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Childhood Trauma Remembered

A Report on the Current Scientific Knowledge Base and its Applications

THE INTERNATIONAL SOCIETY FOR
TRAUMATIC stress STUDIES
ISTSS

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A Report on the Current Scientific Knowledge Base and its Applications

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Cover art: *Beebe's Birthday*© 1993 by Ami Simms. This wall quilt features over 180 photographs and other images that have been transferred to fabric. Simms made the quilt for her mother's 70th birthday. It is featured with other photo-quilts in Simms' book, *Creating Scrapbook Quilts* (Mallery Press, 1993). For more information about Simms' quilts, books, or Photos-To-Fabric ™ transfer paper, please call 800/278-4824, or write to Mallery Press at 4206 Sheraton Drive, Flint, MI 48532-3557.

INTRODUCTION

ver the past several years, the topic of memories of childhood trauma, particularly childhood abuse, has led to considerable debate among professionals and nonprofessionals alike. The debate has attracted the attention of the popular media, which has both reflected and created a wide-ranging interest in questions relating to the memory, in adulthood, of traumatic experiences in childhood.

The degree of popular and professional interest in questions about the validity of memories of childhood abuse has helped to establish a cultural backdrop against which personal, clinical and legal issues for survivors of childhood abuse are considered. On the one hand, a considerable amount of attention has been drawn to the prevalence and enduring effects of the abuse of children by adults who control their access to nurturance, love and material resources. On the other hand, an air of suspicion often surrounds accounts of recovered memories of childhood trauma, whether they occur in response to cues or triggers in the popular media, in psychotherapy, in the courtroom or in response to family life. For the most part, what has been missing in the public eye is a balanced report on the current scientific knowledge base relating to memories of childhood trauma, and the implications of this knowledge base for clinical and forensic practice. The purpose of this report is to provide that information in a readily accessible way.

The initiative for this report comes from the leadership of the International Society for Traumatic Stress Studies, with strong support from its membership. The Society (ISTSS) is perhaps uniquely prepared to take on the task of gathering the expertise necessary to present the state of the art in scientific understanding about memories of childhood trauma. ISTSS is a professional organization of worldwide influence which is dedicated to the discovery and dissemination of knowledge and to the stimulation of policy, program and service initiatives that relate to the occurrence and consequences of traumatic stress. For the present document, we have received input from some of the most distinguished clinical researchers and scholars on traumatic memory in order to provide you with the best available knowledge and its most thoughtful practical application.

This report is organized into five short sections. In the **first section**, accumulated scientific findings about the prevalence of childhood trauma and its psychological consequences are discussed, and the relationship of these findings to the traditions of trauma-focused psychotherapy and assessment is explained. In the **second section**, the scientific evidence for the forgetting of childhood traumatic events, for the delayed recall of traumatic events after a period of forgetting, and for "false memories" of childhood trauma is presented. This section is the center of our report, and the remaining three sections provide the elaboration and application of the information presented here. In the **third section**, what cognitive psychologists and neurobiologists understand about human memory is outlined, based on recent scientific discoveries, and then the implications of this research for an understanding of traumatic memories in general, and forgetting and delayed recall of traumatic events in particular are described. Finally, in the **fourth and fifth sections**, the focus is on how to best apply this current knowledge in clinical and forensic practice with trauma survivors. Gaps in the knowledge base are also identified.

This report represents and incorporates the work of a diverse group of scholars with expertise in a variety of different topic areas and professional contexts. It is a statement of the state-of-the-science that is expected to evolve as new information becomes available. Finally, this effort is in keeping with what has been produced by other professional organizations (see reports at left), and is in the spirit of finding middle ground and a convergence of various points of view and areas of expertise.

This report is not meant to be a comprehensive research review, but rather an overall summary of the major issues involved in the recall of childhood trauma. Therefore, instead of the usual format of citing specific references for each issue, representative references and suggested readings are listed as a sidebar for each section.

Additional Reading for Introduction

Below are reports of professional organizations on the topic of memories of childhood abuse:

Alpert, J., Brown, L., Ceci, S., Courtois, C., Loftus, E., & Ornstein, P. (1996). *Working group on the investigation of memories of childhood abuse: Final report.* Washington, DC: American Psychological Association.

American Medical Association. *Memories of Childhood Abuse Report of the Council on Scientific Affairs* (CSA Report 5-A-94).

American Psychiatric Association. Statement on Memories of Sexual Abuse approved by the Board of Trustees of the American Psychiatric Association on December 12, 1993.

Hammond, D.C. et al. (1994). *Clinical hypnosis and memory: Guidelines for clinicians and for forensic hypnosis.* American Society of Clinical Hypnosis Press.

Recovered memories. The Report of the Working Party of the British Psychological Society (1996). In Pezdek, K. & Banks, W. (Eds.), *The recovered memory/false memory debate.* New York: The Academic Press.

PREVALENCE AND CONSEQUENCES OF CHILDHOOD TRAUMA

ltogether too many children experience serious traumas in childhood. Major accidents from cars or fire, involving broken bones or concussions, are common. Children also unfortunately experience life-threatening diseases such as cancers, leukemia and systemic infections. Some children get caught up in natural and human-made disasters like earthquakes, floods, wars or ethnic persecution. Children experience violence in their communities; they get kidnapped, raped or watch assaults on others. And although much of this was once hidden from public view, we know today that children are too often the victims of battery or sexual abuse by those taking care of them, or are witnesses to episodes of abusive violence between parents.

We do not know the exact number of children who experience serious trauma, but given the variety of forms it can take, the number is not small. In recent years, many efforts have been made to estimate the occurrence of particular kinds of childhood trauma. Sexual abuse is the type of trauma that has received the greatest amount of study. The estimate that 20% of girls and 5-10% of boys experience such unwanted sexual contact and molestation while growing up is based on a large number of community epidemiological studies that have interviewed adults about their childhoods. It appears that only a fraction of these cases get disclosed to authorities while they are occurring, which accounts in part for why only approximately 300,000 cases get reported to U.S. child welfare authorities each year.

Both science and personal experience tell us that these childhood events sometimes leave scars that last until adulthood and interfere with healthy adult functioning. It is one of the most consistent scientific research findings that traumas and adversities in childhood tend to put an individual at risk for a large variety of later difficulties. This is true for all kinds of early traumas, including accidents, disasters and the observation of violence. But we know it to be especially true for victims of child abuse and neglect, who have been the subject of a particularly large amount of research. Those who were severely abused as children are two to five times more likely to experience a mental illness as an adult than those who were not. They are more likely to suffer from low self-esteem and difficulties in social, academic and occupational performance. Children who were abused or neglected are also more likely to get caught up in patterns of later delinquent and criminal behavior, violence, alcohol and drug abuse.

Of course, the relationship between childhood traumas and later difficulties is not a simple or inevitable one. Not all traumatized or maltreated children by any means suffer from later problems. Many recover, sometimes very quickly, and have successful lives. And some traumatized children suffer later problems not directly due to their trauma, but due to other factors such as poverty or genetic vulnerabilities that put them at risk for trauma in the first place. But overall, the weight of research evidence points very strongly toward childhood trauma as one important causative factor in later adult maladaptive functioning.

Given that childhood trauma can play such an important role in adult problems, most psychotherapeutic approaches currently in practice carry the assumption that it is important and even essential to gather a comprehensive trauma history in order to plan treatment. The details surrounding traumatic experiences can provide clues to the depth and seriousness of a person's difficulties. Knowledge about these traumas and some of their possible effects can also help therapists in formulating the kinds of corrective experiences that might alleviate current distress and maladaptive patterns of functioning. While it is not certain that trauma-focused treatments are necessarily better than other kinds of treatment for trauma survivors, and while controlled studies are just now being done with many trauma populations for the first time, research has nevertheless shown trauma-focused treatments to be effective. Patients report relief from anxiety and depression, and resolution of intrusive thoughts and feelings about traumatic childhood events. The practices of trauma-focused assessment and psychotherapy have grown in popularity in recent years for these reasons, and we will return to this topic in Section IV.

Additional Reading for Section I

Briere, J. & Elliott, D. (1994). Immediate and long-term impacts of child sexual abuse. *The Future of Children*, **4** (2), pp. 54-69.

This article reviews evidence about the long-term impact of early traumatic sexual abuse.

Finkelhor, D. (1994). Current information on the scope and nature of child sexual abuse. *The Future of Children*, **4** (2), pp. 31-35.

This article reviews evidence on the prevalence of childhood sexual abuse in the general population.

U.S. Department of Health and Human Services. (1997). *Child maltreatment 1995. Reports from the states to the National Child Abuse and Neglect Data System, Contract no. ACF-105-95-1849.* Washington, DC: U.S. Government Printing Office.

This publication provides the most recent information on the large numbers of child abuse cases currently being reported and investigated by state agencies.

DELAYED RECALL OF TRAUMATIC EVENTS AFTER A PERIOD OF FORGETTING

t the root of the debate about memories of childhood trauma is the question of how common it is for adults to fail to recall traumas that occurred in childhood. People forget myriad ordinary experiences, but do people forget childhood *trauma*? While there is a period in infancy and early childhood during which scientists don't expect memory for any life events, the debate about recovered memory centers on traumas that occurred after this period of approximately the first two or three years of life.

Evidence for the forgetting of childhood trauma

Evidence that people forget childhood traumas comes from clinical and nonclinical studies, and encompasses a range of traumas. The evidence is not limited to people in treatment or to people whose trauma is sexual abuse. Clinical reports of trauma-related forgetting in individual patients can be found in psychiatric literature spanning the last hundred years. In the last 10 years, scholarship on this topic has included research with larger clinical samples of women and men in treatment for the consequences of sexual abuse. This research reveals that many adults who recall childhood sexual abuse report prior periods during which they did not remember the abuse. Recent scholarship has also included nonclinical samples of adults who report a broader range of traumas, and here, too, there are reports of high rates of prior periods of forgetting. One difficulty with these studies is that reports of prior forgetting are also subject to memory problems. We cannot assume that individuals' assessments of their prior forgetting are necessarily accurate. *Prospective* studies of documented abuse that evaluate current forgetting suggest, however, that a significant proportion of women and men with documented cases of sexual abuse *in childhood* do not appear to recall the documented incident when reinterviewed as young adults. Some of the research findings from retrospective and prospective studies are summarized below and on the next page.

Evidence for Forgetting Childhood Traumas

- Herman & Schatzow (1987) found that 28% of their clinical sample of women in group therapy for incest reported "severe memory deficits" for their abuse.
- Briere & Conte (1993) found that 59% of 450 women and men in treatment for sexual abuse reported that, at some time prior to age 18, they had forgotten the sexual abuse they suffered during childhood.

Additional Reading for Section II

Hyman, I., Husband, T. H., & Billings, F. J. (1995). False memories of childhood experiences. *Applied Cognitive Psychology*, **9**, pp. 181-197.

This paper provides evidence that individuals can be made to believe that they had unusual childhood experiences that did not actually occur. After a third suggestive interview, 25% of the subjects claimed to recall events that had not occurred.

Hyman, L. E. & Pentland, J. (1996). The role of mental imagery in the creation of false childhood memories. *Journal of Memory and Language*, **35**, pp. 101-117.

This article provides evidence that individuals who are asked to form a mental image of an event and to describe it to an interviewer were more likely to create a false event. They were also more likely to recover memories of a previously unavailable true event.

- Loftus, Polonsky & Fullilove (1994) reported that 31% of their sample of sexually abused women in treatment for substance abuse reported at least partial forgetting or incomplete memory for their abuse. 19% reported prior periods of total lack of recall of the abuse.
- Elliot (1997), in a national, stratified, random sample of 505 women and men, found that 20% of the 116 people in the sample who reported a history of childhood sexual abuse said that there was a period of time when they had no memory of the event. Complete to partial forgetting was reported after every form of traumatic experience, with child sexual abuse, witnessing a murder of a family member and combat exposure yielding the highest rates.
- Williams (1994), and Williams & Banyard (1997) followed up women and men who, in the early 1970s, were seen in a hospital emergency room for child sexual abuse. They found that at the time of their study, which was 17 years later, 38% of the women and 55% of the men did not recall the documented abuse. Of the women who did recall the abuse, 16% stated that there was a time in the past when they did not remember that it had happened to them.
- Widom & Morris (1997) found that 32% to 60% of women and 58% to 100% of men with court-substantiated reports of child sexual victimization did not report such abuse on reinterview some 20 years later.

It should be noted that the above findings have been challenged in a number of critiques that address methodological concerns with the retrospective studies as well as with the Williams study (see Pope & Hudson, 1995).

Sources: Herman, J. L., & Schatzow, E. (1987). Recovery and verification of memories of childhood sexual trauma. *Psychoanalytic Psychology*, **4**, pp. 1-14; Briere, J. & Conte, J. (1993). Self-reported amnesia for abuse in adults molested as children. *Journal of Traumatic Stress*, **6**, pp. 21-31; Loftus, E., Polonsky, S. & Fullilove, M. T. (1994). Memories of childhood sexual abuse: Remembering and repressing. *Psychology of Women Quarterly*, **18**, pp. 67-84; Elliot, D. M. (1997). Traumatic events: Prevalence and delayed recall in the general population. *Journal of Consulting and Clinical Psychology*, **65**, pp. 811-820; Williams, L. M. (1994). Recall of childhood trauma: A prospective study of women's memories of child sexual abuse. *Journal of Consulting and Clinical Psychology*, **62**, pp. 1167-1176; Williams, L. M. (1995). Recovered memories of abuse in women with documented child sexual victimization histories. *Journal of Traumatic Stress*, **8**, pp. 649-675; Williams, L. M. & Banyard, V. L. (1997). Gender and recall of child sexual abuse: A prospective study. In Read, J. D. & Lindsay, D. S. (Eds.), *Recollections of trauma: Scientific evidence and clinical practice*, pp. 371-377. New York: Plenum Press; Widom, C. S., & Morris, S. (1997). Accuracy of adult recollections of childhood victimization: Part 2: Childhood sexual abuse. *Psychological Assessment*, **9**, pp. 34-36.

Evidence for delayed recall of trauma after a period of forgetting

If we accept the evidence that a significant minority of people do in fact forget childhood trauma, at least for some period of time, then other interesting questions arise. When people report that they recall instances of childhood trauma that they had previously forgotten, clinicians and researchers have been interested in the factors relating to this "delayed recall," and in the accuracy of these "recovered memories." Research findings suggest that age at the time of the childhood trauma is associated with forgetting, and that those who were younger are more likely to have forgotten and to report recovered memories. A wide variety of triggers seem to be associated with the recovery of memory for childhood trauma, including watching a television program or reading some materials about trauma, undergoing a similar experience at a later time, and discussions with family and friends. It is likely that situations that have some characteristics that are similar to the original event are associated with recovered memories. Interestingly, a majority of recovered memories are reported to occur outside of therapy.

Regarding the accuracy of recovered memories, several cases in the public record of reported delayed recall of childhood abuse that were corroborated provide evidence for accuracy, as do preliminary studies of recovered memories of documented traumatic events that occurred in childhood. In the research project mentioned above, for example, Williams was able to compare women's current accounts of their abuse with the details of the abuse that had been recorded in the 1970s. She found that the women who reported prior periods of forgetting and the experience of having 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 17 years earlier. This evidence suggests that memories of childhood trauma can become accessible after periods of forgetting. A summary and synthesis of more than two dozen studies on trauma-related forgetting is described in Scheflin and Brown.

Additional Reading for Section II

Loftus, E. F. & Pickrell, J. E. (1995). The formation of false memories. *Psychiatric Annals*, **25**(12), pp. 720-725.

This paper relies on the "lost in shopping mall" paradigm to show that adults could lead a child to believe that he or she had been lost in a shopping mall, suggesting that memories of at least one mildly traumatic event can be implanted.

Pope, H. G. & Hudson, J. I. (1995). Can memories of childhood sexual abuse be repressed? *Psychological Medicine*, **25**, pp. 121-126.

This article provides a thoughtful methodological analysis of the limitations of studies concerning forgetting of childhood sexual abuse and constructive suggestions for the design of future studies.

Scheflin, A. W. & Brown, D. (1996). Repressed memory of dissociative amnesia: What the science says. *Journal of Psychiatry and Law*, **24** (2), pp. 143-188.

This paper presents a summary and synthesis of more than two dozen studies on trauma-related forgetting.

There is no scientific evidence that adults are likely to intentionally fabricate allegations of abuse in childhood when surveyed using standard victimization screening techniques, or when reporting abuse histories to friends, family or therapists. However, a critical question is whether some proportion of reported accounts of recovered memories of childhood trauma, although sincere, are inaccurate (i.e., what have been called "false memories").

Evidence that memories can be implanted

A large body of laboratory research on memory and suggestibility supports the position that memory is reconstructive and imperfect, that memory can be influenced and distorted, that confabulation can occur to fill in memory gaps, and that subjects can be persuaded to believe they heard, saw or experienced events which they did not. Evidence has accumulated that inaccurate memories can be strongly believed and convincingly described. Much of the laboratory research on suggestibility of memory has involved paradigms in which subjects view an event in which they are not a participant, are later provided incorrect information about the event and, finally, are asked about what they saw. Incorrect information is likely to be incorporated in the later reports of memories of the event. This is termed the "misinformation effect," and it is argued that this effect applies as well to memories for experiences of childhood trauma or child sexual abuse. It is asserted that similar processes may lead to a client's false belief that he or she was sexually abused or otherwise traumatized if such a history is suggested by a therapist.

Criticisms of the application of laboratory research to questions of memory of childhood trauma in general, and to child sexual abuse specifically, have focused on the ecological validity of the studies (i.e., their applicability to the real world experience of trauma experienced in childhood, and child molestation and its aftermath). Changing or adding a feature to an event, as is the procedure in much of the laboratory research, is not the same as causing someone to believe that an entire new event occurred. Critics have argued that implanting memories for traumatic events, and generally for events in which one is a participant, may be a very different matter. Of course, research ethics preclude any experiment that would attempt to implant memories of something as serious as sexual abuse.

Additional Reading for Section II

Schooler, J. W. Bendiksen. M. & Ambadar, Z. (1997) Taking the middle line: Can we accommodate both fabricated and recovered memories of sexual abuse? In M. Conway (Ed.), *False and recovered memories*, pp. 251-292. Oxford: Oxford University Press.

This paper provides evidence of recovered memories and also reports that some individuals may exaggerate their prior forgetting, believing they had forgotten about their abuse during periods in which they are known to have talked about it.

Williams, L. M. & Banyard, V. L. (1997). Perspectives on adult memories of childhood sexual abuse: A research review. In Spiegel, D. (Ed.). Section II *American Psychiatric Review of Psychiatry*, **16**, Chapter 9, pp. II-123 to II-151.

This chapter provides a review of empirical evidence that supports the likelihood that child sexual abuse can be forgotten, that memories of abuse can be implanted and that memories of abuse once forgotten can be recovered.

Recently, a number of studies have been conducted to directly assess the implantation of memories for events that would be mildly traumatic had they occurred, to examine types of events that are more likely to be successfully implanted, and to study the factors associated with successful implantation of memories for events which did not occur. Several designs or paradigms have been used in these studies, but all have in common an attempt to get younger family members of the researchers' collaborators to "remember" events that did not occur. In these studies, researchers were usually able (sometimes after several attempts) to get between 20% and 40% of participants, depending on the strength of the experimental manipulation, to believe that experiences that did not occur actually did happen to them. There is some literature to suggest that those who "remember" events that did not occur may score higher on measures of dissociation and creative imagination. Interestingly, when individuals were asked to form a mental image of an event and to describe it to an interviewer, they were not only more likely to create a false event but they were also more likely to recover memories of a previously unavailable true event. Although these studies all rely on fairly small samples, and although the majority of participants in these studies resisted implanted memory, the findings suggest that certain situational and personal characteristics may maximize suggestibility and that some individuals will report a false or substantially inaccurate memory of childhood trauma. While much needs to be learned about the factors that may contribute to inaccurate recovered memories of childhood trauma and about factors associated with such memories, the provocative laboratory findings on suggestibility and memory point to the value to trauma clinicians and researchers of having a firm grounding in knowledge of human memory processes.

HUMAN MEMORY PROCESSES, TRAUMATIC MEMORY AND DELAYED RECALL OF TRAUMATIC EVENTS

1. Memory is not a simple unitary process.
2. Memories are not stored as complete and separate "packets" of information.
3. Memory is not a perfect representation like a photograph.
4. There are two basic forms of memory: explicit and implicit memory.
5. Traumatic memories may be different than ordinary memories.
6. There are a number of as yet unproven mechanisms that might explain how traumatic memories are "forgotten."
7. There is currently no scientific consensus regarding the question of how a "forgotten" memory can be later "recovered."

Until recently, it was generally believed that memories for specific events were stored as discrete bits of information. The Greek philosopher, Plato, likened the memory process to an aviary in which each bird represented a different memory. Remembering, according to Plato, was the process by which the mind attempted to capture the correct bird so that the full memory of a specific event could be viewed by the conscious mind. This concept of memory persisted in various forms for 2000 years. Memory, from this perspective, was simply identifying a single complete representation of a past event in the mind's collection of memories.

Based on recent scientific discoveries, such models of the memory process are no longer accepted. In this section, we will outline some of the most important scientific findings of cognitive psychologists and neurobiologists pertaining to human memory processes. It must be emphasized at the outset, however, that the scientific questions in this field are very complicated. Thus, the following is only a simplified summary of our current state of knowledge:

1. Memory is not a simple unitary process.
Memory involves three complicated processes that depend on multiple brain regions and connections:

- Encoding is the creation of the memory.
- Consolidation is an intermediate step whereby the memory is constructed so that it can be stored over time.
- Retrieval is the process by which the memory is removed from storage and made available to consciousness.

2. Memories are not stored as complete and separate "packets" of information.
Recent research in cognitive psychology suggests that the memory of a specific event is not processed or stored in any one location within the brain but is distributed, instead, across a network. That is, different dimensions of the memory such as visual quality and spatial location are stored in separate areas. It is believed that consolidation of such a memory involves the linking of separate brain regions that together store the memory of the entire event. In order to recall an event it appears that the brain must somehow reconstruct the memory.

Contemporary cognitive psychologists have rejected Plato's birds in favor of a model of memory storage that is more like a spider web in which specific memories are represented by the pattern of connections among fibers in the entire network. Memory is not a process of locating intact bits of information but rather involves partially recreating a pattern of associated threads of information across an entire network. Attempts to retrieve a certain memory might be associated with a particular pattern of vibration throughout the network. Sometimes the retrieval process might actually activate a close approximation of the original memory, one that is similar but not exactly the same as the original memory. This *Connectionist Model of Memory* explains, for example, how memories of similar events can influence one another, and how people often remember some but not all aspects of a past event. It generally helps us understand common errors in remembering.

3. Memory is not a perfect representation like a photograph.

The human capacity to remember and retrieve past events is largely accurate, but it is not perfect. Memory is a selective process which prioritizes information thought to be most important at the time it first occurred. Although most errors in retrieved memory will be small, sometimes they can be quite large. Some common errors in remembering that people make are:

- People sometimes are unable to recall vast portions of their past experiences.
- People sometimes fail to accurately identify the source of their memories.
- People may mistake memories of imagined events for memories of real events.
- People are suggestible; social influence may generally affect the memory retrieval process, and recall of an event may be influenced by misinformation.

4. There are two basic forms of memory: explicit and implicit memory.

Explicit memory, also referred to as the *declarative memory system*, records consciously available information about past experiences. *Implicit memory*, also referred to as the *nondeclarative memory system*, is information that is not consciously available. Skills or attitudes that are "second nature" and relatively automatic are examples of implicit memories. Implicit memory may also contribute to strong emotional memories. Currently available information about these two basic forms of memory is useful for an understanding of traumatic memories:

Additional Reading for Section III

Davis, S. (Ed.). (1992). *Connectionism: Theory and practice*. New York: Oxford University Press.

This book presents an excellent collection of chapters on the connectionist model of memory.

Roediger, H. L. (1980). Memory metaphors in cognitive psychology. *Memory & Cognition*, **8**, pp. 231-246.

This paper provides a thoughtful review of the evolution of models of memory processes from ancient times to the present.

Schacter, D. L. (1996). *Searching for memory: The brain, the mind and the past*. New York: Basic Books.

This is the authoritative book on brain mechanisms and memory.

Shobe, K. K. & Kihlstrom, J. F. (1997). Is traumatic memory special? *Current Directions in Psychological Science*, **6**, pp. 70-74.

This article provides a thoughtful critique of claims that traumatic memory is special, and a careful analysis of data on which those claims are based.

- Different brain structures serve explicit vs. implicit memory.
- Implicit memory may play a role in the processing of events associated with fear, anxiety and other strong emotions. It may also be involved in creating memories concerning nonemotional information such as skill acquisition and priming.
- Different drugs may affect the two systems differently.
- Implicit memory mechanisms appear to play a key role in the processing of some traumatic memories, although explicit mechanisms are also important.

5. Traumatic memories may be different than ordinary memories.

There are a variety of points of view or emphasis among researchers and scholars with regard to the memory of traumatic vs. nontraumatic events. Some researchers believe that the same basic memory processes can account for the forgetting of both traumatic and nontraumatic memories. Others, however, believe that while traumatic and nontraumatic memories may share many similarities, there may also be important differences between these two types of memories in certain aspects of encoding, consolidation and retrieval. Some researchers propose that memories of traumatic events are less distorted, longer-lasting and less susceptible to inaccurate recall, suggestibility or social influence. This is because traumatic stress activates both explicit and implicit memory to a much greater extent than is the case for nontraumatic events. Emotional arousal associated with traumatic events may also be accompanied by elevations in stress hormones and neuromodulators that facilitate memory formation. The amount of arousal that occurs during a traumatic event, however, may influence the quality of memory formation. Some researchers argue that moderate levels of arousal will lead to more reliable memories, but that extreme levels of arousal may limit attention so much that little memory of the event will be retained. Still others propose that highly charged traumatic memories may sometimes mobilize active efforts to forget a memory. One such theoretical mechanism (among others) that has been widely discussed is called "repression," which prevents conscious recall of such memories. Repression is a concept, originally postulated in psychoanalytic theory, that has not been empirically demonstrated in the laboratory.

These different views about memory for traumatic vs. nontraumatic events continue to stimulate a great deal of exciting research. In spite of our gaps in knowledge and differences in opinion, it is generally accepted that the memory of both childhood and adult traumatic events may sometimes become irretrievable ("forgotten") after exposure. There has also been a

Additional Reading for Section III

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

This chapter provides a comprehensive review of data suggesting that the processing of traumatic memories is different than for other memories.

Also suggested are four chapters from: Yehuda, R. & McFarlane, A.C. (Eds.). (1997). Psychobiology of posttraumatic stress disorder. *Annals of the New York Academy of Sciences*, **821**. New York: Academy of Sciences:

van der Kolk, B. A., Burbridge, J. A. & Suzuki, J. The psychobiology of traumatic memory: Clinical implications of neuroimaging studies, pp. 99-113.

Cahill, L. The neurobiology of emotionally influenced memory: Implications for understanding traumatic memory, pp. 238-246.

Roozendaal, B., Quirarte, G. & McGaugh, J. L. Stress-activated hormonal systems and the regulation of memory storage, pp. 247-258.

Armony, J. L. & LeDoux, J. E. How the brain processes emotional information, pp. 259-270.

great deal of speculation about the mechanisms that might explain the forgetting of childhood trauma.

6. There are a number of as yet unproven mechanisms that might explain how traumatic memories are "forgotten."

It is not currently known how traumatic memories are forgotten, and different mechanisms may operate under different circumstances. These questions are of great interest to researchers, and we can expect a rapid growth in information in this area over the next decade. Among explanatory mechanisms that have been proposed to account for "forgetting" are the following:

- **Failure to encode:** a failure to create a memory at the time of the event.
- **Dissociation:** an altered cognitive state which sometimes occurs during a traumatic event and which may interfere with the normal processes for remembering (encoding, consolidation or retrieval) of such events.
- **Simple forgetting:** the fading of a memory over time (a normal phenomenon with non-traumatic memories).
- **Repression:** a theoretical psychological process hypothesized to actively prevent conscious retrieval of memories.
- **Conditioned extinction:** a laboratory phenomenon by which certain conditions can activate inhibition (or reduce the availability) of previously learned behavior.
- **State dependent learning:** a mechanism that would explain why traumatic memories can be retrieved only when the individual is in the same emotional, environmental and neurobiological state that was present during the original traumatic event.
- **Long-term depression:** a cellular mechanism which suppresses the transmission of data from certain nerve cells to others; this could theoretically impair the retrieval of previously accessible information.

7. There is currently no scientific consensus regarding the question of how a "forgotten" memory can be later "recovered."

Since there is evidence that "forgotten" memories of traumatic events are sometimes "recovered," it is necessary to understand how this might occur. The key to answering this question is first to understand how the initial memories became inaccessible in the first place. It is expected that once we have a better understanding of the mechanism(s) of "forgetting," we will be able to address the question of memory "recovery" in a systematic manner. It is, of course, equally important to understand how inaccurate memories that appear to have been "recovered" can be so compelling as to make some individuals believe that such events really happened. The challenges presented by the "recovered" memory debate have stimulated a burst of creative research activity that will undoubtedly enhance understanding of the complex cognitive psychology and neurobiology of human memory processes.

rauma, like other aversive life events, is associated with a range of negative psychological consequences. Reviewing these past experiences is considered an important component of many treatment approaches. Key tasks in such therapies involve understanding the impact of traumatic events on current functioning and addressing unresolved consequences of such experiences. Memory for trauma is relevant when individuals seek treatment for the specific problems that may be related to traumatic experiences, disclose trauma histories in the course of therapy, or recall previously forgotten experiences while in treatment. Therapy does not always or exclusively focus on trauma memories, but therapy must focus on aspects of the trauma such as emotions and cognitions when they are a source of distress.

Many posttraumatic symptoms are related to traumatic memories and include intrusive thoughts, intensification of emotional and physiologic reactions at recall, flashbacks and nightmares. Specific memories of traumatic events are especially likely to be disturbing and, because of this, become a focus of trauma-specific treatment. Along with such memory-related symptoms, there may be alterations in assumptions about self that derive from actions taken and not taken during and after traumatic events. Cognitive and emotional processing are effective treatments for Posttraumatic Stress Disorder (PTSD) that involve talking specifically and in detail about the experience. Pharmacological interventions can reduce stressful and uncomfortable symptoms associated with traumatic memories, thereby improving the functional capabilities of patients.

Memory for trauma, like all memory, is reconstructive; it may be essentially true, contain significant inaccuracies or, in some cases, be illusory. Competent therapists recognize that memory is fallible and that certain therapeutic approaches may increase the likelihood of distortion or confabulation. In therapeutic situations, when clients have experienced traumatic events, the literal accuracy of the memory may be less relevant than perceptions and meaning. On the other hand, it is harmful for patients to believe they have had traumatic experiences when they have not. Therapy that creates or reinforces false beliefs of trauma may have negative consequences for clients and for third parties.

Current controversies about recovered memory have led professional societies in North America, Europe, Australia and New Zealand to produce position papers on the topic. Although there are certain differences in content and emphasis among them, there is agreement on several points: (1) traumatic events are usually remembered in part or in whole; (2) traumatic memories may be forgotten, then remembered at some later time; (3) illusory memories can also occur. A general consensus is that at present unresolved scientific questions about the mechanisms of remembering and forgetting exist. Finally, professionals agree that there is no standard procedure for establishing the veracity or accuracy of memories in individual cases without evidence or corroboration; therefore, differences of opinion may result among therapists when evaluating the validity of individual reports. While a therapist in an individual clinical situation may develop a hypothesis about the validity of the report, it is ultimately up to the patient, not the therapist, to come to a conclusion about what happened in the past.

Clinicians are advised to be cognizant of these issues and to adhere to recognized principles of therapy. Some specific practices or procedures are outside the standard of care or are potentially risky. For example, one should never assume that certain symptoms or symptom clusters in and of themselves indicate a trauma or abuse history. The diagnoses of Posttraumatic Stress Disorder and Acute Stress Disorder are only given when the patient reports a history of a traumatic stressor as well as the requisite number of trauma-related symptoms. All other psychological symptoms, even those commonly noted in trauma survivors, may have a variety of etiologies. Suggesting to clients that they must have had traumatic experiences, or encouraging clients to imagine that they were traumatized without a reported history are not only contraindicated, but may promote the development of illusory memories. Hypnosis or amytal interviews that are conducted for the purpose of uncovering past experiences and that contain suggestions regarding possible trauma may also produce false memories. Thus neither procedure, when used, should contain suggestions that affect post hypnotic or post amytal memories. Furthermore, clinicians should be aware that when a client is hypnotized or given amytal, they may not thereafter, in some U.S. states, be allowed to testify in any kind of civil or criminal legal proceeding.

Additional Reading for Section IV

Berliner, L. & Briere, J. (in press). Trauma, memory, and clinical practice. In L. Williams (Ed.). *Trauma and memory.* Thousand Oaks, CA: Sage.

This chapter reviews relevant literature on the impact of trauma on memory, the fallibility of memory and therapy practices with regard to memories. Implications for practice are discussed.

Briere, J. (1996). *Therapy with adults molested as children.* New York: Springer.

This is a revised edition of an earlier, seminal book on treatment with adults who have been severely abused. There are updated sections on treatment with specific reference to the handling of memory issues.

Courtois, C. A. (1997). Guidelines for the treatment of adults abused or possibly abused. *American Journal of Psychotherapy,* **51**, pp. 497-510.

A set of guidelines for therapy practice where recovered memory is at issue.

Individuals sometimes have vague or incomplete memories about childhood abuse, or become concerned about a possible abuse history based on related childhood memories, information from others or current symptoms. Understandably, in many cases, they want clarification about whether they were abused, and if so the nature and extent of the experience. When clients raise these concerns in psychotherapy, they are an appropriate therapeutic focus. Therapists can provide an opportunity for patients to examine the basis for their suspicions, consider alternative explanations, learn about the various abuse and nonabuse related origins of psychological distress, and become informed about the ways that memory works and can be altered or distorted. Patients who wish to explore their past may choose to talk with family members or others, and obtain school, medical and counseling records. They may want to record their relevant thoughts or feelings over this period. This information may become part of the therapeutic process. Therapists should refrain from confirming or disconfirming the validity of memories and instead assist patients in arriving at their own conclusions.

Clients sometimes consider taking certain actions with accused offenders and/or family members during the course of therapy for childhood abuse. These actions may include confronting offenders, informing others about the abuse, restricting, and in some cases severing family relationships, or taking legal action against an alleged perpetrator. It is appropriate for therapists to explore with clients the potential positive and negative impacts that different choices may have on psychological and social functioning. It is not appropriate for therapists to instruct or pressure clients to take a particular course of action.

Therapists treating clients who have suffered trauma or report a trauma history have a duty to promote a therapeutic environment that is supportive regarding the trauma, but acknowledges that memory is imperfect. Clients must not be discouraged from revealing and talking about traumatic experiences because of therapist discomfort with the traumatic material or because of undue skepticism about client reports. However, it may be advisable, especially with delayed recall of memories for events that occurred in the remote past, that therapists convey information about the reconstructive nature of memory.

Additional Reading for Section IV

Courtois, C. A. (1997). Informed clinical practice and the standard of care: Proposed guidelines for the treatment of adults who report delayed memories of childhood trauma. In J. D. Read and D. S. Lindsay (Eds.). *Recollections of trauma: Scientific research and clinical practice*, pp. 337-361. New York: Plenum.

This chapter identifies key issues in the treatment of adult survivors who report childhood abuse or recall abuse in therapy. It provides specific guidelines for therapy practice.

Dalenberg, C. & Carlson, E. (in press). Ethical issues in the treatment of the recovered memory trauma victims and patients with false memories of trauma. In S. Buckey (Ed.). *The comprehensive textbook of ethics and law in the practice of psychology*. New York: Plenum.

This chapter describes the various clinical situations where memory or lack of memory for trauma becomes an issue. It identifies the various and complex dilemmas that clinicians face, and suggests therapeutic approaches in light of these dilemmas.

Therapists and patients need not be deterred from exploring trauma histories; however remembering for its own sake should not be a goal of therapy. Effective therapy for trauma helps patients resolve trauma-specific symptoms, leads to an accurate and meaningful interpretation of the traumatic event and allows the experience to be put in perspective.

While reviewing past traumatic experiences is often an important component of the preferred treatment approach, this does not preclude a correspondent treatment emphasis on the present. In treating adult survivors of childhood trauma, the ultimate goal is to address the enduring impact of childhood trauma so that patients can improve their current and future lives. Whether or not there is traumatic material under discussion, improving current functioning is ultimately the major goal of treatment. While childhood traumatic experiences may always remain an important part of a survivor's identity, after successful treatment survivors are likely to be facing forward rather than looking back.

Additional Reading for Section IV

Knapp, S. & VandeCreek, L. (1996). Risk management for psychologists: Treating patients who recover lost memories of childhood abuse. *Professional Psychology: Research and Practice*, **27**, pp. 452-459.

This paper recommends a series of basic precautions that practitioners can take to reduce legal risks with clients including maintaining boundaries, obtaining informed consent, seeking consultation, and maintaining careful documentation.

Knapp, S. & VandeCreek, L. (1997). *Treating patients with memories of abuse: Legal risk management.* Washington, DC: American Psychological Association Press.

A volume devoted to treatment issues that therapists should attend to as legal risk management.

Read, J. D. & Lindsay, D. S. (Eds). (1997). *Recollections of trauma: Scientific evidence and clinical practice.* New York: Plenum.

An edited book of papers and commentaries from the 1996 NATO conference of the same title.

APPLICATION OF THE CURRENT SCIENTIFIC KNOWLEDGE BASE TO FORENSIC PRACTICE

he topic of recovered memories of childhood abuse is one that often arouses a strong emotional response. For one thing, it is very difficult to accept the fact that adults sometimes fail to protect or actually inflict harm on children, especially if those adults are family members. It goes against our moral grain and our need for a sense of security and comfort with the social order. Also, the whole issue of child abuse is very difficult to discuss. In fact, until very recently, there hasn't been a public forum in which this topic could receive full public discussion and consideration.

Another related way to understand the strong emotional response to the topic of recovered memories of childhood trauma is to realize that because of society's persistent commitment to justice, there is a strong universal commitment to identify perpetrators of child abuse accurately. It is as important to ensure that innocent people not be accused of such reprehensible behavior as it is that victims see their perpetrators held responsible. This concern for justice is complicated by ambiguities inherent in situations in which the validity of the memory of abuse might be called into question. Thus the emotional outrage about childhood abuse must be tempered when there is concern that a recovered memory of childhood trauma might be false and might result in someone being falsely accused. Perhaps nowhere is the strong emotional response to the topic of recovered memories of childhood abuse so apparent as in the legal arena. In the effort of our legal and judicial systems to balance both the rights of alleged victims as well as the rights of alleged perpetrators, the current scientific controversy concerning recovered memory has received considerable forensic attention. This concern has led to legal initiatives that have been designed to broaden both the protections available to alleged victims who have recovered memories of prior abuse as well as protections for alleged perpetrators who have been falsely accused.

The laws against child abuse have the purpose of providing legal mechanisms for protecting children from harm within their families, protecting the community from convicted criminals, exacting retribution for violation of the law or obtaining monetary compensation for intentional harmful or negligent acts. Different countries have different types of legal systems that are governed by legal principles, rules and precedents. Under the adversarial legal system that exists in the common law countries of England, Scotland, Ireland, Canada, Australia and the United States, the government or private party bringing the lawsuit must prove the allegations before individuals lose custody or access to their children, their liberty or their assets.

Mental health practitioners may become involved in legal actions in a variety of ways. One circumstance involves reporting suspected child abuse to government entities. In the United States, Canada and some Australian states, mental health providers are legally required to report suspected child abuse to the child protection or criminal justice authorities. In many other common law countries, suspected child abuse may be reported to government agencies which are empowered to conduct investigations and intervene. Other countries have nongovernment agencies or designated individuals who receive reports and carry out interventions. In those countries with formal child protection laws or systems, practitioners are generally granted some degree of immunity for making good faith reports. Practitioners should be familiar with their specific obligations and protections. In the United States, although mandated reporters such as psychiatrists or psychologists have legal immunity, there have recently been cases in which mandated reporters have been civilly sued or reported to licensing boards by alleged perpetrators.

Most jurisdictions that mandate child abuse reporting do not require reports about childhood abuse revealed by adult patients. However, there may be an obligation where the practitioner has knowledge that another child is currently at risk. In countries or jurisdictions with agencies that receive reports, practitioners may choose to make a report because they believe that official inquiry is necessary for the protection of a child. Familiarity with the relevant statutes and implications of reporting is a professional responsibility.

Additional Reading for Section V

Bowman, C. G. & Mertz. (1996). A dangerous direction: Legal intervention in sexual abuse survivor therapy. *Harvard Law Review*, **109**, pp. 551-563.

This is a summary article of legal issues surrounding memory recovery and therapy.

Brown D., Scheflin A. W. & Hammond, D. C. (1998). *Memory, trauma treatment, and the law.* New York: W. W. Norton.

This book was written for clinicians, researchers, attorneys and judges to provide a critical review of memory research, trauma treatment and relevant legal cases.

Knapp, S. & VandeCreek, L. (1996). Risk management for psychologists: Treating patients who recover lost memories of childhood abuse. *Professional Psychology: Research and Practice*, **27**, pp. 452-459.

This paper recommends a series of basic precautions that practitioners can take to reduce legal risks with clients including maintaining boundaries, obtaining informed consent, seeking consultation and maintaining careful documentation.

Additional Reading for Section V

Pope, K. S. & Brown, L. S. (1996). *Recovered memories of abuse: Assessment, therapy, forensics.* Washington, DC: American Psychological Association.

This book was written for clinicians and expert witnesses working with clients who report recovered memories of childhood abuse. Forensic issues for therapists providing treatment and for forensic expert witnesses are addressed.

Practitioners may also become witnesses in criminal or civil legal actions. They may be fact witnesses because they have information that is relevant and admissible. In such cases their testimony may be compelled by subpoena and the patient-practitioner privilege may be abrogated. Or, practitioners may be involved as expert witnesses. Experts for plaintiffs or defendants may be called to testify about a particular patient because they have conducted a forensic evaluation or reviewed case materials. They may be asked to give opinions about whether the traumatic event occurred and about the psychological damage that has resulted from the traumatic event(s). They may also testify as to whether a practitioner met the standard of care in situations where professionals are sued for malpractice or are reported to licensing or professional bodies. Sometimes experts testify about relevant scientific and clinical knowledge without specific reference to a particular individual.

Several new areas of law have emerged in recent years that directly relate to questions of memory and may involve practitioners as fact or expert witnesses. For example, many jurisdictions through legislation or case law have extended the statutes of limitations (the period of time by which a legal action must commence) for child abuse criminal prosecutions or civil damage suits. This has occurred in response to increased awareness that some victims remember their experiences long after the fact, or only belatedly recognize the link between current dysfunction and past victimization. Statutes of limitations exist in recognition that over time memory fades, evidence may be lost, witnesses may disappear or die and as a result, a defendant's right to an adequate defense and a fair trial may be compromised. These limits on the time elapsed between the perpetration of a damaging act and the filing of a suit by an alleged victim to claim damages for such an act may be extended by legal interpretation or by new legislation based on the "delayed discovery rule." This legal principle recognizes that there are circumstances where it is not possible for a victim to know about a crime or a negligent act and its harmful effects until the statute of limitations has expired. In these cases, the statute of limitations does not start to run until the time that a victim remembers or recognizes the harm.

Another relevant legal development in the United States has been malpractice suits against therapists initiated by third parties who are not clients or otherwise participants in their therapeutic relationship, but claim to have been harmed by the therapists' actions. Under traditional malpractice law, therapists can be sued for malpractice *only* by their clients. For example, some legal actions have been brought by clients who claim that their therapist exerted undo pressure on them to recall previous trauma or who initially accused a family member of childhood abuse, later retracted such accusations, and currently hold the therapist responsible for promoting the initial accusations. Recently, however, some courts have allowed cases to proceed in which "third parties" — usually a member of the client's family — claim that the therapist has committed malpractice by engaging in activities that may have led clients to develop false memories about the third party. These cases have proceeded even when the adult client does not wish to bring an action against the therapist and has not taken any legal action against the alleged perpetrator. In addition to law suits, third parties have also been successful in making complaints to disciplinary boards that have resulted in restrictions on practice or the loss of license to practice. In many of these cases, the patients themselves have not supported the actions and have not believed they were harmed by the therapy. One result of these developments is that some therapists have become increasingly reluctant to address their patients' traumatic memories, even when such therapeutic attention seems necessary.

Practitioners who conduct forensic evaluations or serve as expert witnesses must adhere to the professional standards of practice in their respective disciplines. For example, forensic practice differs from clinical practice in terms of the role of the practitioner, the purpose of the professional activity and the generally accepted methods and approaches. Forensic evaluations are intended for use in legal decision-making, although the evaluator does not always testify in court. Such evaluations are ordinarily requested by lawyers or courts. Patients are informed of the nature of the evaluation and agree to the release of information to designated parties. Practitioners generally assume a neutral stance and rely on a variety of sources of information in addition to patient report. In addition, experts must be familiar with the current scientific and clinical knowledge about trauma and memory.

Additional Reading for Section V

Tracy, C. E., Morrison, J. C., McLaughlin, M. A., Bratspies, R. M., & Ford, D. W. (1996). Brief of the International Society for Traumatic Stress Studies and the Family Violence & Sexual Assault Institute as *Amici Curiae* in support of the state. No. 95-429; State of New Hampshire v. Joel Hungerford; State of New Hampshire v. John Morahan; Appeal of an Order of the Hillsborough County Superior Court, Northern District, Pursuant to RSA 606:10; In the State of New Hampshire Supreme Court, 1996 term, July session.

This "friend of the court" legal document is concerned with the admissibility of testimony concerning recovered memories about childhood sexual abuse, and more specifically, with the court's recognition of traumatic amnesia as a well-documented symptom that may result from severe trauma.

This is a field that is rapidly expanding and new research findings are regularly reported in peer-reviewed journals and at professional meetings. Although there is no requirement that experts be academic researchers, since expertise can be a function of extensive experience, clinical experts would do well to be aware of the general principles and facts that are accepted by the relevant scientific community.

It is important for practitioners to understand that laws and legislation related to statute of limitations, the application of delayed discovery and third party law suits are state specific and may change frequently. It is recommended that practitioners consult their malpractice carriers for information regarding the laws in their states.

SUMMARY AND CONCLUSIONS

hildhood trauma involving interpersonal violence occurs frequently and plays an important role in later adult maladaptive functioning.

Correspondent with a general increase in trauma-focused scholarship has been an increase in knowledge about delayed recall of traumatic events and about memory processes relevant to an understanding of traumatic memories. We know that people forget childhood traumas and that this is not limited to people in treatment or to people whose trauma is sexual abuse. We also know that people can accurately recall memories of documented childhood trauma that they report having previously forgotten, and that a wide range of triggers seem to be associated with these memories. Most memory recovery appears to be precipitated in situations that include cues that are similar to the original trauma and does not occur as a direct result of psychotherapy. However, it is possible, and indeed many would argue likely, that therapists who fail to conform to accepted standards of practice may promote a "recovered memory" of an event that never occurred.

While there is some evidence that recovered memories of childhood abuse can be as accurate as never-forgotten memories of childhood abuse, there is also evidence that memory is reconstructive and imperfect, that people can make very glaring errors in memory, that people are suggestible under some circumstances to social influence or persuasion when reporting memories for past events and that at least under some circumstances inaccurate memories can be strongly believed and convincingly described. While traumatic memories may be different than ordinary memories, we currently do not have conclusive scientific consensus on this issue. Likewise, it is not currently known how traumatic memories are forgotten or later recovered. These are all fundamental questions that have stimulated a great deal of important research on the memory process in general and on traumatic memories in particular.

Trauma-focused approaches to assessment and treatment have also promoted a sophisticated articulation of the purpose, process and standards of care. While competent therapists must provide a therapeutic environment

in which recovered memories of childhood trauma can be addressed, they must also recognize that memory is fallible and that certain therapeutic approaches may increase the likelihood of distortion or confabulation. Professionals agree that there is no standard procedure for establishing the accuracy of recovered memories in individual cases and that in clinical practice, it is up to the patient to come to his or her own conclusions about whether or not he or she was previously traumatized and about the specific details of such events. Professionals also agree that it is not the role of therapists to instruct or pressure patients to take a particular course of action with accused offenders and/or family members during the course of therapy for childhood abuse.

There is a strong commitment in contemporary society to accurately identify perpetrators of child abuse, and it is as important that innocent people not be accused of such a crime as it is that victims see their perpetrators held responsible. In the efforts of our legal and judicial systems to balance the rights and protections of both alleged victims and alleged perpetrators, the current scientific controversy concerning recovered memory has received considerable forensic attention and has led to a number of legal initiatives. Both alleged perpetrators and those held responsible for alleged false accusations, including therapists, have been targets of legal action. While there is currently not a standard protocol for the determination of the validity of individual reports of recovered memories of childhood trauma, our current scientific knowledge base provides consensual and balanced information that can be essential in forensic practice.

This pamphlet was developed by the International Society for Traumatic Stress Studies to inform the general public about the complex and important issues that are involved in the current controversy about memories of childhood sexual abuse. We address the questions of childhood trauma, traumatic memory, the memory process, clinical issues and forensic implications pertaining to this controversy. We have tried to present a balanced review of these issues. As an international organization dedicated to promoting the best research and education in this field, we believe it essential that people who grapple with this controversial topic be equipped with the most accurate and comprehensive information possible. We hope that this pamphlet has served this purpose.