psychological trauma and its sequelae are associated with hypnosis in poorly understood ways (e.g., increased susceptibility to hypnosis and dissociation following traumatic events³⁷; spontaneous hypnosis in posttraumatic disordered patients³⁸; and the seeking of cult-like affiliations, possibly as a means of obtaining "relief from neurotic distress"³⁹). More recent studies have controlled for the relative distorting effect of subjects' suggestibility, social influence, and hypnosis per se. "Suggestibility" encompasses separate capacities^{40, 41} to be influenced by hypnosis,³⁴ misinformation,⁴² and interrogation.43

False memories are more likely to arise from social influence, either inside or outside of hypnosis or psychotherapy; intrinsic suggestibility (especially interrogative) and dissociative potential⁴⁴; and less so, simply from being hypnotized.^{45, 46} Schacter⁴⁷ argues that this most likely occurs when a subject confuses whether a memory trace was originally laid by the alleged event, by internal imagery, and/or by another event(s). If so, a false memory Beahrs, Cannell, and Gutheil

can be viewed as an error of what Johnson⁴⁸ *et al.* term "source monitoring."

Suggestion in Psychotherapy

Like other meaningful relationships, psychotherapy contains suggestive elements, whether or not formal hypnotic inductions are employed.⁴⁹ Mutual shaping occurs in all parties, making it exceptionally difficult to assess the degree and source(s) of biasing social influence. Several published surveys show that clinicians are likely to accept uncritically the content material presented by their patients, selectively attend to what reinforces their own preferred models, and resist corrective data or alternate frames of reference.⁵⁰ In addition, given a standardized scenario of an abuse allegation, forensic child abuse experts also gave strikingly divergent opinions and recommendations.⁵¹ Many psychotherapies yield therapeutic effects independent of the accuracy of their rationales, probably via nonspecific interpersonal factors.⁵² Gravitz also notes how easily hypnotic reconstruction can be used deliberately to facilitate therapy by putting traumatic events in a more positive context, but advises great caution when factual truth is at issue.⁵³ Similar caution is warranted regarding the factual truth value of the products of guided imagery work.54

In summary, the very same process by which hypnotic-like psychotherapy techniques can heal—that is, using interpersonal influence to alter experiential realities—can confound legal justice when these alterations include the content of declarative recall.

Legal Recommendations

We recommend that the law acknowledge more clearly the profound distinctions between the clinical/experiential and legal/factual domains. Respecting the former, we affirm the value and necessity of clinical psychotherapy. We therefore do not support social actions that would unacceptably constrain legitimate psychotherapy with legitimate treatment goals. At the same time, we caution against inappropriate application of experiential reality to matters of historical truth and justice.

There are many problems to be considered when legislation tolling the statute of limitations permits litigation for long forgotten abusive events: the frailty of memory, lack of available evidence when many years have passed, and the many serious consequences that may result. In states that do have this provision, other legal safeguards may help. Admissibility of expert testimony can be determined through hearings on whether the proposed evidence meets $Frye^{55}$ or $Daubert^{56}$ criteria and/or can be modulated through specific jury instruction on its hazards.

Specifically, it is unacceptable to permit using the current clinical diagnosis or reported symptomatology as evidence for alleged past events.

Clinical Recommendations

We concur with the APA recommendations for clinical practice: therapist neutrality, comprehensive multidimensional evaluation, and avoiding pre-judgment.¹ Clinicians must be aware of their own beliefs and values and of how these may impact those of patients and others. We also agree that systemic polarization should not obviate patients' needs for acceptance, for being taken seriously, and for a measured degree of advocacy. Sufficient data show that these are often essential to therapeutic recovery.

No data, however, yet support the additional claims sometimes made by memory recovery therapists that the therapeualliance depends on uncritical tic affirmation of patients' narratives as historical truth, successful confrontation of former perpetrators, or litigation. We strongly advise that therapists not indoctrinate patients into accepting such beliefs, because of the inherent risks: the propensity to evoke false memories, to destroy interpersonal ties that may be essential to healing (even in abusive families), or to reinforce a regressive and retraumatizing frame of reference antithetical to a successful result. We affirm the doctrine of primum non nocere, and that this doctrine extends also to patients' significant others and society at large. To respect this principle and the data, benevolent skepticism is more clinically appropriate at this level.⁵⁷

Suggestive therapies are probably indicated for some patients. If/when so, they should be employed selectively, cautiously, and with fully informed consent concerning potential clinical and forensic hazards and alternative treatments. Therapists should avoid fostering patient dependency and instead stimulate independent problem solving and personal responsibility. Guidelines for therapeutic memory recovery have been proposed by the American Society of Clinical Hypnosis (ASCH).⁶

Like the ASCH, we advise that patients be cautioned about the clinical and forensic risks of seeking retribution against alleged perpetrators and recommend that therapists not support such actions. We further recommend that hypnotic or experiential techniques weigh heavily against subsequent litigation for previously unknown events that they might elicit. This applies equally to drug-assisted (e.g., Amytal) interviews. Patients should be fully informed that such treatment modalities are likely to obviate successful results in subsequent litigation.

Forensic Recommendations

Several precautions can mitigate the risk of injustice that is always present in delayed recall litigation. The forensic evaluator should be a separate professional from the treating clinician, thus better able to give an unbiased assessment of the litigant, the therapist, the therapeutic relationship, other interested parties, and other relevant factors.⁵⁸ The evaluator must be aware of his/her own biases, preconceptions, and attitudes toward this subject, and should not proceed unless or until he/she can maintain an acceptable degree of neutrality.

Information from third parties is crucial. This can include journals, diaries, current/past treatment records, hospitalizations, employment and military records, and litigation history. Collateral interviews with siblings, servants, old acquaintances, and family often yield useful information. Medical, school, therapy, or police records from the time of the alleged abuse may help to corroborate or discorroborate the allegations.

The forensic psychiatrist should carefully assess the litigant's current psychiatric status, looking for evidence of disorders (psychotic, posttraumatic, dissociative, affective, and anxiety), as well as for evidence of histrionic, borderline, and antisocial personality traits. Nonspecific syndromes such as "sexual abuse syndrome" are unacceptable. There should also be an adequate index of suspicion for malingering or factitious disorder.⁵⁹ Consistency between present and prior accounts and between alleged symptoms and current functioning should be carefully assessed, and whenever possible, both clinical interviews and standardized scales should be used. Evaluation of hypnotic and interrogative suggestibility, as well as dissociative potential, also should be done through standardized scales.

Forensic psychiatrists should look for possible contaminating influences within treatment itself (i.e., what is known about the relevant clinicians' biases, belief systems, ideological commitments, and known patterns of clinical outcome). This includes the methodologies employed, with special attention to suggestive techniques such as hypnosis, amobarbitalassisted interviews, guided imagery, body work, experiential techniques, groups with high potential for mutual shaping (e.g., incest survivors, dissociators), and the use of suggestive self-help manuals.^{60–63}

Other sources of social influence should also be identified within the greater social network. Evaluators should weigh each party's motives and relative

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priorities (e.g., for treatment, compensation, retribution, or sociopolitical agendas) and estimate to what extent and in what directions suggestive influence may be occurring.

The evaluator should also identify the time course of the memories at issue. What was the age of the presumed victim at the time of the alleged offense and its later recall? If memories were always present, did they change over time, incorporating ever more details, or were they relatively stable? If they first emerged during psychotherapy, were they affirmed as an explanation for the presenting symptoms, disbelieved, or treated with receptive neutrality? Whenever it is possible to document how a witness's recollections evolved over time, the resulting assessment is likely to be more accurate than one based solely on the form and properties of the memories themselves.

Finally, independent corroboration should be a mandatory condition for legal recovery, subject to applicable standards of evidence. Testimony by other interested parties such as the family is limited by mutual shaping in a manner similar to what occurs in hypnosis (e.g., perpetuation of group ideals, family myths, and scapegoating). The more that third parties have been isolated from recent affiliative or antagonistic interactions, the greater the credibility that can be granted to their testimony. At present, the only way to respect fully the presumption of innocence is to require more tangible evidence, such as medical records and reports by school authorities, police, and social service agencies filed at or near the time of the alleged offense.

Conclusion

In summary, memory is essential to human experience, life planning, and the regulation of human affairs. At the same time, it is never fully reliable. We know this from our own personal experiences of how easily and often the same event is remembered and interpreted differently by healthy individuals with the same data. With all that has been discovered about the nature of memory, these basic facts and uncertainties remain. Thus, caution is advised whenever matters at issue carry potential consequences that are as significant as those that accompany the question of adult delayed recall. No less is at stake than proper recourse and effective treatment for victims, appropriate respect for families, and the integrity of justice.

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References

- 1. American Psychiatric Association: Statement on Memories of Sexual Abuse. Washington, DC: APA, 1993
- 2. American Medical Association Council on Scientific Affairs: Report on Memories of Child Abuse. AMA, 1994
- 3. Gutheil TG: True or false memories of sexual abuse?: a forensic psychiatric view. Psychiatr Ann 23:527–31, 1993
- 4. Dennett DC: The Intentional Stance. Cambridge, MA: MIT Press, 1987

- 5. Beahrs JO: Hypnotic transactions, and the evolution of psychological structure. Psychiatr Med 10:25–39, 1993
- 6. Hammond DC, Garver RB, Mutter CB, et al: Clinical Hypnosis and Memory: Guidelines for Clinicians and For Forensic Hypnosis. Des Plaines, IL: American Society of Clinical Hypnosis Press, 1995
- 7. Loftus EF: The reality of repressed memories. Am Psychol 48:518-36, 1993
- 8. Lynn SJ, Rhue JW: Dissociation: Clinical and Theoretical Perspectives. New York: Guilford Press, 1994
- 9. Kandel ER: Cellular mechanisms of learning and the biological basis of individuality, in Principles of Neural Sciences (ed 3). Edited by Kandel ER, Schwartz JH, Jessel TM. New York: Elsevier, 1991, pp 1009–31
- Bartlett F: Remembering. Cambridge, U.K.: Cambridge University Press, 1932
- LeDoux JE: Emotion, memory and the brain: the neural routes underlying the formation of memories about primitive emotional experiences, such as fear, have been traced. Sci Am 270:50-7, 1994
- van der Kolk BA: The body keeps the score: memory and the evolving psychobiology of posttraumatic stress. Harv Rev Psychiatry 1:253-65, 1994
- Bechara A, Tranel D, Damasio H, Adolphs R, Rockland C, Damasio AR: Double dissociation of conditioning and declarative knowledge relative to the amygdala and hippocampus in humans. Science 269:1115–18, 1995
- Spanos NP: Hypnotic behavior: a social-psychological interpretation of amnesia, analgesia, and "trance logic." Behav Brain Sci 9:449-502, 1986
- 15. Holmes D: The evidence for repression: an examination of sixty years of research, in Repression and Dissociation: Implications for Personality, Theory, Psychopathology, and Health. Edited by Singer J. Chicago: University of Chicago Press, 1990, pp 85–102
- Beahrs JO: Volition, deception, and the evolution of justice. Bull Am Acad Psychiatry Law 19:81-31, 1991
- Schacter DL, Bowers J, Booker J: Intention, awareness, and implicit memory: the retrieval criterion, in Implicit Memory: Theoretical Issues. Edited by Lewandowsky S, Dunn JC, Kirsner K. Hillsdale, NJ: Lawrence Erlbaum, 1989, pp 47–65
- Hall DF, Loftus EF, Tousignant JP: Postevent information and changes in recollection for a natural event, in Eyewitness Testimony: Psychological Perspectives. Edited by Wells GL,

Loftus EF. Cambridge, U.K.: Cambridge University Press, 1984

- Kolko DJ: Educational programs to promote awareness and prevention of child sexual victimization: a review and methodological critique. Clin Psychol Rev 8:195–209, 1988
- Binder RL, McNiel DE, Goldstone RL: Patterns of recall of childhood sexual abuse as described by adult survivors. Bull Am Acad Psychiatry Law 22:357-66, 1994
- Williams LM: Recall of childhood trauma: a prospective study of women's memories of child sexual abuse. J Consult Clin Psychol 62:1167–75, 1994
- Loftus EF, Garry M, Feldman J: Forgetting sexual trauma: what does it mean when 38% forget? J Consult Clin Psychol 62:1177–81, 1994
- van der Kolk BA: Compulsion to repeat the trauma: reenactment, revictimization, and masochism. Psychiatr Clin North Am 12: 389-412, 1989
- Terr L: Chowchilla revisited: the effects of psychic trauma four years after a school-bus kidnapping. Am J Psychiatry 140:1543–50, 1983
- 25. Terr L: What happens to early memories of trauma?: a study of twenty children under age five at the time of documented traumatic events. J Am Acad Child Adolesc Psychiatry 27:96–104, 1988
- Christianson SA: Emotional stress and eyewitness memory: a critical review. Psychol Bull 112:284–309, 1992
- 27. Terr L: Unchained Memories: True Stories of Traumatic Memories, Lost and Found. New York: Basic Books, 1994
- Frankel FH: Adult reconstruction of childhood events in the multiple personality literature. Am J Psychiatry 150:954-8, 1993
- Spanos NP, Burgess CA, Burgess MF: Pastlife identities, UFO abductions, and satanic ritual abuse: the social construction of memories. Int J Clin Exp Hypn 42:433-46, 1994
- deYoung M: One face of the devil: the satanic ritual abuse crusade and the law. Behav Sci Law 12:389-407, 1994
- Levitt EE, Pinnell CM: Some additional light on the childhood sexual abuse-psychopathology axis. Int J Clin Exp Hypn 43:145–62, 1995
- 32. Beitchman JH, Zucker KJ, Hood JE, daCosta GA, Akman D, Cassavia E: A review of the long term effects of child sexual abuse. Child Abuse Negl 16:101–18, 1992
- Kendall-Tackett KA, Williams LM, Finkelhor D: Impact of sexual abuse on children: a re-

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view and synthesis of recent empirical studies. Psychol Bull 113:164-80, 1993

- American Medical Association Council on Scientific Affairs: Council report: scientific status of refreshing recollection by the use of hypnosis. JAMA 253:1918-23, 1985
- Rogers R, Wettstein RM: Drug-assisted interviews to detect malingering and deception, in Clinical Assessment of Malingering and Deception. Edited by Rogers R. New York: Guilford Press, 1988, pp 195–204
- 36. Iacono WG, Patrick CJ: Assessing deception: polygraph techniques, in Clinical Assessment of Malingering and Deception. Edited by Rogers R. New York: Guilford Press, 1988, pp 205–33
- Spiegel D, Hunt T, Dondershine HE: Dissociation and hypnotizability in posttraumatic stress disorder. Am J Psychiatry 145:301–5, 1988
- Beahrs JO: Spontaneous hypnosis in the forensic context. Bull Am Acad Psychiatry Law 17:171–91, 1989
- Galanter M: The "relief effect": a sociobiological model for neurotic distress and largegroup therapy. Am J Psychiatry 135:588–91, 1978
- 40. Gheorghiu VA, Netter P, Eysenck HJ, Rosenthal H (eds.): Suggestion and Suggestibility: Theory and Research. Berlin: Springer-Verlag, 1989
- 41. Schumaker JF (ed.): Human Suggestibility. New York: Routledge, 1991
- 42. Belli RF: Influences of postevent information: misinformation interference and acceptance. J Exp Psychol Gen 118:72–85, 1989
- Gudjonsson GH: The Psychology of Interrogations, Confessions and Testimony. New York: John Wiley & Sons, 1992
- 44. Hyman IE, Billings FJ: Individual differences related to the creation of false childhood memories. Presented at the annual meeting of the Western Psychological Association, Los Angeles, CA, April 1995
- 45. Barnier A, McConkey K: Reports of real and false memories: the relevance of hypnosis, hypnotizability, and test context. J Abnorm Psychol 101:521–527, 1992
- Brown D: Pseudomemories: the standard of science and the standards of care in trauma treatment. Am J Clin Hypn 37:1–24, 1995
- 47. Schacter DL: Memory wars. Sci Am 272: 135–9, 1995
- Johnson MK, Hashtroudi S, Lindsay DS: Source monitoring. Psychol Bull 114:3–28, 1993

- 49. Ganaway GK: Transference and countertransference shaping influences on dissociative syndromes, in Dissociation: Clinical and Theoretical Perspectives. Edited by Lynn SJ, Rhue JW. New York: Guilford, 1994, pp 317– 337
- Yapko MD: Suggestibility and repressed memories of abuse: a survey of psychotherapists' beliefs. Am J Clin Hypn 36:163–71, 1994
- Horner TM, Guyer MJ, Kalter NM: The biases of child abuse experts: believing is seeing. Bull Am Acad Psychiatry Law 21:281– 92, 1993
- 52. Frank J: Persuasion and Healing: A Comparative Study of Psychotherapy. Baltimore: Johns Hopkins University Press, 1973
- 53. Gravitz MA: Memory reconstruction by hypnosis as a therapeutic technique. Psychotherapy 31:687–91, 1994
- Hyman IE, Pentland J: The role of mental imagery in the creation of false childhood memories. J Memory Language, in press, 1996
- 55. Frye v. United States, 293 F 1013 (DC Cir 1923)
- 56. Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S Ct 2786 (1993)
- Paris J: Memories of abuse in borderline patients: true or false? Harv Rev Psychiatry 3:1017, 1995
- Johnson EK, Howell RJ: Memory processes in children: implications for investigations of alleged child abuse. Bull Am Acad Psychiatry Law 21:213–26, 1993
- Rogers R: Clinical Assessment of Malingering and Deception. New York: Guilford Press, 1988
- 60. Rogers ML: Evaluating adult litigants who allege injuries from sexual abuse: clinical assessment methods for traumatic memories. Issues in Child Abuse Allegations 4:221–38, 1992
- Rogers ML: Factors to consider in assessing adult litigants' complaints of childhood sexual abuse. Behav Sci Law 12:279–98, 1994
- 62. Temerlin MK, Trousdale WW: The social psychology of clinical diagnosis. Psychother Theory Res Pract 6:24–9, 1969
- Lindsay DS, Read JD: Psychotherapy and memories of childhood sexual abuse: a cognitive perspective. Appl Cognit Psychol 8:281-338, 1994