The Recovered Memory Project: Alphabetized Bibliography of Scholarly Resources

Berliner, L., Hyman, I., Thomas, A., & Fitzgerald, M. (2003, June 16). Children's memory for trauma and positive experiences. *Journal of Traumatic Stress, 16*(3), 229-236. (University of Washington, Seattle, WA.)

Abstract: Characteristics of children's memory for a trauma and for a positive event were compared and relationships of memory characteristics to trauma symptoms examined in 30 children who experienced a traumatic event. Results revealed that memories for trauma tended to have less sensory detail and coherence, yet have more meaning and impact than did memories for positive experiences. Sexual traumas, offender relationship, and perceived life threat were associated with memory characteristics. Few relationships between memory characteristics and trauma symptoms were found. Therapist ratings of child memory characteristics were correlated with some child trauma memory characteristic reports. These results are consistent with other studies. Possible explanations include divided attention during the traumatic event and cognitive avoidance occurring after the event.

Bremner, J. D., Krystal, J. H., Charney, D. S., & Southwick, S. M. (1996). Neural mechanisms in dissociative amnesia for childhood abuse: Relevance to the current controversy surrounding the "false memory syndrome." *The American Journal of Psychiatry, 153,* 71-82. (Department of Psychiatry, Yale University School of Medicine, New Haven, CT.)

Abstract: OBJECTIVE: There is considerable controversy about delayed recall of childhood abuse. Some authors have claimed that there is a "false memory syndrome," in which therapists suggest to patients events that never actually occurred. These authors point to findings that suggest that memory traces are susceptible to modification. The purpose of this paper is to review the literature on the potential vulnerability of memory traces to modification and on the effects of stress on the neurobiology of memory. METHOD: The authors review findings on mechanisms involved in normal memory function, effects of stress on memory in normal persons, children's memory of stressful events, and alterations of memory function in psychiatric disorders. The effects of stress on specific brain regions and brain chemistry are also examined. RESULTS: Neuropeptides and neurotransmitters released during stress can modulate memory function, acting at the level of the hippocampus, amygdala, and other brain regions involved in memory. Such release may interfere with the laying down of memory traces for incidents of childhood abuse. Also, childhood abuse may result in long-term alterations in the function of these neuromodulators. CONCLUSIONS: John Nemiah pointed out several years ago that alterations in memory in the form of dissociative amnesia are an important part of exposure to traumatic stressors, such as childhood abuse. The studies reviewed here show that extreme stress has long-term effects on memory. These findings may provide a model for understanding the mechanisms

involved in dissociative amnesia, as well as a rationale for phenomena such as delayed recall of childhood abuse.

Brewin, C. R., & Andrews, B. (1998, December). Recovered memories of trauma: Phenomenology and cognitive mechanisms. *Clinical Psychology Review, 18*(8), 949-970. (Department of Psychology, University of London, Surrey, UK.)

Abstract: We outline four current explanations for the reported forgetting of traumatic events, namely repression, dissociation, ordinary forgetting, and false memory. We then review the clinical and survey evidence on recovered memories, and consider experimental evidence that a variety of inhibitory processes are involved in everyday cognitive activity including forgetting. The data currently available do not allow any of the four explanations to be rejected, and strongly support the likelihood that some recovered memories correspond to actual experiences. We propose replacing the terms repression and dissociation as explanations of forgetting with an account based on cognitive science.

Briere, J., & Conte, J. R. (1993, January). Self-reported amnesia for abuse in adults molested as children. *Journal of Traumatic Stress, 6*(1), 21-31.

Abstract: A sample of 450 adult clinical subjects reporting sexual abuse histories were studied regarding their repression of sexual abuse incidents. A total of 267 subjects (59.3%) identified some period in their lives, before age 18, when they had no memory of their abuse. Variables most predictive of abuse-related amnesia were greater current psychological symptoms, molestation at an early age, extended abuse, and variables reflecting especially violent abuse (e.g., victimization by multiple perpetrators, having been physically injured as a result of the abuse, victim fears of death if she or he disclosed the abuse to others). In contrast, abuse characteristics more likely to produce psychological conflict (e.g., enjoyment of the abuse, acceptance of bribes, feelings of guilt or shame) were not associated with abuse-related amnesia. The results of this study are interpreted as supporting Freud's initial "seduction hypothesis," as well as more recent theories of post-traumatic dissociation.

Brown, D. (2000). (Mis) representations of the long-term effects of childhood sexual abuse in the courts. *Journal of Child Sexual Abuse, 9*(3-4), 79-107. (Cornell University, Ithaca, NY.)

Abstract: This study addresses the (mis) representations made by pro-false memory attorneys and expert witnesses in court regarding the long-term effects of childhood sexual abuse (CSA). Five pro-false memory positions were identified: (1) there is no causal connection between CSA and adult psychopathology; (2) the evidence is insufficient; (3) CSA does not cause specific trauma-related outcomes like borderline and dissociative identity disorder; (4) other variables than CSA explain the variance of adult

psychopathology; and (5) the long-term effects of CSA are general and non-specific. Examining the testimony revealed that such pro-false memory testimony was based solely on a partial understanding of retrospective data and that pro-false memory experts do not cite the more recent prospective data. Reviewing the totality of the scientific evidence demonstrates that such pro-false memory testimony is inaccurate and has the potential of misleading the jury. Prospective studies provide sufficient evidence to causally link CSA to a number of areas of adult psychopathology including multiple, co-morbid psychiatric conditions, and possibly to link early parent-infant attachment pathology to the development of borderline and dissociative identity disorder.

Burgess, A. W., Hartman, C. R., & Baker, T. (1995, September). Memory presentations of childhood sexual abuse. *Journal of Psychosocial Nursing & Mental Health Services, 33*(9), 9-16. (University of Pennsylvania, School of Nursing, Philadelphia, PA.)

Abstract: Questions are continually raised about the accuracy and validity of very young children's memories of traumatic events. Out of 19 children, where the median age was 2 1/2 at time of disclosure, 11 had full verbal memory, five had fragmented verbal memory traces, and three had no memory 5 to 10 years following day care sexual abuse. Data from this clinical study suggest the nature of children's memory is four-dimensional: somatic, behavioral, verbal, and visual. Efforts need to continue to document the nonverbal components for assessment and treatment purposes.

Cameron, C. (1994). Women survivors confronting their abusers: Issues, decisions, and outcomes. *Journal of Child Sexual Abuse, 3*(1), 7-35. (U La Verne, Behavioral Science Dept, CA.)

Abstract: Surveyed 72 women who entered therapy in the mid-1980s to deal with the long-term consequences of childhood sexual abuse. 51 Ss were surveyed again in 1988 and 1992. In general, responses to the 1st survey were characterized by a desire to confront without the readiness to do so, responses to Survey 2 by completed confrontations, and responses to Survey 3 by reconfrontations. Findings support recommendations regarding helping clients to plan, practice, and carry out confrontations safely. More recognition should be given to the aftermath of confrontation, debriefing, and reconfrontation, and to survivors with specialized needs, such as women formerly amnesic to their abuse.

Chu, J. A., Frey, L. M., Ganzel, B. L., & Matthews, J. A. (1999, May). Memories of childhood abuse: Dissociation, amnesia, and corroboration. *The American Journal of Psychiatry, 156*(5), 749-755. (Dissociative Disorders and Trauma Program, McLean Hospital, Belmont, MA.)

Abstract: OBJECTIVE: This study investigated the relationship between self-reported childhood abuse and dissociative symptoms and amnesia. The presence or absence of

corroboration of recovered memories of childhood abuse was also studied. METHOD: Participants were 90 female patients admitted to a unit specializing in the treatment of trauma-related disorders. Participants completed instruments that measured dissociative symptoms and elicited details concerning childhood physical abuse, sexual abuse, and witnessing abuse. Participants also underwent a structured interview that asked about amnesia for traumatic experiences, the circumstances of recovered memory, the role of suggestion in recovered memories, and independent corroboration of the memories. RESULTS: Participants reporting any type of childhood abuse demonstrated elevated levels of dissociative symptoms that were significantly higher than those in subjects not reporting abuse. Higher dissociative symptoms were correlated with early age at onset of physical and sexual abuse and more frequent sexual abuse. A substantial proportion of participants with all types of abuse reported partial or complete amnesia for abuse memories. For physical and sexual abuse, early age at onset was correlated with greater levels of amnesia. Participants who reported recovering memories of abuse generally recalled these experiences while at home, alone, or with family or friends. Although some participants were in treatment at the time, very few were in therapy sessions during their first memory recovery. Suggestion was generally denied as a factor in memory recovery. A majority of participants were able to find strong corroboration of their recovered memories. CONCLUSIONS: Childhood abuse, particularly chronic abuse beginning at early ages, is related to the development of high levels of dissociative symptoms including amnesia for abuse memories. This study strongly suggests that psychotherapy usually is not associated with memory recovery and that independent corroboration of recovered memories of abuse is often present.

Colangelo, J. J. (2009, January-February). The recovered memory controversy: A representative case study. *Journal of Child Sexual Abuse, 18*(1), 103-121. (Long Island University, Fresh Meadows, NY.)

Abstract: The recovered memory controversy has been an ongoing debate within the mental health profession for the past two decades. Disagreement remains in the field over the veracity of "forgotten" memories of childhood sexual abuse that are recalled or recovered during therapy. At the heart of the controversy are the concepts of repression and dissociation as well as the impact traumatizing events have on the encoding of memory. This article provides an overview of the central factors in the longstanding debate and presents a detailed clinical case study involving independent corroboration of memories of childhood sexual abuse recovered during treatment, which the author believes provides additional support for the potential veracity of recovered memories.

Dalenberg, C. J. (1996, Summer.) Accuracy, timing and circumstances of disclosure in therapy of recovered and continuous memories of abuse. *Journal of Psychiatry & Law, 24*(2), 229-275. (CSPP, Trauma Research Inst, San Diego, CA.)

Abstract: Seventeen patients who had recovered memories of abuse in therapy participated in a search for evidence confirming or refuting these memories. Memories of

abuse were found to be equally accurate whether recovered or continuously remembered. Predictors of number of memory units for which evidence was uncovered included several measures of memory and perceptual accuracy. Recovered memories that were later supported arose in psychotherapy more typically during periods of positive rather than negative feelings toward the therapist, and they were more likely to be held with confidence by the abuse victim.

Dalenberg, C. J. (2006, October). Recovered memory and the Daubert criteria: Recovered memory as professionally tested, peer reviewed, and accepted in the relevant scientific community. *Trauma, Violence, & Abuse, 7*(4), 274-310. (Alliant International University.)

Abstract: Research during the past two decades has firmly established the reliability of the phenomenon of recovered memory. This review first highlights the strongest evidence for the phenomenon itself and discusses the survey, experimental, and biological evidence for the varying mechanisms that may underlie the phenomenon. Routes to traumatic amnesia from dissociative detachment (loss of emotional content leading to loss of factual content) and from dissociative compartmentalization (failure in integration) are discussed. Next, an argument is made that false memory is a largely orthogonal concept to recovered memory; the possibility of one phenomena is largely irrelevant to the potential for the other. Furthermore, some aspects of the false memory research offer supportive data for the recovered memory researcher. Finally, the issue of error rates in making the Daubert case is explored. It is concluded that the weight of the evidence should allow the recovered memory victim to come before the court.

Dallam, S. J. (2001). Crisis or creation? A systematic examination of False Memory Syndrome. *Journal of Child Sexual Abuse, 9*(3/4), 9-36. (Cynwyd, PA.)

Abstract: In 1992, the False Memory Syndrome Foundation (FMSF), an advocacy organization for people claiming to be falsely accused of sexual abuse, announced the discovery of a new syndrome involving iatrogenically created false memories of childhood sexual abuse. This article critically examines the assumptions underlying "False Memory Syndrome" to determine whether there is sufficient empirical evidence to support it as a valid diagnostic construct. Epidemiological evidence is also examined to determine whether there is data to support its advocates' claim of a public health crisis or epidemic. A review of the relevant literature demonstrates that the existence of such a syndrome lacks general acceptance in the mental health field, and that the construct is based on a series of faulty assumptions, many of which have been scientifically disproven. There is a similar lack of empirical validation for claims of a "false memory" epidemic. It is concluded that in the absence of any substantive scientific support, "False Memory Syndrome" is best characterized as a pseudoscientific syndrome that was developed to defend against claims of child abuse.

DeWind, E. (1968). The confrontation with death. *International Journal of Psychoanalysis, 49,* 302-305.

Excerpt: "Most former inmates of Nazi concentration camps could not remember anything of the first days of imprisonment because perception of reality was so overwhelming that it would lead to a mental chaos which implies a certain death."

Duggal, S., & Sroufe, L. A. (1998, April). Recovered memory of childhood sexual trauma: A documented case from a longitudinal study. *Journal of Traumatic Stress, 11*(2), 301-321. (Institute of Child Development, University of Minnesota, Minneapolis MN.)

Abstract: A case of recovered memory of childhood trauma is reported with documented sexual trauma in early childhood, chronicled evidence of the absence of memory for traumatic experience over a period of time, and substantial evidence of 'spontaneous' recovery of memory. This account contains the first available prospective report of memory loss in a case in which there is both documented evidence of trauma and evidence of recovery of memory. The case emerged as part of a broadband, large-scale study of children followed closely from birth to adulthood which was not focused on memory for trauma. Prospective data gathered in a neutral research context, corroborated and supplemented by retrospective information, circumvent many limitations of previous retrospective accounts of recovered memories.

Durlacher, G. L. (1991). *De zoektocht* [The search]. Amsterdam: Meulenhoff.

Dutch sociologist Durlacher, a survivor of Birkenau, describes his search for and meetings with another 20 child survivors from this camp. Excerpt: "Misha…looks helplessly at me and admits hesitantly that the period in the camps is wiped out from his brain….With each question regarding the period between December 12, 1942 till May 7, 1945, he admits while feeling embarrassed that he cannot remember anything….Jindra…had to admit that he remembers almost nothing from his years in the camps….From the winter months of 1944 until just before the liberation in April 1945, only two words stayed with him: Dora and Nordhausen….In a flash I understand his amnesia, and shocked, I hold my tongue. Dora was the hell which almost nobody survived, was it not? Underground, without fresh air or daylight, Hitler's secret weapon of destruction, the V-2 rocket, was made by prisoners. Only the dying or the dead came above the ground, and Kapos, and guards."

Edwards, V. J., Fivush, R., Anda, R. F., Felitti, V. J., & Nordenberg, D. F. (2001). Autobiographical memory disturbances in childhood abuse survivors. *Journal of Aggression, Maltreatment & Trauma, 1*(4), 247-263.

Abstract: There is growing recognition among trauma researchers, clinicians, and human rights activists of the need for greater understanding of the nature, impact, and mediators of

traumatic exposure among trauma survivors from diverse cultures and contexts and a growing interest in the phenomenon of resiliency and the possibility of recovery in the aftermath of traumatic exposure. This introduction briefly describes the articles that comprise this volume, emphasizing their status both as individually unique and worthwhile contributions to this literature and as a collection of works that speak powerfully to the promise of multi-cultural research and practice and to the need for a theoretical framework able to account for wide variations in individual expressions of psychological trauma, trauma recovery, and resilience. For us as co-editors of this volume, that framework resides in the ecological perspective of community psychology and in the attention to culture and context inherent in ecological theory.

Elliott, D. M. (1997). Traumatic events: Prevalence and delayed recall in the general population. *Journal of Consulting and Clinical Psychology, 65,* 811-820. (UCLA Medical Center, Child Abuse Crisis Center, Torrance, CA.)

Abstract: A random sample of 724 individuals from across the United States were mailed a questionnaire containing demographic information, an abridged version of the Traumatic Events Survey (DM Elliott, 1992), and questions regarding memory for traumatic events. Of these, 505 (70%) completed the survey. Among respondents who reported some form of trauma (72%), delayed recall of the event was reported by 32%. This phenomenon was most common among individuals who observed the murder or suicide of a family member, sexual abuse survivors, and combat veterans. The severity of the trauma was predictive of memory status, but demographic variables were not. The most commonly reported trigger to recall of the trauma was some form of media presentation (i.e., television show, movie), whereas psychotherapy was the least commonly reported trigger.

Elliott, D. M., & Briere, J. (1995, October). Posttraumatic stress associated with delayed recall of sexual abuse: A general population study. *Journal of Traumatic Stress, 8*(4), 629-647. (Child Abuse Crisis Center, Harbor-UCLA Medical Center, Torrance, CA.)

Abstract: This study examined delayed recall of childhood sexual abuse in a stratified random sample of the general population (N = 505). Of participants who reported a history of sexual abuse, 42% described some period of time when they had less memory of the abuse than they did at the time of data collection. No demographic differences were found between subjects with continuous recall and those who reported delayed recall. However, delayed recall was associated with the use of threats at the time of the abuse. Subjects who had recently recalled aspects of their abuse reported particularly high levels of posttraumatic symptomatology and self difficulties (as measured by the IES, SCL, and TSI) at the time of data collection compared to other subjects.

Epstein, M. A., & Bottoms, B. L. (2002, August). Explaining the forgetting and recovery of abuse and trauma memories: possible mechanisms. *Child Maltreatment, 7*(3), 210-225.

Abstract: Much attention has been focused on memories of abuse that are allegedly forgotten or repressed then recovered. By retrospectively surveying more than 1,400 college women (aged 18-60 yrs), the authors investigated (a) the frequency with which temporary forgetting is reported for child sexual abuse experiences as opposed to other childhood abuse and traumas and (b) exactly how victims characterize their forgetting experiences in terms of various competing cognitive mechanisms. Rates of forgetting were similar among victims who experienced sexual abuse, physical abuse, and multiple types of traumas. Victims of other types of childhood traumas (e.g., car accidents) reported less forgetting than victims of childhood sexual abuse or multiple types of trauma. Most victims' characterizations of their forgetting experiences were not indicative of repression in the classic Freudian sense but instead suggested other more common mechanisms, such as directed forgetting and relabeling. The implications of these findings for psychological theory, clinical practice, and law are discussed.

Erdinç, I. B., Sengül, C. B., Dilbaz, N., & Bozkurt, S. (2004). A case of incest with dissociative amnesia and post traumatic stress disorder. *Turkish Journal of Psychiatry, 15*(2), 161-165. (Ankara Numune Eğitim ve Araştirma Hastanesi 2. Psikiyatri Kl., Ankara.)

Abstract: Incest is a kind of sexual abuse that causes serious disorders during childhood and adulthood. In order to overcome the trauma, abuse victims frequently use dissociative defence mechanisms. Post traumatic stress disorder, dissociative disorders, major depression and borderline personality disorder can be seen in the victims of childhood sexual abuse. In this article we present an adolescent who was found and brought to our clinic by the Children's Police Department while she was wandering around aimlessly. She could not remember anything about her identity or personal history. She had no apparent physical disturbances, marks of beating or wounds which could be seen externally. Her physical and neurological examinations were both normal. In her laboratory tests, there was nothing abnormal. No sign of intoxication or infection was detected. EEG and CT were also normal. After the family was found, we learned about the sexual and physical abuse and the patient was diagnosed with dissociative amnesia. The psychometric evaluations also supported our diagnosis. When the dissociation began to disappear, post traumatic stress disorder symptoms became more apparent. After she described her traumatic memories, PTSD symptoms began to recede. Through this case presentation we would like to emphasize the relationship between childhood physical and sexual abuse and dissociative disorders.

Feldman-Summers, S., Pope, K. S. (1994, June). The experience of "forgetting" childhood abuse: A national survey of psychologists. *Journal of Consulting and Clinical Psychology, 62*(3), 636-639.

Abstract: A national sample of psychologists were asked whether they had been abused as children and, if so, whether they had ever forgotten some or all of the abuse. Almost a quarter of the sample (23.9%) reported childhood abuse, and of those, approximately 40% reported a period of forgetting some or all of the abuse. The major findings were that (1) both sexual and nonsexual abuse were subject to periods of forgetting; (2) the most frequently reported factor related to recall was being in therapy; (3) approximately one half of those who reported forgetting also reported corroboration of the abuse [see comparable percentage in the Pope & Tabachnick (1995) study below]; and (4) reported forgetting was not related to gender or age of the respondent but was related to severity of the abuse.

Fish, V., & Scott, C. G. (1999, August). Childhood abuse recollections in a nonclinical population: Forgetting and secrecy. *Child Abuse & Neglect, 23*(8), 791-802. (Family Therapy Center of Madison, WI.)

Abstract: OBJECTIVE: This study investigated the relationship of interrupted memories of childhood abuse with the secrecy of the abuse. METHODOLOGY: Fifteen hundred people were randomly selected from the membership of the American Counseling Association and sent a questionnaire regarding childhood abuse history. Four hundred and twenty-three usable questionnaires were returned and analyzed. RESULTS: Thirty-two percent of the sample reported childhood abuse. Fifty-two percent of those reporting abuse also noted periods of forgetting some or all of the abuse. On the two survey items assessing secrecy, 76% of respondents reporting childhood abuse indicated there had been a time when no one but themselves and their abuser knew about the abuse; 47% indicated that an abuser tried to get them to keep the abuse secret. Forty percent endorsed both secrecy items. Respondents who reported forgetting abuse also reported one or both elements of secrecy more frequently than those who reported continuous memories of abuse. CONCLUSION: These findings are consistent with those of other studies that suggest that, among adults reporting childhood abuse, the experience of forgetting some or all abuse is common. Secrecy of the abuse appears to be associated with the experience of forgetting childhood abuse for many individuals.

Fivush, R., & Edwards, V. J. (2004). Remembering and forgetting childhood sexual abuse. *Journal of Child Sexual Abuse, 13*(2), 1-19.

Abstract: Twelve white middle-class women who had been severely sexually abused as children by a family member were asked to provide a narrative of their abuse and discuss their subsequent remembering and forgetting of these experiences. Most claimed they had undergone periods during which they had not recalled their abuse, but also claimed that they had never forgotten their experiences at another point during the interview. Nine of

the women had actively tried to forget the abusive experiences, although 8 still experienced recurrent and often relentless intrusive memories. Our findings suggest that women with continuous memories may have longer and more coherent narratives than women without continuous memories. Implications of these findings for understanding the phenomenology of memory experiences and the concept of "recovered" memories of childhood sexual abuse are discussed.

Geraerts, E., Schooler, J. W., Merckelbach, H., Jelicic, M., Hauer, B. J., & Ambadar, Z. (2007, July). The reality of recovered memories: corroborating continuous and discontinuous memories of childhood sexual abuse. ***Psychological Science, 18*****(7), 564-568.**

Abstract: Although controversy surrounds the relative authenticity of discontinuous versus continuous memories of childhood sexual abuse (CSA), little is known about whether such memories differ in their likelihood of corroborative evidence. Individuals reporting CSA memories were interviewed, and two independent raters attempted to find corroborative information for the allegations. Continuous CSA memories and discontinuous memories that were unexpectedly recalled outside therapy were more likely to be corroborated than anticipated discontinuous memories recovered in therapy. Evidence that suggestion during therapy possibly mediates these differences comes from the additional finding that individuals who recalled the memories outside therapy were markedly more surprised at the existence of their memories than were individuals who initially recalled the memories in therapy. These results indicate that discontinuous CSA memories spontaneously received outside of therapy may be accurate, while implicating expectations arising from suggestions during therapy in producing false CSA memories.

Herman, J. L., & Harvey, M. R. (1997). Adult memories of childhood trauma: a naturalistic clinical study. ***Journal of Traumatic Stress, 10*****(4), 557-571.**

Abstract: The clinical evaluations of 77 adult psychiatric outpatients reporting memories of childhood trauma were reviewed. A majority of patients reported some degree of continuous recall. Roughly half (53%) said they had never forgotten the traumatic events. Two smaller groups described a mixture of continuous and delayed recall (17%) or a period of complete amnesia followed by delayed recall (16%). Patients with and without delayed recall did not differ significantly in the proportions reporting corroboration of their memories form other sources. Idiosyncratic, trauma-specific reminders and recent life crises were most commonly cited as precipitants to delayed recall. A previous psychotherapy was cited as a factor in a minority (28%) of cases. By contrast, intrusion of new memories after a period of amnesia was frequently cited as a factor leading to the decision to seek psychotherapy. The implications of these findings are discussed with respect to the role of psychotherapy in the process of recovering traumatic memories.

Herman, J. L., & Schatzow, E. (1987, Winter). Recovery and verification of memories of childhood sexual trauma. *Psychoanalytic Psychology, 4*(1), 1-14. (Women's Mental Health Collective, Somerville, MA.)

Abstract: 53 women outpatients (aged 15-53 yrs) participated in short-term therapy groups for incest survivors. This treatment modality proved to be a powerful stimulus for recovery of previously repressed traumatic memories. A relationship was observed between the age of onset, duration, and degree of violence of the abuse and the extent to which memory of the abuse had been repressed. 74% of Ss were able to validate their memories by obtaining corroborating evidence from other sources. The therapeutic function of recovering and validating traumatic memories is explored in relation to case material.

Hopper, J. W., & van der Kolk, B. A. (2001). Retrieving, assessing, and classifying traumatic memories: A preliminary report on three case studies of a new standardized method. *Journal of Aggression, Maltreatment, & Trauma, 4,* 33-71.

Abstract: The study of traumatic memories is still an emerging field, both methodologically and theoretically. Previous questionnaire and interview methods for studying traumatic memories have been limited in their ability to evoke and assess remembrances with the characteristics long observed by clinicians. In this paper, we introduce a new standardized method that incorporates a laboratory procedure for retrieving memories of traumatic events and a clinically informed measure for assessing these memories' characteristics. We present three case studies to demonstrate the data yielded by script-driven remembering and the Traumatic Memory Inventory – Post-Script Version (TMI-PS). We then discuss subjects' script-driven remembrances in terms of methodology, theoretical classification of traumatic memories, and the interplay between the two. Finally, we critique our method in detail and offer suggestions for future research. If validated as a method for evoking and assessing traumatic memories, and shown to yield reliable data, this integrative method shows great promise for advancing both clinical and cognitive research on traumatic memories.

Hovdestad, W. E., & Kristiansen, C. M. (1996, Summer). A field study of "false memory syndrome": Construct validity and incidence. *Journal of Psychiatry & Law, 24*(2), 299-338. (Carleton University, Department of Psychology, Ottawa, ON, Canada.)

Abstract: False memory syndrome (FMS) is described as a serious form of psychopathology characterized by strongly believed pseudomemories of childhood sexual abuse. A literature review revealed four clusters of symptoms underlying the syndrome regarding victims' belief in their memories of abuse and their identity as survivors, their current interpersonal relationships, their trauma symptoms across the lifespan, and the characteristics of their therapy experiences. The validity of these clusters was examined using data from a community sample of 113 women who identified themselves as survivors of girlhood sexual abuse. Examining the discriminant validity of these criteria

revealed that participants who had recovered memories of their abuse (n = 51), and who could therefore potentially have FMS, generally did not differ from participants with continuous memories (n = 49) on indicators of these criteria. Correlational analyses also indicated that these criteria typically failed to converge. Further, despite frequent claims that FMS is occurring in epidemic proportions, only 3.9%-13.6% of the women with a recovered memory satisfied the diagnostic criteria, and women with continuous memories were equally unlikely to meet these criteria. The implications of these findings for FMS theory and the delayed-memory debate more generally are discussed.

Jaffe, R. (1968). Dissociative phenomena in former concentration camp inmates. *The International Journal of Psychoanalysis, 49*(2), 310-312.

Case descriptions include amnesia for traumatic events and subsequent twilight states in which events would be relived without conscious awareness. Excerpt: "The dissociative phenomena described here turn out not to be rare, once one is on the look out for them."

Joseph, R. (1999, August). The neurology of traumatic "dissociative" amnesia: commentary and literature review. *Child Abuse & Neglect, 23*(8), 715-727. (Brain Research Laboratory, San Jose, CA.)

Abstract: BACKGROUND: The relationship between traumatic emotional stress, hippocampal injury, memory loss, and traumatic ("dissociative") amnesia was examined. METHOD: A survey of the research on emotional trauma, learning, memory loss, glucosteroid stress hormones, and the hippocampus was conducted, and animal and human studies were reviewed. RESULTS: It is well documented and has been experimentally demonstrated in animals and humans that prolonged and high levels of stress, fear, and arousal commonly induce learning deficits and memory loss ranging from the minimal to the profound. As stress and arousal levels dramatically increase, learning and memory deteriorate in accordance with the classic inverse U-shaped curve. These memory deficits are due to disturbances in hippocampal activation and arousal, and the corticosteroid secretion which can suppress neural activity associated with learning and memory and induce hippocampal atrophy. Risk and predisposing factors include a history of previous emotional trauma or neurological injury involving the temporal lobe and hippocampus, the repetitive and prolonged nature of the trauma, and age and individual differences in baseline arousal and level of cortisol. CONCLUSIONS: Although some victims may be unable to forget, amnesia or partial memory loss is not uncommon following severe stress and emotional trauma. Even well publicized national traumas may induce significant forgetting. Memory loss is a consequence of glucosteroids and stress-induced disturbances involving the hippocampus, a structure which normally plays an important role in the storage of various events in long-term memory.

Keilson, H. (1992). Sequential traumatization in children. Jerusalem: The Magnes Press.

Amnesia in Jewish Dutch child survivors for the traumatic separation from their parents.

Krell, R. (1993). Child survivors of the Holocaust: Strategies of adaptation. *Canadian Journal of Psychiatry, 38,* 384-389.

Excerpt: "The most pervasive preoccupation of child survivors is the continuing struggle with memory, whether there is too much or too little….For a child survivor today, an even more vexing problem is the intrusion of fragments of memory—most are emotionally powerful and painful but make no sense. They seem to become more frequent with time and are triggered by thousands of subtle or not so subtle events….As children they were encouraged not to tell, but to lead normal lives and forget the past….Some are able to protect themselves by splitting time into past, present, and future….The interviewer can assist in sequencing fragments of memory, sometimes even filling in gaps with historical information and other data. Fragments of memory which made no sense had often been experienced as 'crazy' and never shared with anyone….To achieve relief for symptomatic child survivors, the knowledgeable therapist elicits memories, assists in their integration, makes sense of the sequence and encourages the child survivor to write their story, publish it, tape, or teach it."

Krystal, H., & Danieli, Y. (1994, Fall). Holocaust survivor studies in the context of PTSD. *PTSD Research Quarterly, 5*(4), 1-5.

Kuch, K., & Cox, B. J. (1992). Symptoms of PTSD in 124 survivors of the Holocaust. *American Journal of Psychiatry, 149,* 337-340.

Potential subjects with confirmed or suspected organicity, bipolar or obsessive compulsive disorder were excluded. One group (N=78) had been detained in various concentration camps for greater than 1 month. A second group (N=20) had been detained in Auschwitz and had been tattooed. A third group (N=45) had not been in labor camps, ghettos, or had hidden in the illegal underground. Psychogenic amnesia was found in 3.2% of the totals sample, in 3.8 of the general concentration camp survivors, and in 10% of tattooed survivors of Auschwitz. 17.7% (N=22) of the total sample had received psychotherapy. The tattooed survivors had a higher number of PTSD symptoms overall.

Lagnado, L. M., & Dekel, S. C. (1991). *Children of the flames: Dr. Josef Mengele and the untold story of the twins of Auschwitz.* New York: William and Morrow & Co.

Excerpt: "A few of the twins insisted that they had no memories of Auschwitz whatsoever. Instead, they dwelt on the sadness of their postwar adult lives — their emotional upheavals, physical breakdowns, and longings for the dead parents they had hardly known."

Laub, D., & Auerhahn, N. C. (1989). Failed empathy—A central theme in the survivor's Holocaust experience. *Psychoanalytic Psychology, 6*(4), 377-400.

Excerpt: "Holocaust survivors remember their experiences through a prism of fragmentation and usually recount them only in fragments….A curious blend often exists between almost polar experiences: Remembering minute details in their fullest color and subtlest tones, while being unable to place those details in their narrative context or specific situational reference."

Laub, D., & Auerhahn, N. C. (1993). Knowing and not knowing massive psychic trauma: Forms of traumatic memory. *American Journal of Psychoanalysis, 74,* 287-302.

Excerpt: "The knowledge of trauma is fiercely defended against, for it can be a momentous, threatening, cognitive and affective task, involving an unjaundiced appraisal of events and our own injuries, failures, conflicts, and losses….To protect ourselves from affect we must, at times, avoid knowledge….Situations of horror destroy the detached sensibility necessary for articulation, analysis, elaboration….Knowing…requires a capacity for metaphor which cannot withstand atrocity….Notwithstanding the difficulties around and the struggle against knowing, the reality of traumatic events is so compelling that knowledge prevails, despite its absence to consciousness and its incompleteness….The different forms of remembering trauma range from not knowing, fugue states, fragments, transference phenomena, overpowering narratives, life themes, witnessed narratives, metaphors….These vary in degree of encapsulation versus integration of the experience and in degree of ownership of the memory, i.e., the degree to which an experiencing 'I' is present as subject….Erecting barriers against knowing is often the first response to such trauma. Women in Nazi concentration camps dealt with difficult interrogation by the Gestapo by derealization, by asserting 'I did not go through it. Somebody else went through the experience.' A case study example is included of a man in therapy who wanted to capture an elusive memory. The only remaining trace was a sense of dread on hearing the phone click. Over time, he recollected a traumatic wartime experience as a child involving the death of a doctor whom he had loved, and for which he felt partly responsible. Having recovered the memory he had lost, its intrusive fragments no longer blocked him from pursuing his life. Many of his somatic symptoms receded at the time….Unintegrable memories endure as a split-off part, a cleavage in the ego….When the balance is such that the ego cannot deal with the experience, fragmentation occurs….Simply put, therapy with those impacted by trauma involves, in part, the reinstatement of the relationship between event, memory and personality."

Loftus, E. F., Polonsky, S., & Fullilove, M. T. (1994, March). Memories of childhood sexual abuse: Remembering and repressing. *Psychology of Women Quarterly, 18*(1), 67-84. (University of Washington, Psychology Department, Seattle, WA.)

Abstract: Women involved in outpatient treatment for substance abuse were interviewed to examine their recollections of childhood sexual abuse. Overall, 54% of the 105 women

reported a history of childhood sexual abuse. Of these, the majority (81%) remembered all or part of the abuse their whole lives; 19% reported they forgot the abuse for a period of time, and later the memory returned. Women who remembered the abuse their whole lives reported a clearer memory, with a more detailed picture. They also reported greater intensity of feelings at the time the abuse happened. Women who remembered the abuse their whole lives did not differ from others in terms of the violence of the abuse or whether the violence was incestuous.

Marks, J. (1995). *The hidden children: The secret survivors of the Holocaust.* Toronto: Bantam Books.

Excerpt: "So much of my childhood between the ages of four and nine is blank….It's almost as if my life was smashed into little pieces….The trouble is, when I try to remember, I come up with so little. This ability to forget was probably my way of surviving emotionally as a child. Even now, whenever anything unpleasant happens to me, I have a mental garbage can in which I can put all the bad stuff and forget it….I'm still afraid of being hungry….I never leave my house without some food….Again, I don't remember being hungry. I asked my sister and she said that we were hungry. So I must have been! I just don't remember."

Mazor, A., Ganpel, Y., Enright, R. D., & Ornstein, R. (1990, January). Holocaust survivors: Coping with posttraumatic memories in childhood and 40 years later. *Journal of Traumatic Stress, 3*(1), 11-14.

Abstract: This essay deals with coping processes of childhood trauma of survivors who were children during World War II over the lifecycle in a nonclinical group. The main issues refer to: (1) responses to war memories immediately after the war and 40 years later; (2) dealing with memories and feelings at present; (3) victims'' feelings and attitudes toward the persecutor; (4) attitudes of survivors'' children to the war experience of their parents; and (5) coping styles immediately and 40 years after the war, including the survivors'' responses at present. Using a semistructural interview and a qualitative content analysis of interviews, it is suggested that for most persons the reactivation of memories and the need to document their experiences enhances, in a limited scope, the recognition of their loss and brings some relief; it also discloses new ways for these adults to comprehend their traumatic past.

Mechanic, M. B., Resick, P. A., & Griffin, M. G. (1998, December). A comparison of normal forgetting, psychopathology, and information-processing models of reported amnesia for recent sexual trauma. *Journal of Consulting and Clinical Psychology, 66*(6), 948-957.

Abstract: This study assessed memories for sexual trauma in a nontreatment-seeking sample of recent rape victims and considered competing explanations for failed recall.

Participants were 92 female rape victims assessed within 2 weeks of the rape; 62 were also assessed 3 months postassault. Memory deficits for parts of the rape were common 2 weeks postassault (37%) but improved over the 3 month window studied (16% still partially amnesic). Hypotheses evaluated competing models of explanation that may account for reported recall deficits. Results are most consistent with information processing models of traumatic memory.

Melchert, T. P. (1996, October). Childhood memory and a history of different forms of abuse. *Professional Psychology: Research & Practice, 27*(5), 438-446. (Texas Tech University, Department of Psychology, Lubbock, TX.)

Abstract: A widespread professional and public controversy has recently emerged regarding recovered memories of child sexual abuse, but the prevalence and nature of these memories have received limited empirical examination. This study (N = 553 nonclinical participants) found that very similar proportions of those with histories of physical, emotional, or sexual abuse reported that they had periods without memory of their abuse (21%, 18%, and 18%, respectively). The responses of approximately one half of these participants suggested that they lacked conscious access to their abuse memories, whereas the responses from the others suggested that they had conscious access to their memories. A great deal of variance was found in the reported quality of general childhood memory and the offset of infantile amnesia, and the findings also suggest that it is normative to recover memories of childhood. Each of these variables was also unrelated to the experience of child abuse.

Melchert, T. P. (1999, November). Relations among childhood memory, a history of abuse, dissociation, and repression. *Journal of Interpersonal Violence, 14*(1), 1172-1192.

Abstract: The author of this study investigated several questions regarding the relationships between a history of child abuse memories, childhood memory in general, repression, and dissociation. Of the total sample (n = 560 undergraduate students), one quarter reported a history of child abuse, and 18% of these reported a period when they lacked memories of their abuse. These participants endorsed a variety of descriptions of their recovered memories, many of which do not suggest a lack of conscious access to the memories. General quality of childhood memory was found to be unrelated to a history of abuse, and most participants, regardless of their abuse history, reported recovering memories from their childhood in general. Repressive personality traits were found to be unrelated to recovering abuse memories, but dissociative traits were found to be weakly associated with recovering abuse memories.

Melchert, T. P., & Parker, R. L. (1997, February). Different forms of childhood abuse and memory. *Child Abuse & Neglect, 21*(2), 125-135. (Department of Psychology, Texas Tech University, Lubbock, TX.)

Abstract: Recently a heated controversy emerged regarding recovered memories of childhood sexual abuse, but the prevalence and nature of these memories as well as the relationship between a history of child abuse and childhood memory generally have received limited empirical examination. This study (N = 429 nonclinical participants) found that similar proportions of those reporting histories of sexual, emotional, and physical abuse reported that they had periods without memory for their abuse (19.8%, 11.5%, and 14.9%, respectively). These participants, however, appeared to be referring to both a lack of conscious access to their abuse memories as well as the intentional avoidance of the memories for some period. There was a great deal of variance found in the reported quality of general childhood memory, but this was unrelated to reporting a history of child abuse. In addition, it appears to be normative to recover previously forgotten childhood events, and this too was found to be unrelated to history of child abuse.

Milchman, M. S. (2008). Does psychotherapy recover or invent child sexual abuse memories? A case history. *Journal of Child Sexual Abuse, 17*(1), 20-37.

Abstract: This case describes bodily experiences that appeared to cue child sexual abuse memories during psychotherapy by a woman who was amnesic for her childhood and suffered from chronic dissociative states. Though corroboration was unavailable, she became increasingly confident about her returning memories. Special efforts were made to avoid making suggestions. The article proposes the theory that integrates the construct of the self with the relationship between bodily experiences and memory narratives. It suggests that: (1) amnesia and recovering memories involve normal and abnormal memory mechanisms; (2) remembering during psychotherapy is complex; (3) psychotherapy need not be suggestive; (4) inaccessible memories may act as constraints on suggestibility; and (5) narrative recall may depend on the connection of bodily experiences with self-reflection.

Modai, I. (1994). Forgetting childhood: A defense mechanism against psychosis in a Holocaust survivor. In T. L. Brink (Ed.), *Holocaust survivors' mental health*. New York: Haworth Press.

In a debate about uncovering painful memories of the Holocaust, Modai's case is of a 58 year old woman who is unable to remember her childhood.

Moskovitz, S., & Krell, R. (1990). Child survivors of the Holocaust: Psychological adaptations to survival. *Israel Journal of Psychiatry and Related Services, 27*(2), 81-91.

Excerpt: "Whatever the memories, much is repressed as too fearful for recall, or suppressed by well-meaning caretakers wishing the child to forget. Without confronting the fear and recapturing the fragments of memory, the survivor cannot make the necessary connections which allow reintegration of their whole life; neither can they obtain the peace of mind that comes with closure."

Musaph, H. (1993). Het post-concentratiekampsyndroom [The post-concentration camp syndrome]. *Maandblad Geestelijke volksgezondheid* [Dutch Journal of Mental Health], *28*(5), 207-217.

Amnesia exists for certain Holocaust experiences, while other experiences are extremely well remembered.

Myers, L. B., Brewin, C. R., & Power, M. J. (1998). Repressive coping and the directed forgetting of emotional material. *Journal of Abnormal Psychology, 107*(1), 141-148.

Abstract: Using a directed forgetting task, the authors tested in 2 experiments the hypothesis that repressors would be superior to controls in forgetting negative experimental material. Consistent with previous studies, there was an overall directed forgetting effect, with significantly more to-be-remembered material recalled than to-be-forgotten (TBF) material. In both experiments, repressors forgot more negatively valenced words in the TBF set than did nonrepressors, suggesting that repressors have an enhanced capability for using retrieval inhibition. The data offer preliminary support for a cognitive account of repressors' deficits in recalling negative autobiographical memories.

Niederland, W. G. (1968). Clinical observations on the "survivor syndrome." *International Journal of Psychoanalysis, 49,* 313-315.

Discusses memory disturbances such as amnesia and hypermnesia.

Palesh, O. G., & Dalenberg, C. J. (2006). Recovered Memory and Amnesia in Russian College Students. In M. V. Landow (Ed.), *College Students: Mental Health and Coping Strategies*. Nova Science Publishers. 153-165.

Three hundred and one participants from Moscow State Linguistics University participated in a survey. Two hundred and one participants completed a demographic questionnaire, the Dissociative Continuum Scale, Zung Self-Rating Depression Scale, the Traumatic Events Survey, the Violence History Questionnaire, questions regarding memory status and attitudes towards child abuse. An additional one hundred participants completed a

demographic questionnaire, the Dissociative Continuum Scale and the Violence History Questionnaire. Among participants who reported child abuse experiences (n = 45), twenty-one reported partial or full amnesia of the abuse. The frightening and shameful parents factor generated from the Traumatic Events Scale was the most consistent predictor of amnesia and recovered memory. Subjective experience of fear and terror during trauma (Criterion A trauma of PTSD) and chronicity of trauma also accounted for a significant amount of variance in predicting amnesia and recovered memory. Participants' alcohol use and recency of trauma did not predict recovered memory. Participants in the study who reported trauma and history of child abuse had more dissociative symptoms and were more depressed than non-traumatized participants.

Pope, K. S., & Tabachnick, B. G. (1995). Recovered memories of abuse among therapy patients: A national survey. *Ethics & Behavior, 5*(3), 237-248. (Norwalk, CT.)

Abstract: A survey of 205 female and 173 male psychologists found that 73% of them had had at least 1 patient who claimed to recover previously forgotten memories of childhood sex abuse. There were gender differences regarding patients who claim to have recovered memories of abuse. Patients who are alleged to have sexually abused a child who recovered memories of the abuse after a period of being unable to remember it do not show such differences except that 3 times as many men were reported to have been the object of a civil or criminal complaint on the basis of the recovered memory. Data suggest that when recovered memories seem to implicate male and female patients as perpetrators or victims of childhood sex abuse, therapist's gender is a significant variable only for women patients who recover memories of having been abused. Therapists' theoretical orientation was not relevant. [Note: In this study, the therapists reported 2,452 patients (out of a total of 273,785 whom they had treated over the course of their career) who reported recovering memories of childhood abuse. This represents about 8 or 9 patients out of every 1,000. According to the therapists, about 50% of the patients who claimed to have recovered the memories had found external validation, a percentage that coincides with that obtained in the Feldman-Summers & Pope, 1994 study.]

Roe, C. M., & Schwartz, M. F. (1996, Summer). Characteristics of previously forgotten memories of sexual abuse: A descriptive study. *Journal of Psychiatry & Law, 24*(2), 189-206.

Abstract: Investigated the childhood sexual abuse memories of 52 women 21-55 yrs old who had been hospitalized for treatment of sexual trauma, been sexually abused prior to age 18, and reported a period of amnesia before recalling abuse memories. Ss completed a questionnaire about their first suspicions of having been sexually abused, their first memories of sexual abuse, other memories of abuse, and details of their abuse history. Ss were more likely to recall part of an abuse episode, as opposed to an entire abuse episode, following a period of no memory of the abuse. Additionally, first memories tended to be described as vivid rather that vague. Descriptive statistics are used to present and summarize additional findings.

Roesler, T. A., & Wind, T. W. (1994, September). Telling the secret: Adult women describe their disclosures of incest. *Journal of Interpersonal Violence, 9*(3), 327-338. (National Jewish Center for Immunology & Respiratory Medicine, Denver, CO.)

Abstract: A questionnaire survey of 755 adults sexually abused as children, asking about the circumstances of their disclosure to the 1st person they told, resulted in 286 responses (228 from female victims of incest). Ss were asked basic demographic information, details about their abuse, who they told first, the reaction of the 1st person told, and reasons why they delayed telling or finally did tell. The women telling their parents first were likely to tell in childhood. Those telling friends, other family members, or partners were more likely to tell in early adulthood. Survivors telling therapists revealed the abuse at a later age. Those revealing the incest to parents in childhood received a worse reaction than did those waiting until adulthood. When women disclosed to parents prior to age 18, the incest continued for more than 1 yr after the disclosure in 52% of the cases. Women who disclosed as children were more often met with disbelief or blame.

Sargant, W., & Slater, E. (1941, June). Amnesic Syndromes in War. *Proceedings of the Royal Society of Medicine, 34*(12), 757-764.

Abstract: Loss of memory is much commoner in soldiers in wartime than in civilian practice in peace. From the previous records of our patients, it seems that the condition is often overlooked in civilian life; in the Army a stricter routine and discipline make this impossible. Attention in the past has been mainly directed to states of fugue, and civilian practice suggests that behind these there often lies a criminal act or a situation from which an immediate, even though an illusory, escape is desired. Cases occurring in war, however, indicate that other causes, such as terror, bomb blast and exhaustion, may produce not only fugues both at the time and subsequently, but also large gaps retrospectively in the patient's memory of the past.

Stein, A. (1994). *Hidden children: Forgotten survivors of the Holocaust.* Harmondsworth, Middlesex: Penguin Books.

A collection of interviews with child survivors who were hidden during the war. Excerpt: "Over the years I have been trying to re-experience those feelings, but they kept eluding me. I was cut off from most of my memories, and from relieving the anxiety of that time….I remember nothing about the time I spent with those people…not a face, not a voice, not a piece of furniture. As if the time I spent there had been a time out of my life….What is missing? Why can't I conjure up those memories? I am staring into the darkness with occasional flashes of light allowing me to unearth bits and pieces of life."

van der Hart, O., Bolt, H., & van der Kolk, B. A. (2005). Memory fragmentation in dissociative identity disorder. *Journal of Trauma & Dissociation, 6*(1), 55-70. (Department of Clinical Psychology, Utrecht University, the Netherlands.)

Abstract: This study examined the quality of self-reported memories of traumatic experiences in participants with dissociative identity disorder (DID) and compared them with their memories of non-traumatic, but emotionally significant life experiences. Systematic interview data were gathered from 30 DID patients in The Netherlands. All participants reported a history of severe childhood abuse; 93.3% reported some period of amnesia for the index traumatic event, and 33.3% reported periods of amnesia for significant non-traumatic childhood experiences. All participants who had been amnestic for their trauma reported that their memories were initially retrieved in the form of somatosensory flashbacks. This suggests that, like PTSD patients, DID patients at least initially recall their trauma not as a narrative, but as somatosensory re-experiencing. Surprisingly, however, DID participants also recalled emotionally charged non-traumatic life events with significant somatosensory components, a phenomenon that has not been previously reported. This finding raises important issues regarding basic memory processing abnormalities in DID patients.

van der Hart, O., Brown, P., & Graafland, M. (1999, February). Trauma-induced dissociative amnesia in World War I combat soldiers. *Australian and New Zealand Journal of Psychiatry, 33*(1), 37-46. (Department of Clinical Psychology and Health Psychology, Utrecht University, the Netherlands.)

Abstract: OBJECTIVE: This study relates trauma-induced dissociative amnesia reported in World War I (WW I) studies of war trauma to contemporary findings of dissociative amnesia in victims of childhood sexual abuse. METHOD: Key diagnostic studies of post-traumatic amnesia in WW I combatants are surveyed. These cover phenomenology and the psychological dynamics of dissociation vis-à-vis repression. RESULTS: Descriptive evidence is cited for war trauma-induced dissociative amnesia. CONCLUSION: Posttraumatic amnesia extends beyond the experience of sexual and combat trauma and is a protean symptom, which reflects responses to the gamut of traumatic events.

van der Hart, O., & Nijenhuis, E. (2001, October). Generalized dissociative amnesia: Episodic, semantic and procedural memories lost and found. *Australian and New Zealand Journal of Psychiatry, 35*(5), 589-600. (Department of Clinical Psychology, Utrecht University, Utrecht, the Netherlands.)

Abstract: OBJECTIVE: This review tests Ribot's classic twofold categorization of generalized amnesia (GA) into Type I, total loss of episodic memory, and Type II, additional more or less extensive loss of semantic and/or procedural memory. It also explores his law of regression, according to which, cast in modern terms, recovery of lost procedural and semantic memories precedes recovery of episodic memory, as well as reported aetiological factors. METHOD: Clinically and formally assessed cases of GA,

published since 1845, were surveyed and further analysed. RESULTS: Over and above authentic episodic memory loss, cases differed widely in the extent of impairment of semantic and procedural memory. Recovery of semantic and procedural memory often preceded recovery of episodic memory. This particularly applied to authenticated trauma memories. To an extent, lost memories affected current functioning, and in some cases were associated with alternating dissociative personalities. Severe memory distortions upon memory recovery were not reported. Most cases were trauma or stress related, while in some cases the aetiology remained unknown. CONCLUSIONS: Contrary to the view expressed in DSM-IV, which states that dissociative amnesia pertains to an inability to recall personal information, GA may also involve loss and recovery of semantic and procedural memories. Since the loss of various memory types in GA is dimensional rather than categorical, Ribot's typological distinction does not hold. Some of the reviewed cases suggest a trauma-related aetiology. Generalized amnesia of varying degrees of severity can involve delayed retrieval of trauma memories, as well as the loss and delayed retrieval of the premorbid personality.

van der Kolk, B. A. (1996). Trauma and memory. In B. A. van der Kolk, A. C. McFarlane, & L. Leisaeth, (Eds.), ***Traumatic stress: The effects of overwhelming experience on mind, body, and society*** **(pp. 279-302). New York: The Guilford Press.**

van der Kolk, B. A., & Fisler, R. (1995, October). Dissociation and the fragmentary nature of traumatic memories: Overview and exploratory study. ***Journal of Traumatic Stress, 8*****(4), 505-525. (HRI Trauma Center, Brookline, MA.)**

Abstract: Since trauma arises from an inescapable stressful event that overwhelms people's coping mechanisms, it is uncertain to what degree the results of laboratory studies of ordinary events are relevant to the understanding of traumatic memories. This paper reviews the literature on differences between recollections of stressful and of traumatic events. It then reviews the evidence implicating dissociation as the central pathogenic mechanism that gives rise to posttraumatic stress disorder (PTSD). A systematic exploratory study of 46 subjects with PTSD indicated that traumatic memories were retrieved, at least initially, in the form of dissociated mental imprints of sensory and affective elements of the traumatic experience: as visual, olfactory, affective, auditory, and kinesthetic experiences. Over time, subjects reported the gradual emergence of a personal narrative that can be properly referred to as "explicit memory." The implications of these findings for understanding the nature of traumatic memories are discussed.

van der Kolk, B. A., Hopper, J. W., & Osterman, J. E. (2001). Exploring the nature of traumatic memory: Combining clinical knowledge with laboratory methods. ***Journal of Aggression, Maltreatment, & Trauma, 4,*** **9-31.**

Abstract: For over 100 years clinicians have observed and described the unusual nature of traumatic memories. It has been repeatedly and consistently observed that these memories are characterized by fragmentary and intense sensations and affects, often with little or no verbal narrative content. Yet, possibly because traumatic memories cannot be

precipitated under laboratory conditions, the organization of traumatic memories has received little systematic scientific investigation. In our laboratory we have developed an instrument, the Traumatic Memory Inventory (TMI), which systematically assesses the ways that memories of traumatic experience are organized and retrieved over time. In this paper we report findings from our third study using the TMI, of 16 subjects who had the traumatic experience of awakening from general anesthesia during surgery. We assessed changes in traumatic memory characteristics over time and differences between memories of subjects with and without current Posttraumatic Stress Disorder. Our findings suggest the need for more rigorous methods for the assessment of the evolution of traumatic memories. In order to develop a comprehensive and integrated understanding of the nature of traumatic memory, we need to combine careful clinical observations with replicable laboratory methods, including those of cognitive science and neuroscience.

van der Kolk, B. A., Pelcovitz, D., Roth, S., Mandel, F. S., McFarlane, A., & Herman, J. L. (1996, July). Dissociation, somatization, and affect dysregulation: The complexity of adaptation of trauma. ***The American Journal of Psychiatry, 153*****(7 Suppl), 83-93. (Harvard Medical School, Boston, MA.)**

Abstract: OBJECTIVE: A century of clinical research has noted a range of trauma-related psychological problems that are not captured in the DSM-IV framework of posttraumatic stress disorder (PTSD). This study investigated the relationships between exposure to extreme stress, the emergence of PTSD, and symptoms traditionally associated with "hysteria," which can be understood as problems with stimulus discrimination, self-regulation, and cognitive integration of experience. METHOD: The DSM-IV field trial for PTSD studied 395 traumatized treatment-seeking subjects and 125 non-treatment-seeking subjects who had also been exposed to traumatic experiences. Data on age at onset, the nature of the trauma, PTSD, dissociation, somatization, and affect dysregulation were collected. RESULTS: PTSD, dissociation, somatization, and affect dysregulation were highly interrelated. The subjects meeting the criteria for lifetime (but not current) PTSD scored significantly lower on these disorders than those with current PTSD, but significantly higher than those who never had PTSD. Subjects who developed PTSD after interpersonal trauma as adults had significantly fewer symptoms than those with childhood trauma, but significantly more than victims of disasters. CONCLUSIONS: PTSD, dissociation, somatization, and affect dysregulation represent a spectrum of adaptations to trauma. They often occur together, but traumatized individuals may suffer from various combinations of symptoms over time. In treating these patients, it is critical to attend to the relative contributions of loss of stimulus discrimination, self-regulation, and cognitive integration of experience to overall impairment and provide systematic treatment that addresses both unbidden intrusive recollections and these other symptoms associated with having been overwhelmed by exposure to traumatic experiences.

van der Kolk, B. A., van der Hart, O., & Marmar, C. (1996). Dissociation and information processing in posttraumatic stress disorder. In B. A. van der Kolk, A. C. McFarlane, & L. Weisaeth (Eds.), ***Traumatic stress: The effects of overwhelming experience on mind, body, and society*** **(pp. 303-322). New York: Guilford.**

van Ravesteijn, L. (1976). Gelaagdheid van herinneringen [Layering of memories]. ***Tijdschrift boor Psychotherapie, 5*****(1), 195-205.**

Excerpt: "A smell, a sound, an image evoke fragments of images or emotions, more compelling than current reality, fragments to which all experience pain, anger, fear, shame, and powerlessness have attached themselves. Must a coherent account be given, then it is often painfully apparent that this is impossible. Most often, the person is unable to present an overview of this period."

Wagenaar, W. A., & Groeneweg, J. (1990). The memory of concentration camp survivors. ***Applied Cognitive Psychology, 4,*** **77-87.**

Abstract: This study is concerned with the question whether extremely emotional experiences, such as being the victim of Nazi concentration camps, leave traces in memory that cannot be extinguished. Relevant data were obtained from testimony by 78 witnesses in a case against Marinus De Rijke, who was accused of Nazi crimes in Camp Erika in The Netherlands. The testimonies were collected in the periods 1943–1947 and 1984–1987. A comparison between these two periods reveals the amount of forgetting that occurred in 40 years. Results show that camp experiences were generally well-remembered, although specific but essential details were forgotten. Among these were forgetting being maltreated, forgetting names and appearance of the torturers, and forgetting being a witness to murder. Apparently intensity of experiences is not a sufficient safeguard against forgetting. This conclusion has consequences for the forensic use of testimony by witnesses who were victims of violent crimes.

Whitfield, C. L. (2001). The "false memory" defense: Using disinformation and junk science in and out of court. ***Journal of Child Sexual Abuse, 9*****(3-4), 53-78. (Atlanta, GA.)**

Abstract: This article describes a seemingly sophisticated, but mostly contrived and often erroneous "false memory" defense, and compares it in a brief review to what the science says about the effect of trauma on memory. Child sexual abuse is widespread and dissociative/traumatic amnesia for it is common. Accused, convicted and self-confessed child molesters and their advocates have crafted a strategy that tries to negate their abusive, criminal behavior, which we can call a "false memory" defense. Each of 22 of the more commonly used components of this defense is described and discussed with respect to what the science says about them. Armed with this knowledge, survivors, their clinicians, and their attorneys will be better able to refute this defense of disinformation.

Whitfield, C. L., Silberg, J., & Fink, P. J. (2001). Introduction: Exposing misinformation concerning child sexual abuse and adult survivors. *Journal of Child Sexual Abuse, 9*(3-4), 1-8. (Atlanta, GA.)

Abstract: This article introduces a special volume on misinformation about child sexual abuse. Despite extensive research findings on the long-term effects and consequences of child sexual abuse, misinformation on this topic is widespread. Several forces have worked to support and disseminate this erroneous information. Because it is difficult to comprehend the horror of sexual crimes against children, society's denial and disbelief have often unwittingly supported the agendas of those who want to discount or minimize the impact of these crimes. The media has also contributed to the aura of skepticism surrounding claims of sexual abuse and its mental health impact, and has reported favorably on controversial and unproven claims such as the "false memory syndrome." In the hope of countering misinformation and thus raising the level of discourse to the engagement of real scientific issues, a number of well known and respected researchers and clinicians examine various facets of the problem.

Widom, C. S., & Shepard, R. L. (1996, December). Accuracy of adult recollections of childhood victimization: Part 1. Childhood physical abuse. *Psychological Assessment, 8*(4), 412-421. (State University of New York, School of Criminal Justice, Albany, NY.)

Abstract: Using data from a study with prospective-cohorts design in which children who were physically abused, sexually abused, or neglected about 20 years ago were followed up along with a matched control group, accuracy of adult recollections of childhood physical abuse was assessed. Two-hour in-person interviews were conducted in young adulthood with 1,196 of the original 1,575 participants. Two measures (including the Conflict Tactics Scale) were used to assess histories of childhood physical abuse. Results indicate good discriminant validity and predictive efficiency of the self-report measures, despite substantial underreporting by physically abused respondents. Tests of construct validity reveal shared method variance, with self-report measures predicting self-reported violence and official reports of physical abuse predicting arrests for violence. Findings are discussed in the context of other research on the accuracy of adult recollections of childhood experiences.

Williams, L. M. (1994, December). Recall of childhood trauma: A prospective study of women's memories of child sexual abuse. *Journal of Consulting and Clinical Psychology, 62*(6), 1167-1176. (University of New Hampshire, Family Research Lab, Durham, NH.)

Abstract: One hundred twenty-nine women with previously documented histories of sexual victimization in childhood were interviewed and asked detailed questions about their abuse histories to answer the question "Do people actually forget traumatic events such as child sexual abuse, and if so, how common is such forgetting?" A large proportion of the women (38%) did not recall the abuse that had been reported 17 years

earlier. Women who were younger at the time of the abuse and those who were molested by someone they knew were more likely to have no recall of the abuse. The implications for research and practice are discussed. Long periods with no memory of abuse should not be regarded as evidence that the abuse did not occur.

Williams, L. M. (1995, October). Recovered memories of abuse in women with documented child sexual victimization histories. *Journal of Traumatic Stress, 8*(4), 649-673.

Abstract: This study provides evidence that some adults who claim to have recovered memories of sexual abuse recall actual events that occur in childhood. One hundred twenty-nine women with documented histories of sexual victimization in childhood were interviewed and asked about their abuse history. Seventeen years following the initial report of the abuse, 80 of the women recalled the victimization. One in 10 women (16% of those who recalled the abuse) reported that at some time in the past they had forgotten about the abuse. Those with a prior period of forgetting – the women with "recovered memories" – were younger at the time of abuse and were less likely to have received support from their mothers than the women who reported that they had always remembered their victimization. The women who had recovered memories and those who had always remembered had the same number of discrepancies when their accounts of the abuse were compared to the reports from the early 1970s.

Wilsnack, S. C., Wonderlich, S. A., Kristjanson, A. F., Vogeltanz-Holm, N. D., & Wilsnack, R. W. (2002, February). Self-reports of forgetting and remembering childhood sexual abuse in a nationally representative sample of US women. *Child Abuse & Neglect, 26*(2), 139-147.

Abstract: Objective: The purpose of this article is to describe patterns of forgetting and remembering childhood sexual abuse (CSA) in a nationally representative sample of US adult women. Method: The respondents were a national probability sample of 711 women, aged 26 to 54 years, residing in noninstitutional settings in the contiguous 48 states. In a 1996 face-to-face interview study, trained female interviewers asked each respondent whether she had experienced any sexual coercion by family members or nonfamily members while growing up; whether she believed that she had been sexually abused (by family members or others); and whether she had ever forgotten the CSA experiences and, if so, how she had subsequently remembered them. Results: Twenty-one and six-tenths percent or respondents reported having sexually coercive experiences while growing up; of these, 69.0% indicated that they felt they had been sexually abused. More than one-fourth of respondents who felt sexually abused reported that they had forgotten the abuse for some period of time but later remembered it on their own. Only 1.8% of women self-described as sexually abused reported remembering the abuse with the help of a therapist or other professional person. Conclusions: The findings indicate that, among women who report CSA, forgetting and subsequently remembering abuse experiences is not uncommon. According to the women surveyed, however, very few (1.8%) of those who felt abused recovered memories recovered memories of CSA with help from therapists or

other professionals. As one of the few studies of CSA memories in a nationally representative sample, this study suggests that therapist-assisted recall is not a major source of CSA memories among women in the US general population.

Wilson, J., Harel, Z., & Kahana, B. (1988). *Human adaptation to extreme stress: From the Holocaust to Vietnam*. New York: Plenum Press.

Yehuda, R., Elkin, A., Binder-Brynes, K., Kahana, B., Southwick, S. M., Schmeidler, J., & Giller, E. R., Jr. (1996, July). Dissociation in aging Holocaust survivors. *American Journal of Psychiatry, 153*(7), 935-940.

Abstract: OBJECTIVE: This study explored relationships among dissociation, trauma, and posttraumatic stress disorder (PTSD) in elderly Holocaust survivors with and without PTSD and in a demographically comparable group of nontraumatized subjects. METHOD: Holocaust survivors with PTSD (N = 35) and without PTSD (N = 25) who had been recruited from the community and a comparison group (N = 16) were studied. Dissociation was evaluated with the Dissociative Experiences Scale. Past cumulative trauma and recent stress were evaluated with the Antonovsky Life Crises Scale and the Elderly Care Research Center Recent Life Events Scale, respectively. PTSD symptoms were assessed with the Clinician- Administered PTSD Scale. RESULTS: The Holocaust survivors with PTSD showed significantly higher levels of current dissociative experiences than did the other groups. However, the extent of dissociation was substantially less than that which has been observed in other trauma survivors with PTSD. Dissociative Experiences Scale scores were significantly associated with PTSD symptom severity, but the relation between Dissociative Experiences Scale scores and exposure to trauma was not significant. CONCLUSIONS: Possible explanations for this finding include the age of the survivors, the length of time since the traumatic event, and possible unique features of the Holocaust survivor population. Nevertheless, the findings call into question the current notion that PTSD and dissociative experiences represent the same phenomenon. The findings suggest that the relationships among dissociation, trauma, and PTSD can be further clarified by longitudinal studies of trauma survivors.

Yehuda, R., Schmeidler, J., Siever, L. J., Binder-Brynes, K., & Elkin, A. (1997). Individual differences in posttraumatic stress disorder symptom profiles in Holocaust survivors in concentration camps or in hiding. *Journal of Traumatic Stress, 10,* 453-465.

46% of 100 survivors report amnesia on PTSD measures.

Yovell, Y., Bannett, Y., & Shalev, A. Y. (2003, September). Amnesia for traumatic events among recent survivors: A pilot study. *CNS Spectrums, 8*(9), 676-685.

Abstract: Objective: Traumatic amnesia has been amply documented in the psychoanalytic

literature but inconsistently in the research literature. Method: Six trauma patients were followed prospectively. Survivors were interviewed 7, 30, and 120 days following the traumatic event. Each interview each interview documented in detail their recollections on the day of the trauma. Results: In four subjects who did not develop posttraumatic stress disorder (PTSD), we found brief, stable, and persistent memory gaps, which coincided with the moment of greatest emotional intensity. In two subjects who developed PTSD, we found, in addition to the previous form of amnesia, longer, progressive, and unstable memory gaps. Discussion: Neurobiological research offers two explanatory mechanisms for the observations: A failure of acquisition of episodic memories may account for the stable deficits seen in all subjects. This could coincide with stress-induced malfunction of the hippocampal declarative memory system. A failure of spontaneous recall may account for the more extended traumatic amnesia that was observed in PTSD patients. This resembles the psychoanalytic description of repression. Conclusion: These preliminary findings suggest that brief, irreversible memory gaps are common in trauma survivors, whereas longer, progressive and potentially reversible amnesia occurs among survivors who develop PTSD.

Zola, S. M. (1997, Summer). The neurobiology of recovery memory. *The Journal of Neuropsychiatry and Clinical Neurosciences, 9*(3), 449-459. (San Diego Veterans Affairs Medical Center, San Diego, CA.)

Abstract: The so-called recovery memory syndrome--reports by adults of recovered memories of childhood sexual abuse and trauma that were allegedly "repressed" for many years--has become an important issue in the field of mental health. In particular, there is debate about the credibility of recovered memories. The author describes findings in several fields of brain science about the way memory works and how memory is organized in the brain. These findings clarify aspects of normal memory function and the process of memory distortion, and they provide a neurobiological perspective from which to approach the topic of recovered memory.