MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

TABLE OF CONTENT

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

TABLE OF CONTENT

(continuation)

N.B. : The present course is largely based on a book written by Daniel Brown, Alan W. Scheflin, and D. Corydon Hammond, "Memory, Trauma Treatment, and the Law". Trauma therapists are strongly encouraged to acquire this book and study it thoroughly, as this course only represents an introduction to the field.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

INTRODUCTION

* Two fundamental issues are involved in the scientific debate about the *false memory controversy* :

- *memory*

- *therapeutic influence*

* Central questions are :

- "Are children's accounts of being molested reliable?"

- "Are adults' recalls of childhood trauma reliable?"

* Dissociation has also been increasingly recognized, and seriously dissociated patients have increasingly reported sadistic stories of abuse. These reports have provoked a credibility crisis in the field.

* Poole et al. (1995) reported that 5% of clinicians were responsible for 58% of the reports of treating patients who claimed to be victims of satanic abuse.

* The self-help movement has deepened the crisis by narrowly framing their treatment in terms of "recovering traumatic memories", and by their insistence at confronting *alleged* perpetrators.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY THEORY

Basic Theories

* It is first imperative to understand that the false memory controversy needs to be understood within the wider context of memory theory.

* There are basically two models of memory :

- *trace theory* (e.g. Penfield)

- *constructivist theory* (e.g. Neisser)

* Psychotherapists who understand memory processes will be reluctant to promise patients that they have the ability to reconstruct historically accurate memories. They will know that memories can be inaccurate, memories can be become lost, false memories can be created, and memories can be spontaneously recovered (Knapp & Vandecreek, 1997).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY THEORY

Trace Theory

* *Trace theory* argues that memory representations are more or less a carbon copy of an event as if every event is both completely and exactly encoded in the brain (Penfield).

* It was first asserted that all experiences were stored, and that memories were localized within the brain. Then, it was assumed that memory traces were stored as associations of cell networks.

* These hypotheses were based on electrostimulation studies of different areas of the brain while patients were conscious; patients frequently reported flashbacks of "forgotten events" which they couldn't remember during normal recall. But only 40 out of the 530 patients had "flashbacks", and there were never independently verified and some were even disconfirmed as "memories".

* These hypotheses were also based on studies which were conducted using nonsense syllables, simple words, or visual stimuli. After presentation of a visual stimuli at very high speed, it was found that stimuli could be recognized for some period of time although they were not identified consciously (referred to iconic memory).

* This model has been partly invalidated by experiments which were conducted to examine the constructivist theory of memory.

Naive, and usually lay, trauma therapist adopt this model
(e.g., *The Courage to Heal*).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY THEORY

Constructivist Theory

* *Constructivist theory* has been the dominant paradigm since the 70s. It suggests that memories are ongoingly reconstructed; while each recall may preserve the gist of the memory, the details will inevitably be different.

* To support this model, experiments were conducted using meaningful everyday stimuli (stories, personal experiences, simulated or real eye-witnessed events) (e.g., Bartlett). For example, subjects are read a story and asked to remember it over successive intervals; although the general meaning of the story is retained reasonably well, each version contains omissions and transformations of details.

* There is ample scientific evidence that recall of daily experiences is largely reconstructed and subject to significant distortions, but this model has not been tested with traumatic memories.

Advocates of the false memory position adopt this model (e.g. Loftus).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY THEORY

Integration of Basic Theories

* The crucial question is :

> "Do traumatic events induce processes involved in trace theory or constructivist theory, or both?

* There is little laboratory research available on memory for traumatic events. Therefore, although it was found to be the best fitting model for memory of everyday life experiences, it would be premature to apply constructivist theory to memory for traumatic events.

* A recent *partially constructive theory of memory* (Brewer, 1986) stipulates that the gist of important personal experiences is accurately retained at the expense of less important details. This model seems to better apply to traumatic memories.

> *Many trauma specialists adopt this position (e.g. Terr, 1994)*.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY THEORY

Structural Model of Memory

* As it is usually the case in science, main theories do not necessarily compete, but complete each other. It is now clear that different *types* of memory system exist, and that each theory applies to a distinct memory system.

* Following Miller's concept of limited capacity of information processing (upper limit of 7 chunks of information), two key concepts have emerged: limited capacity, and rapidly decaying short-term memory storage system.

* Broadbent converged these concepts into a structural model of memory, i.e., a memory processing system organized into a number of independent storage systems.

* Broadbent proposed the concept of a selective filter in which *attention* acts like a filter to select stimuli for further processing, while ignoring other information. Consequently, the concept of long-term memory emerged, where stimuli are stored after having been selected and attended to.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY THEORY

Structural Model of Memory (continuation)

* Atkinson and Shiffrin proposed the *structural model of memory* :

- transient sensory registers (one for each sensory modality)

- a short-term memory system (STM), conscious working memory system

- a long-term memory system (LTM)

* While most of the information decays rapidly, information can be transferred to the STM system if paid attention to. If the information in the STM system is rehearsed, it can be transferred to the LTM system. There is a bidirectional flow between these three systems.

* *The main question remains, however, as to whether or not verbal and sensory information are encoded separately in LTM*.

(Brown, Scheflin, & Hammond, 1997)

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY THEORY

Multiple Memory Systems

* Tulving argued that there are two partially independent information processing systems :
    - episodic memory system (autobiographical), the *remembering system*
    - semantic memory system (concepts, qualities, etc), the *knowing system*

* For the remembering system, Schacter further proposed two memory systems for previous experiences :
    - *explicit memory* (intentional, conscious remembering; e.g. self-reports)
    - *implicit memory* (unintentional, non-conscious remembering; e.g. influence of non-conscious memory on task performance as in test aversion test)

* Amnesic individuals usually present a deficit on explicit memory performance, but they usually present no deficit on implicit memory performance; i.e., while amnestics are unable to remember personal experiences, they can learn new motor and perceptual skills.

* Pillemer and White suggested the existence of two independent memory systems in children :
    - *verbal memory system* (socially shared autobiographical memory)
    - *behavioral memory system* (actions, images, sensations)

* All these systems are relevant to understanding recovered memories of abuse.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY THEORY

Memory Evaluation

* To understand trauma memories, one needs to be able to evaluate the research in this area. To do so, one must be knowledgeable of the ways that memory performance is tested.

* Memory performance can be evaluated in terms of its :

- *completeness* (total amount of information)
- *accuracy* (remembered information corresponding to original stimuli)

* Completeness is a concept related to *amnesia, hypermnesia,* and *omission errors* in memory testing. In laboratory studies, normal subjects remember about 70% of the information.

* There are, however, important problems in using completeness in research on memory as memory appears more fallible than it is. Using memory for the total amount of information as a memory performance measure disregards the importance of the type of information and the salience of details. Examples of the latter are :

- *central versus peripheral details*
- *emotionally arousing actions versus neutral actions*
- *objects relevant to plot versus irrelevant objects*

* Accuracy is a concept related to *commission errors*.

* The problem with the concept of accuracy is how much memory distortion constitutes inaccuracy? Many memories contain accurate and inaccurate information. Therefore, terms such as "false memories" are misleading.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY THEORY

Memory Evaluation (continuation)

* As we are strongly reminded by Brown et al. (1997), completeness is not to be confused with accuracy. A memory can be quite incomplete but be mostly accurate. Recovered memories can be quite accurate or quite inaccurate, or something in between. And, accuracy cannot be separated from the types of information to be remembered and the salience of details.

* Therefore, "it is too simple, and sometimes outright misleading, to assess memory accuracy for the total amount of information in any complex event, without regard to the salience of selected information, and then draw conclusions about the memory for the complex event as either accurate or inaccurate." (Brown et al., 1997).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY THEORY

Memory Evaluation (continuation)

* There are other dimensions on which memory performance is evaluated :

- *vividness*

- *emotionality*

- *confidence*

* The fact that a subject remembers vividly, i.e., with rich and elaborated detail, does not mean that the memory is accurate. The same findings apply to the clarity of a memory.

* Emotionality (intensity and valence of emotions associated with memory report) is often mistaken as an indicator of accuracy. Emotionality can either increase or decrease the accuracy of memory performance under different conditions.

* It should not be assumed that confidence in a memory report reflects accuracy.

* Furthermore, *consistency over time* does not imply accuracy, as neither does a *reputation of being honest* or of having a good memory.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Theory on Traumatic versus Ordinary Memory

* Memory performance of traumatized individuals has been virtually ignored by scientists. What we know is based on clinical observations and clinical research. Therefore, it cannot be assumed that the laboratory findings apply to clinical populations, nor can we assume that normal memory processes apply to memory in traumatized populations.

* Freud viewed trauma memory as interfered with by repression and screen memories, two concepts similar to omission error and commission error. The underlying assumption in Freud's seduction theory is that traumatic memory is processed differently from ordinary memory.

* Janet considered that the intensification of affect during and after trauma interferes with normal memory processing and causes dissociation of otherwise unitary phenomena of consciousness and memory. The traumatic memory is first dissociated from consciousness (primary dissociation), and its components (affects, physical sensations, behaviors, etc) are further dissociated from each other (secondary dissociation). Janet's basic assumption is that trauma disrupts normal information processing through dissociation.

(Brown, Scheflin, & Hammond, 1997)

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Theory on Traumatic versus Ordinary Memory (continuation)

* Horowitz's model of trauma asserts that information processing is disrupted by a traumatic experience (Horowitz & Reidbord, 1992) :
  - arousal and overwhelming emotions are encoded as sensory imagery
  - integration of these memories into consciousness cannot be accomplished, and therefore stored in long-term memory
  - trauma memories can thus be frozen in time
  - trauma memories present themselves in a fragmented way such as through flashbacks, nightmares, feelings, actions, etc
  - trauma memories are stored in "active memory" system, and they are not processed if they are not subjected to normal memory processing

* Zajonc has argued that emotional memory is mediated by a system that is independent from the system processing cognitive information, and operates unconsciously. There is considerable evidence from the experimental literature that affect and content can be dissociated.

* Trauma memories are stored separately in the behavioral system (most likely, the amygdala) and the verbal system, or autobiographical system of memory.

* Recent neurobiological studies support the notion that traumatic or emotional memories are processed differently than normal memory within the brain (e.g. Rauch et al., 1996).

(Brown, Scheflin, & Hammond, 1997).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Memory Development in Children

* According to Pillemer and White, two *parallel and independent* memory systems develop in childhood :

- a behavioral memory system

- a verbal, autobiographical memory system

* The behavioral memory system develops earlier, as for young children, memory is expressed primarily in the form of behavioral reenactment and imagery.

* Studies consistently showed that young children (2 to 3 y.o.) retain a relatively complete and mostly accurate memory of play events, even when they are not capable of verbalizing their memory for these events.

* Young children organize verbal memory around the gist of central and familiar activities, which are called *general event schemas*. Toddlers make sense of the world by developing these schemas through routine activities and assimilating new information within these existing schemas. In the second year of life, memories are increasingly recognized as belonging to the self, allowing toddlers to develop a cohesive sense of self.

* By the end of the third year, a highly organized verbal memory system has emerged. Verbal accounts are reasonably accurate but incomplete.

* During the fifth and sixth years, this verbal memory system becomes a socially shared autobiographical system. Personal experiences are shared and elaborated with others, a process called rehearsal.

* In latency years, children are capable of verbalizing specific memories for personal experiences.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Memory Development in Children (continuation)

* By the fourth year of life, the verbal system becomes the *dominant* one while the behavioral system persists. According to Pillemer and White, this is the reason why older children or adults have a hard time accessing verbal memories before the age of four. While verbal memories can be available, early memories would be less accessible due to that developmental shift.

* Exceptions do occur as some older children and adults can remember some personally significant events which have occurred before the age of four. However, a reliable adult report of a specific and detailed memory for an event occurring in the first year of life is very unlikely, and such memory reports should be regarded with suspicion.

* But, an adult's report of an incomplete verbal memory for the gist of an important experience during the second and third year of life is conceivable.

* Unfortunately, adult behavioral memory for early childhood experiences has not been studied, leaving a central question unanswered :

" Could it be that the behavioral system is at the basis for *repetition compulsion* and *post-traumatic reenactment*?"

More scientific data is required on this topic.

* Unfortunately, we do not know yet with certainty whether the behavioral system is used for autobiographical memory after these first few years of life.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Factors Influencing Memory Performance

* Memory processing proceeds in three stages : - *encoding or acquisition*
- *storage or retention*
- *retrieval*

* During the *acquisition* phase, more or less information is encoded depending on how the information is organized by the subject. Memory for complex events is divided by scientists into (1) the physical characteristics of people, (2) the objects in the environment, and (3) the nature of the action sequence.

* In eye-witness performance, a main distinction is made between *central actions* and *peripheral details*. Preferential processing is given to the action sequence over peripheral objects in the environment, and certain characteristics of people (e.g., height and body build) may be given preferential processing over other characteristics (e.g., eye color) (Christianson, 1992).

* *Saliency of detail* affects memory performance as do *exposure time, frequency of exposure, attention*, and *rehearsal*.

* *Retention* or forgetting can be affected in two ways :
- passive decay, which is operative at short intervals and due to a lack of attention
- interference, which is operative at longer intervals and occurs when information presented prior or after the target information interferes with memory performance about the target information; for example, pre-event or post-event misinformation

* Generally, information is better preserved over shorter intervals. However, under certain conditions, certain types of emotionally charged information are better retained over longer intervals (Christianson, 1992).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Factors Influencing Memory Performance (continuation)

* *Retrieval* is the process by which stored information is accessed and remembered. Retrieval is enhanced if the information contained in the retrieval cue is similar to the originally encoded information.

* Retrieval is affected by numerous factors :
  - retrieval strategy (recognition or recall)
  - retrieval context
  - state of consciousness
  - personality characteristics
  - social influences during retrieval (addressed later in this course)

* *Free recall leads to incomplete but quite accurate reports,* while cued recall leads to more complete memory reports but less accurate one as cued recall may involve leading or misleading questions (implying a desired answer).

* Discrepancy between the environmental context at the time of memory encoding and memory retrieval reduces memory performance :

- *state dependent retrieval* refers to the similarity or discrepancy between the initial state of consciousness of the subject at the time of memory encoding and subsequent memory testing. For example, an event learned in one state of consciousness (e.g., panic) is better remembered when one reexperiences panic (that is, the same psychological state) and if free recall is employed. However, with cued recall, it is unnecessary to duplicate the state of consciousness.

- personality characteristics and psychologically motivated defenses can influence retrieval. For example, repressors present less accessibility (not necessarily availability) to negative emotional memories. Depressives are too much focused on negative memories. Histrionics, borderlines and dissociators tend to distort memories.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Factors Influencing Memory Performance (continuation)

* Consolidation of trauma memories involves the linking of separate brain regions that together store the memory of an entire event.

* The "strength" of a memory depends on the degree of emotional arousal (especially in the amygdala). At a very early age, trauma memories may be encoded in the amygdala mostly. After 3 year old, the hippocampus participates in memory processing, which fosters their integration.

* 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.

* Early abuse has been found to be associated with left hemisphere abnormalities in adulthood (including the amygdala and the hippocampus) that may prevent greater hemisphere interconnectivity and foster specialization of the right hemisphere, which is specialized for processing negative emotions.

* While narrative memory is more subject to be distorted, trauma memory may be more likely to be indelible as fear responses are.

(Brown, Scheflin, & Hammond, 1997)

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Laboratory Studies on Memory for Negative Emotions

* Early laboratory studies indicated that emotionally and physiologically arousing words were remembered less than neutral words at short intervals, and better at longer intervals.

* The most widely cited study on this topic was conducted by Loftus and Burns (1982). Subjects viewed brief film about a bank robbery:

Nonviolent control condition : A robber holds up a bank and leaves the bank. The teller shouts that she has been robbed, and two bank employees chase the robber in the parking lot where two young boys are playing. One boy is wearing a football jersey with the number 17 on it. Exposure time was 2 seconds for that number. Then the film flashes back to the bank where the teller is talking about the robbery.

Violent experimental condition : In the parking lot, as the employees chase the robber, the robber turns around and fires his gun. He misses the employee but hits one of the boys in the face. The boy then falls to the ground, injured and bleeding.

Assessment strategy : Subjects were asked a series of 25 questions. Subjects were asked to report the number on the jersey (recall test) or to recognize it from a list of four numbers (recognition test).

Results : Experimental subjects reported the film to be more interesting and upsetting. Experimental subjects were less able to recall the number on the jersey (4% vs. 28%), and to recognize it (28% vs. 55%). For the remaining 16 target details, experimental subjects were less accurate than control subjects.

* Loftus and Burns concluded that "witnesses to emotionally *traumatic* events may be less able to recall *key* elements". Loftus even started her argument in favor of the logic of the False Memory Syndrome Foundation using these findings. Christianson (1992) disagrees. Brown et al. (1997) have even recalculated the mean accuracy of the recall of all 17 stimulus items in the emotionally arousing condition, and found it to be 76%, indicating a high accuracy with respect to the recommended cut-off point of 70%!

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Laboratory Studies on Memory for Negative Emotions (continuation)

* Subsequent studies did not find a significant decrease in memory accuracy in response to viewing supposedly emotionally arousing films or slides (Christianson, 1992).

* On the contrary, experimental subjects recalled more correct information about the stimulus event, especially after long retention intervals (e.g. 2 weeks). Christianson (1992) interprets these data to mean that information, encoded under a state of heightened emotional arousal is *less susceptible* to forgetting than information encoded under neutral conditions.

* Other studies have shown that there is no difference in memory accuracy when retrieval is emotion-cued, context-cued or non-cued.

* Other studies have shown that subjects significantly improved their recall of details over successive trials; 38% of details remembered at first trial vs. 61% at fourth trial. This improvement in memory was not associated with an increased guessing or commission errors.

* Therefore, *free recall* can lead to *more accurate and complete* detailed accounts. So, testimonies do change for the better over interrogations as long as free recall procedures are employed.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Laboratory Studies on Memory for Negative Emotions (continuation)

* When a *cognitive interview or guided imagery* is employed (imagining the environmental context of the original event, recalling the feelings associated with it, and then free recalling everything that happened), an *increase in accurate information* is observed, even in children when they are instructed to say "I don't know" and even with adults 5 months later. When the cognitive interview is practised before hand, recall improves even further (more than double).

* With respect to *staged crimes*, victims and witnesses were better than controls at photo identification and, in turn, victims were more accurate than witnesses at describing the physical characteristics of the perpetrator. Recognition accuracy is better for more serious crimes.

* Witnesses who accurately recognized the perpetrator were less good at remembering peripheral details than those who correctly identified peripheral details. Again, attention seems to play a central role.

So, it is not because recall of peripheral detail is mostly inaccurate that the identification of the perpetrator is invalid.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Laboratory Studies on Memory for Negative Emotions (continuation)

* From the indisputable observation that memory can sometimes be impaired, Loftus (1995) elaborated and defended her hypothesis of memory fallibility. She has even written that "strongly negative and stressful emotions hinder accurate perception and memory". She has further generalized the memory fallibility hypothesis to memories recovered in psychotherapy.

* Sadly, 79% of expert in the eyewitness research field endorse such generalized viewpoint, while such conclusion is simplistic and great harm can result from it, as pointed out by Brown et al. (1997).

* A more reasonable view is that emotional stress seems to enhance memory under certain conditions, while it also seems to hinder it under others (Brown et al., 1997; Christianson, 1992).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Memory and Emotions

* Christianson (1992) reviewed the literature on the effects of negative emotional events on memory (rather than encompassing any type of arousal such as physiological arousal or general emotional arousal). He concluded that there is *no simple relation between intense emotion and memory*.

* The following variables interact with memory performance of emotionally arousing events :

- type of arousal (better memory if specific arousal)
- type of event (emotional events are better remembered)
- activity level (victims recall better than witnesses)
- retention interval (longer intervals increase memory)
- *type of information (memory is better for central than peripheral details)*
- retrieval strategy (free recall is best, especially if cued, and successive free recall improves memory)

* Christianson (1992) has developed a multidimensional model called *preferential processing hypothesis*, suggesting five critical factors :

1. memory performance should be addressed with respect to information *specifically* associated with the source of the emotional arousal
2. *attention* is paid more to central actions than peripheral details in emotionally arousing events
3. emotional events may be *unusual and distinct*, capturing more attention
4. emotional priming effect may give preferential processing to critical emotional details
5. *post-stimulus elaboration*, such as rehearsal, may account for the unusual retention

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Autobiographical Memories

* Recent autobiographical memories are more likely to be remembered than remote memories.

* Early childhood memories are generally not remembered before the age of 3-4, that is, when verbal skills are sufficiently well established.

* Exact dates are not well retained, especially for remote memories, except if the memory is tagged with a landmark event.

* Remarkable autobiographical memories are extremely well retained over extensive periods; retention rates run from 90-100% across studies for most remarkable memories in comparison to 60-80% for less remarkable or mundane events.

* The gist of memories for remarkable events is highly accurate, while details are not necessarily accurate and may be quite inaccurate. The average commission error rate for salient actions is low (14%), but much higher for details; so constructive distortions of details are to be expected.

* Remarkable autobiographical events may be forgotten due to operation of psychological defenses, such as those used by repressors.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Events of Impact

* As laboratory studies failed to establish that their target stimuli actually induced stress or evoked strong emotions, research paradigms were developed to assess real-life experiences.

* Yuille and Cutshall (1986) naturalistically studied eyewitness memory reports. Five to six months after a hold-up in which the victim and the robber were shot, these researchers interviewed the 21 witnesses. Their accounts were compared with the police reports. Free recall was first employed, followed by cued recall (specific questions).

The total amount of information recalled, as well as memory for action details, was greater at *5 months* than initially. Accuracy rates were high (89% for object details, 82% for action details, and 76% for people description). Inaccurate details were "relatively rare". A total of 60% of the information was new. Rate of reports for nonexistent actions was 3%, and there were given mostly by bystanders whose view of the event was partially obstructed. There was *no accuracy loss*. Differences were found between retrieval strategies.

* These results were replicated, but lower rates of accuracy were found with non-violent crimes. More accurate information was provided when cognitive interviews were employed. Victims provided more accurate accounts than bystanders. Therefore, direct participation in an actual crime, especially a violent crime, is quite different from passively viewing slides about a robbery in the laboratory.

* Such findings suggest a different information processing for ordinary events and events of impact, or traumatic events. However, these studies suffer from their naturalistic nature; i.e., we cannot know what really happened at the time of these events.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories

* Studies comparing memory performance of traumatized and nontraumatized populations are now being done. The problem with them is that there is no baseline against which to compare memory accuracy and consistency over time.

* Natural disasters: - Cardena & Speigel (1993) reported partial or full amnesia only in a very small percentage (3%) of students after the 1989 San Francisco earthquake.

- McFarlane (1988) found that 3.6% of the 469 firefighters who survived the bushfire disaster had full amnesia of their injuries 11 months after, and those were part of the ones who did not suffer from PTSD.

* Combat: - Sargant & Slater (1941) reported that 14.4% of 1,000 WW II soldiers had significant partial amnesia of war experiences.

- Torrie (1944) reported amnesia and/or fugue in 8.6% of 1,000 soldiers from the North Africa theater during WW II.

- Henderson & Moore (1944) reported amnesia in 5% of WW II soldiers in South Pacific.

- A randomized survey of contemporary veterans found full amnesia for war experiences in 16% of veterans, and partial amnesia in 23%.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories (continuation)

* Nazi Holocaust : - Wagenaar & Groeneweg (1990) studied the memory of holocaust survivors *prospectively*. After 40 years, their memory for central experiences were remarkably accurate and consistent, while memory for peripheral details (dates, description of people) were not well preserved.

- Wagenaar & Groeneweg (1990) also reported a subgroup of 40 holocaust survivors who failed to remember traumatic experiences. When confronted with their previous testimonies, their memory failure reversed.

* *Adult Memory of Childhood Physical Abuse* :

- A 30-year prospective study (Robins, 1996) interviewed adults who presented with deviant behavioral problems and who were physically abused as children. A total of 78% failed to report their father's abusive behaviors toward them, even though questions were presented about parental abuse, but they also failed to report most of other parental failings.

- In a similar prospective study, Femina et al. (1990) found that 38% of subjects provided reports discrepant with their original clinical report. When confronted with earlier reports, subjects explained why they either concealed the abuse now or then.

- Elliott & Fox (1994) reported that, out of 100 students, 17% were fully amnesic and 10% partially amnesic for a period of time of the physical abuse they endured as children. When recovery of memory happened, subjects presented PTSD symptoms.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories (continuation)

* *Adult Memory of Childhood Physical Abuse* (continuation) :

- Golding et al. (1996) reported that, out of 613 students, of the 13% who claimed to have recovered memory for traumatic experiences, 21% did so for a nonsexual assault or violent event.

- Elliott & Briere's (1995) random survey of the general population reported that 10% of respondents who had been physically abused had had a period of full amnesia, and 15% of partial forgetting.

- Melchert (1996) found, that of 553 students, 21% reported periods of full amnesia of physical abuse; 54% claimed that they had "repressed" the memory while 33% claimed that they simply avoided the memory.

- Fish & Scott (in press) reported that, of 423 counsellors, within those who reported physical abuse, 21% reported amnesia for a period of time. Of those, 10% reported forgetting the abuse by one perpetrator only, while no subject forgot all the abuse.

- With respect to rape, Elliott & Briere (1995) reported 3% of full amnesia and 10% of partial amnesia in their sample.

In summary, all studies obtained reports of full amnesia (3-17%) and partial amnesia (4-51%).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories (continuation)

* *Adult Memory of Childhood Sexual Abuse* :

A) *Clinical samples*

- Because rates are reasonably consistent across studies, there is support for amnesia of childhood sexual abuse as a non iatrogenic product of psychotherapy.

- About 33% have had full memory, 33% have had partial amnesia, and 33% have had full amnesia.

- With the exception of two studies; low rate of 19% for full amnesia in Loftus et al.'s (1994) study where chemical dependency detoxification could explain the low rate, and a high rate of 77% in Roe & Schwartz (1996) where a high rate can be explained by the severity of symptoms in these inpatients.

There can be selection bias in those surveys.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories (continuation)

* *Adult Memory of Childhood Sexual Abuse* (continuation) :

B) Non Clinical Samples

- Bernet et al. (1993) found that, of students who reported having been sexually abused as children, 36% reported full amnesia for period of time for at least one abuse experience. Only 30% have been in psychotherapy.

- Belicki et al. (1994) compared students who reported having been sexually abused, physically abused, not abused, or who were asked to simulate abuse. A total of 55% who were abused as children reported full amnesia for a period of time. With respect to symptoms, there was no difference between subjects who reported corroboration of abuse or not, and between subjects with continuous memory of abuse or not. With respect to corroborative evidence and seeking psychotherapy, there was no difference between those with recovered memory and those with continuous memory.

- Loftus criticized the wording of questions regarding recovered memories of abuse. In response, Kristiansen et al. (1995) asked about abuse in many different ways, and their results failed to support Loftus' criticism; 25% had been fully amnesic and 26% had been partially amnesic, as determined by having answered "yes" on all questions regarding those issues.

- Elliott & Fox (1994) found that 30% of respondents, who said they had been abused as children, reported full amnesia for a significant period of time, and 14% reported partial amnesia. Only 19% reported that psychotherapy was a trigger for remembering the abuse.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories (continuation)

* *Adult Memory of Childhood Sexual Abuse* (continuation) :

B) Non Clinical Samples (continuation)

- Golding et al. (1996) reported a low rate of 13% for full amnesia of childhood traumatic experiences. This low rate could be explained, as suggested by the authors, by the younger age of their sample, as traumatic memories are reported to be recovered mostly in the 20s and 30s. This low rate could also be because the authors required that a memory be recovered all at once to be classified as fully repressed.

- Van der Kolk & Fisler (1995) recruited people "haunted by memories of terrible life experiences". Of those who were abused in childhood, 42% have had partial or full amnesia of the abuse, and corroborative evidence was present in 75% of those cases. Traumatic memories was initially "remembered" somatically.

- Roesler & Wind (1994) reported that 29% of women, who were sexually abused in childhood for an average of 7.6 years, said that they repressed their memories of abuse for a significant period; they tended to not have disclosed the abuse as children.

- Grassian & Holtzen (1996) asked 99 victims of Father Porter, and 19% said that they had "no thoughts, even brief ones, about the abuse" before the media exposure of Father Porter. In contrast, 31% have had intrusive, continuous thoughts about the abuse. Triggers for remembering were attending church, engaging in sexual activity, seeing someone from the period of the abuse, seeing a child reaching the same age as the victim was when the abuse occurred, and being reminded by the media. Continuous memory of abuse during adolescence was a predictor of poor adulthood adjustment.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories (continuation)

* *Adult Memory of Childhood Sexual Abuse* (continuation) :

C) Random Samples

- Briere & Conte (1993) reported a 53% rate of amnesia for sexual childhood abuse in psychotherapy patients.

- Feldman-Summers & Pope (1994) randomly selected 500 therapists. Of those who reported childhood abuse, 40% reported a period of time during which they could not remember some or all of the abuse.

- Westerhoff, Woertman, & van der Hart (in press), in the Netherlands, replicated the above findings. A total of 70% reported corroborative evidence for recovered memories of abuse, and a total of 68% said that recovery of abuse memory was associated with therapy, but only 19% said that it was triggered by psychotherapy.

- Fish & Scott (in press) sampled 1,500 counsellors. Of those who reported having been abused, 52% reported partial or full amnesia. A total of 44% said that recovery of abuse memory was associated with therapy. This study examined carefully different types of forgetting. Most respondents endorsed more than one type of forgetting (trying not to think about it, blocking it out, could have remembered if I thought about it, not having any memory, and part of the mind not having the memory and part of the mind having it), those physically abused were more likely to report that they could have remembered it if they thought about it, but those sexually abused were more likely to report that memory was inaccessible.

But all those samples entail recruitment by or of therapists.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories (continuation)

* *Adult Memory of Childhood Sexual Abuse* (continuation) :

C) Random Samples (continuation)

- A more recent study by Elliott & Briere (1995) corrected this problem. They surveyed a general population using random telephone numbers stratified according to geographic location. Out of 800 calls, 505 responded. Of those who were abused, 20% reported full amnesia and 22% partial amnesia. Only 7% of respondents were in therapy at the time of the survey, and only 13% said that recovery of memory was triggered by therapy; in fact, psychotherapy was the least endorsed trigger. *Threat by perpetrator* predicted amnesia, but not age of onset, abuse frequency, or use of physical force.

- Melchert (1996) reported full amnesia in 21% of physical abuse and 18% of sexual or emotional abuse. Nearly half of those who indicated that they had unconsciously repressed these memories also indicated that they could have remembered them.

Major problems with those studies are that they deal with reported abuse, and not actual abuse, and respondents may be confused about "repressing".

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories (continuation)

* *Adult Memory of Childhood Sexual Abuse* (continuation) :

D) *Prospective Studies*

- Williams (1994) studied prospectively 129 women who were originally part of a study on the immediate consequences of sexual abuse, as their sexual abuse has caused them to be brought to a hospital. Abuse was documented in detail in medical records, with corroborative evidence of physical injury found in 34% of cases. Therefore, this design prospectively examined abuse and amnesia for abuse in a nonclinical sample.

Seventeen years after the sexual abuse occurred, Williams conducted free recall and cued recall interviews. Respondents were asked about reports of sexual abuse and other kinds of abuse, but they were not asked about the target abuse. A total of 38% either failed to report the abuse or were amnesic, and 32% said they were *neve*r abused. An additional 16% reported that they had forgotten the abuse for a period of time and that they had recovered abuse memory before the interview. Over half of those who did not report the target abuse, talked about other abuse or embarrassing experiences. Some 2% even said that they were sent to the hospital as children on false allegation of abuse. There was a tendency for women with clearest evidence of abuse to be more amnesic. Being molested by a family member or having a close relationship with the perpetrator also predicted amnesia.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories (continuation)

* *Adult Memory of Childhood Sexual Abuse* (continuation) :

D) *Prospective Studies* (continuation)

- Widom & Morris (1997) conducted a long-term follow-up (20 years) study of children with a documented (court substantiated) history of physical abuse, sexual abuse, and neglect, as compared to demographically matched non-abused children. Interviewers and interviewees were blind to the reason of the study. Responses about abuse were compared to court records. A total of 37% of sexually abused children failed to report the abuse 20 years later. Age was not a predictor of underreporting.

However, nothing proves that amnesia was due to repression rather than normal forgetting or underreporting, although older age at the time of abuse was not associated with less amnesia than younger age. Furthermore, a "clarification interview" did not take place to confront memory of the target abuse.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories (continuation)

* *Accuracy of Recovered Trauma Memories*

- Williams (1995) addressed the question of accuracy as 75 of the 129 women recalled the details of the target abuse 17 years later. Of the 75, 16% reported a significant period of time during which they had forgotten the abuse. *Women with recovered memories had no more inconsistencies in their accounts than women who had always remembered; their retrospective reports were remarkably consistent with the original ones. Memory commission errors were about minor details and dates*; many could not remember the age at which the abuse occurred, nor could they report the age at which they had forgotten the abuse.

- Coons (1994) saught confirmation of abuse for 19 patients diagnosed as having a multiple personality disorder, and found evidence through investigations or witnesses of the abuse in 18 cases (95%).

- Kluft (1997) reported that abuse could be confirmed for 56% of 34 patients. A total of 53% have had continuous memory, while 47% recovered their memories in psychotherapy. All but two patients recovered their trauma memories under hypnosis.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories (continuation)

* *Accuracy of Recovered Trauma Memories* (continuation)

- Dalenberg (1996) studied the accuracy of memories of abuse recovered in psychotherapy for 17 women who always remembered some abuse, recovered substantial percentage of new abuse memories, were not involved in self-help groups, and did not have family members involved in the False Memory Syndrome Foundation. Evidence for abuse was gathered and rated; 60% of the abuse memories could be confirmed and 75% were rated very convincing or reasonably certain. The gist of both continuous and recovered memories was generally accurate, and there was no difference in accuracy.

So, memories of abuse recovered in psychotherapy were as accurate as memories who were always remembered, and the gist of the recovered traumatic memories was very accurate (accuracy rate over 70%). Moreover, half of the patients improved the accuracy of their memories over the course of treatment. Source attribution errors were, however, common; patients did not remembered well if they recovered a memory in psychotherapy or if it had been continuous. Memories recovered later in therapy were more likely to be accurate than those recovered early in therapy. Moreover, memories recovered after transference interpretations and alliance repairs were more accurate. Patients with borderline personality disorder presented the least accurate memories, and some patients presented quite inaccurate memories.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories (continuation)

* Summary by Brown, Scheflin, and Hammond (1997) :

- In all 30 studies reported by Brown et al. (1997), full amnesia was reported to range from 5% to 68%, with an average of 30% and a 10% variation around this figure. Partial amnesia ranged from 12% to 40%. The combined rate is 51%.

- Data on completeness of memory for trauma suggest a bimodal distribution, with a larger sample with continuous memories and a smaller sample with periods of full amnesia.

- Limited amnesia is more characteristic of single incident trauma and general amnesia is more common of multiple traumatic events.

- It is difficult to differentiate between amnesia and denial, and there is no consensus on the mechanisms by which trauma-specific amnesia occurs (repression, dissociation, state-dependent retrieval failure, or normal forgetting).

- Recovery of trauma memory occurs through expectable retrieval strategies such as free recall, context reinstatement, and reinstatement of emotional arousal.

- Hypermnesia and amnesia have little to do with accuracy.

- Those conclusions only apply to verbal memory only, although there is documentation supporting the existence of a behavioral, implicit memory system storing trauma memory.

- Trauma memories usually resurface somatically at first, with the narrative memory being incomplete, fragmented and increasing in both coherence and details over time.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

FALLIBILITY

Traumatic Memories in Children

* Summary by Brown, Scheflin, and Hammond (1997) :

- Behavioral memory for trauma may manifest itself in the form of behavioral reenactments in relationships, posttraumatic play, trauma-specific fears, or somatic symptoms.

- Children as young as 36 months possess a verbal memory of traumatic events, although it is often fragmented and incomplete, especially in young children.

- There are no known predictors of whether a trauma memory will be stored in the verbal and/or behavioral memory systems.

- In contrast to the adult studies, some child studies on single-incident trauma fail to find evidence for amnesia, although selective amnesia for bodily injury occurs.

- Full or partial amnesia occurs in young children who were victims of multiple sexual abuse. Amnesia occurs over long retention intervals and well into adolescence. There is some indication that amnesia does not manifest itself shortly after the sexual abuse.

- Traumatized children may be more suggestible to post-event information than nontraumatized children.

- Children caught in a custody dispute can report false allegations of abuse, although these children usually do not present PTSD symptoms.

- Studies demonstrate clear psychologically motivated distortion of trauma memory, especially when traumatization involves injury or threat.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Misinformation Suggestibility

* The original paradigm of the studies examining misinformation suggestibility was as follows :

- Subjects view a stimulus (e.g. slides) containing items to be encoded, including specific target items.

- *Post-event misinformation manipulation* consists of providing experimental subjects with a narrative about the stimulus, which contains misleading information about the target items.

- *Memory test* occurs after a retention interval and provides subjects with a forced-choice recognition test (e.g., pairs of slides). The misinformation effect equals the percentage of subjects selecting slides containing the misinformation in comparison to the original target items.

* In Loftus' experiments, control subjects typically gave better than chance responses, while experimental subjects gave worse than chance responses. Loftus has also demonstrated that just changing a specific wording (e.g., use "the" rather than "a") increase the misinformation effect (up to doubling it), showing how easy it can be to have some subjects incorporate *nonexistent* items into their recollections.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Misinformation Suggestibility (continuation)

* It is increasingly clear that the misinformation effect is a function of the type of target information and the type of post-event misinformation (Brown et al., 1997):

- In most studies, the misinformation effect was demonstrated mostly for stimulus details (which can be generalized to description of people) rather than central actions, unless subjects do not have a real memory for the actions. When memory for central actions is tested, commission errors are significantly lower than for peripheral details.

- Memory representation should not be confused with memory reports or beliefs.

- Viewing a stimulus does not equate experiencing it, as Loftus implied.

- Furthermore, the use of a forced-choice recognition test may induce commission errors because subjects are likely to make decisions based on familiarity. When subjects are asked to select the source of the information (original stimulus or memory performance test), the misinformation effect is eliminated completely. This latter finding emphasizes the possibility of *source confusion* in subjects.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Misinformation Suggestibility (continuation)

* Alternative hypothesis to the "memory impairment" suggested by Loftus view are :

- *Memory coexistence hypothesis* suggests that memory for the original target information coexists with the memory for the misinformation; the latter memory may be more easily retrieved because it is more recent.

- *Nonretention hypothesis* suggests that the original target information was simply not encoded and, therefore, can not be retrieved. Subjects who fail to encode are more prone to the misinformation effect.

- *Social persuasion hypothesis* states that a highly credible communication can persuade a recipient to change an attitude about a particular message. A credible source is viewed as trustworthy, fair, and unbiased. Source credibility and the personality of the recipient interact, with highly credible persons persuading more highly persuable individuals. Unstable attitudes are more likely to be changed through persuasion. When source credibility is controlled for, the misinformation is found to be eliminated; i.e., when subjects see the source of the information as biased, such as when it is provided by lawyers, the misinformation effect is eliminated.

* *Conclusion : While the existence of misinformation suggestibility is irrefutable, its interpretation is controversial. It is largely a function of uncertainty. The magnitude of this uncertainty is function of the social context (credible person using biased question). There is very little evidence supporting the memory impairment hypothesis (Brown et al., 1997)*.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Misinformation Suggestibility (continuation)

* Although the misinformation effect is a robust finding, its magnitude is rather small when memory encoding factors and social influences are controlled for; then, less than 3% of subjects are vulnerable to the misinformation effect.

* Nonetheless, false memory advocates continue to argue that the misinformation findings indicate that (1) false memory production in psychotherapy is very large; (2) therapy can result in the actual production of false memories, (3) and that such false memories persist so that the patient's subsequent behavior is potentially damaging to others (Brown et al., 1997).

* Although few would argue that psychotherapy can contribute to commission errors about childhood abuse, the weakness of the misinformation effect as applied to therapy lies in the fact that the studies emphasized cognitive factors rather than social influence factors (Brown et al., 1997).

* Studies on social influence showed that normal individuals, when questioned about memory for past events, can show very high rates of memory commission errors under very specific conditions of social influence :

- 42-76% in forensic studies for confessions, and 61-85% for partial confessions

- 37-72% in studies on child abuse investigations (Brown et al., 1997).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Misinformation Suggestibility in Children

* The desire to please an adult or the fear of intimidation may have a greater influence on children, especially younger ones, than on adults.

* Uncertainty about an event may be higher in children, especially for young children given that they present a high rate of omission errors at an early developmental level, leading to a greater vulnerability to persuasion.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Generalization to Recovered Memories of Trauma

* False memory advocates argue that the results of the misinformation effect are directly generalizable to the psychotherapeutic situation. Obviously, more caution should be exercised.

* As pointed out by Pezdek & Roe (1994), recovered memories of trauma in therapy involve repeated incidents of abuse, while all studies on the misinformation effect involve a single-incident presented once, except for one study which found that children, who saw the slides until they learned the items, were less likely to be influenced by the post-event misinformation.

* Pezdek & Roe (1994) pointed out another significant difference :

> "Most of the suggestibility studies are structured such that event A is observed, event B is suggested, and memory is tested for A versus B. In the generalization claims, A is never observed, A is suggested, and memory is tested for A versus not A." (pp.380-381)

* When Pezdek & Roe (1997) conducted experiments to test the difference between these two situations, a misinformation effect occurred only for the condition in which 10 year old girls were told that they were touched in a different way than they were (hand vs. shoulder), in comparison to when they were told that they were touched while they had not been, or the reverse.
* It can thus be relatively easy to effectively suggest to some individuals that a similar but different event took place, but it is more difficult to suggest that an event took place when no event occurred; social influences are required in those instances.

* Ceci & Bruck (1995) showed however, that with more powerful and persistent methods of suggestion, a substantial percentage of children can be led to make false reports of events that never occurred, including events that involve their own bodies and that would have been quite traumatic had they occurred (more detail in a later section).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Child Studies on Interrogatory Suggestibility

* In the "Sam Stone" study, control children made no commission errors when free recall was employed as a retrieval strategy, while 10% of control children made commission errors after being asked specific questions about Sam Stone (Bruck & Ceci, 1995). Although Sam Stone only came into the classroom and cleaned it, a total of 72% of experimental children reported actually seeing Sam Stone ripping a book or soiling a bear, after hearing multiple (12) scripted pre-event stories about Sam Stone's clumsiness and also hearing two post-event misleading questions about his actions during his visits over multiple interviews (5). About 21% of the experimental children persisted in their erroneous beliefs, even after being explicitly challenged. Therefore, social pressure can create false memory beliefs, while free recall was conducive to no commission memory errors (Ceci & Bruck, 1995).

* In another study, the beliefs of the interviewer was demonstrated to have significant effect on children's commission error rates, even if misleading questions were absent and free recall was used (Ceci & Bruck, 1995).

* In the "Mousetrap Study", the effects of repeated rehearsal of false information on memory was examined. For 10 consecutive weeks, experimental children were asked to think and visualize a fictitious event; for example, getting a hand caught into a mousetrap. The interviewer asked open-ended questions and leading questions. An impressive 58% of the pre-school children produced a false belief to one or more of the fictitious stories (Ceci & Bruck, 1995).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Child Studies on Interrogatory Suggestibility (continuation)

* In a subsequent study, the experimental children were warned that not everything presented in earlier interviews actually happened and they were asked to free recall the actual events. After 12 weeks of repeatedly suggesting fictitious events, 45-40% of younger and older children reported recalling fictitious events. However, children reported more positive and neutral fictitious events than negative ones (20%) (Ceci & Bruck, 1995).

* Basically, Ceci's studies demonstrate that the more elements of interrogatory suggestibility (biasing subjects and expectations, biasing interviewer's beliefs, systematic and repeated introduction of misinformation within and across interviews) are introduced about a past event, the greater the rate of suggestibility, with commission error rates varying from 20% to 72%.

* However, Ceci's findings also suggest that the risk of commission errors is lowered when free recall is employed, and when a subject is asked to examine critically the source of his memory, is challenged about the truth of his recollections, or is warned not to answer unless he is sure that the event actually occurred.

* When nonsuggestive interviews conditions are provided, the average amount of inaccurate information is 7%, and asking children to use a sensory-imagery prompt resulted in even less inaccurate memory reports.

* Furthermore, while systematically repeating misleading questions increase the likelihood of commission errors, systematically repeating open-ended questions does not (Brown et al., 1997).

* As these studies were designed with pre-schoolers, so they need to be viewed with caution.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Adult Studies on Interrogatory Suggestibility

* Nearly all studies on memory and suggestibility in adults have focused on misinformation suggestion for minor details of a complex event which took place, the generalization of the associated findings to psychotherapy have been criticized.

* In response, Loftus designed her "Shopping Mall Study" in which credible person (e.g. older sibling of an adult, graduate students) were asked to "implant" the memory of a plausible but yet false memory of being lost in a shopping mall at a younger age. While the strategy worked for 5 subjects, the design is non-experimental at best because no manipulation was conducted and no sample number was reported. Nonetheless, Loftus asserted that it was a demonstration of how a false memory can be easily implanted.

* In a follow-up study, Loftus & Pickrell (1995) presented 24 subjects with four childhood stories (three true and one false; a plausible trip to a department store). A total of 68% remembered the true stories, while 29% incorporated the misinformation in their reports. However, such study assumes that parental reports of children childhood experiences is accurate, while studies have repeatedly shown that parental reports are inaccurate, except for very memorable events (Brown et al., 1997).

* With more likely events, Hyman et al. (1995) found that the misinformation was not included by any subject in the first interview, but 25% of them incorporated it in the second interview. The authors recognized though that they failed to control for social/contextual influences which can inflate the base rate.

* Pezdek et al. (in press) conducted a similar study in which they found that 15% of the subjects accepted a familiar false suggestion (lost in a mall) while 0% accepted unfamiliar suggestion (rectal enema).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Interrogatory Suggestibility

* Most of the studies on interrogatory suggestibility (IS) have been conducted by Gudjonsson and his associates, providing a model for understanding under which conditions significant memory commission errors can occur.

* Gudjonsson argues that IS is essentially different from other types of suggestibility, such as hypnotic suggestibility or misinformation suggestibility, due to the operation of social influences as compared to cognitive factors (Gudjonsson & Clark, 1986).

* The definition of IS has three components :

1. misinformation suggestibility

2. social influences:
   - response bias
   - source credibility
   - interpersonal pressure (explicit and implicit positive and negative emotional feedback)

3. demand for behavioral response

* Because therapy is a social interaction, studies on IS may be relevant to the understanding of false memories of abuse (Brown et al., 1997)

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Interrogatory Suggestibility (continuation)

* According to Gudjonsson & Clark (1986), IS has six interrelated elements :

1) - a closed social interaction (flow of information goes in one direction)

- little opportunity to learn alternative hypotheses

- a clear power differential (the interviewee is not allowed to challenge the interviewer)

2) - a questioning procedure focusing on a memory for a past experience

- the interviewee's cognitive set and coping resources interacts with the questioning procedures, leading to either suggestibility or resistance

- there are cognitive factors associated to increased suggestibility (being uncertain about the event, manipulation of the expectation that the event can be known-having a rigid hypothesis about the event-, and development of interpersonal trust between interviewee and interviewer)
- questioning procedure may involve systematic rewards and punishments

- more passive avoidant coping -trying to avoid confrontation with the interviewer- leads to more suggestibility

3) - a suggestive question communicating plausible premises about the suspect's involvement in the crime

- the questions are leading and misleading, implying a desired response

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Interrogatory Suggestibility (continuation)

4) - some form of acceptance of the stimulus message, in terms of memory interference and not merely a compliant verbal response (although the latter occurs)

5) - a behavioral response, like the recognition test in misinformation studies, although the behavioral response required in police interrogation settings is much more elaborate as it takes the form of a verbal or written confession

- the elaborateness of the behavioral response is important in that it reinforces either suggestibility or resistance (as studies on cognitive dissonance have shown that requiring someone to behave in a manner contrary to their original attitude contributes to attitudinal change)

6) - feedback, in terms of negative emotional feedback in police interrogation, which is provided after a behavioral response in order to strengthen it or modify it

* IS increases in likelihood of true confessions and false confessions, although the absolute number of false confessions is unknown.

* *IS is composed of a trait of suggestibility and interpersonal influences.*

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Interrogatory Suggestibility (continuation)

* Brown et al. (1997) concluded that, although there are no studies on suggestion in psychotherapy per se, the construct of interrogatory suggestion might apply to psychotherapy. They hypothesized that *false beliefs about past events have a high likelihood of developing in psychotherapy when most or all of the basic elements of interrogatory suggestion are recreated in the therapeutic interaction*. This happens when :

1) Therapy is a *closed social interaction*
   - with a *one-way exchange* of information from therapist to patient and with little opportunity given to explore alternative hypotheses about the experience in question
   - where there is a marked *power differential* in the therapy relationship; so the risk is greater with an authoritative therapist
   - when the therapist fosters a progressive *sense of dependency* in the patient

2) The therapist utilizes a *questioning procedure* that
   - *narrowly focuses on the past*, e.g., strictly memory recovery
   - specifically focuses on events that have a high degree of *uncertainty*
   - introduces a clear *interrogatory bias* in which the therapist intentionally manipulates the patient's *expectations* about the past event in question and/or the therapist has a rigidly narrow and fixed belief about past abuse that is held with great conviction and certitude
   - exerts *interpersonal pressure* in the form of positive and negative emotional feedback, or rewards and punishments for the patient's responses that do or do not confirm the therapist's beliefs about the past abuse

These interrogatory strategies are likely to be more effective in patients who do not have adequate *coping resources* to resist the therapist's unduly suggestive influences.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Interrogatory Suggestibility (continuation)

3) The therapist *systematically leads and misleads* the patient instead of allowing the patient an open-ended opportunity to freely recall his or her experience. The therapist persistently introduces plausible misleading suggestions repeatedly, both within and across therapy sessions.

4) The therapist overtly or subtly demands that the patient *accept* the premise about the abuse as his or her own memory.

5) The therapist encourages a *behavioral response* in the form of a written narrative of the abuse, a testimonial in a survivor group, or a confrontation with the perpetrator or other party associated with the alleged abuse.

* These techniques seem to occur mostly in self-help groups, especially those in which peer confrontational techniques attack the patient's sense of self. These kinds of practices occur in psychotherapy, but they are unlikely to occur in trauma treatment which abides to a standard of care, as described later (Brown et al., 1997. pp 284-285).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Interrogatory Suggestibility (continuation)

* Interrogatory suggestibility can be measured by the Gudjonsson Suggestibility Scale (Gudjonsson, 1984), in terms of memory recall and memory suggestibility.

* In this test, the subject is read a story of a woman who goes to a foreign country and has her handbag stolen. After an immediate or delayed free recall, the subject is asked 20 questions (5 are accurate and 15 are misleading). Afterward, the experimenter reviews the subject's answers and disapproves the answers in an authoritative manner. The questions are asked again to assess the impact of the social pressure.

* Misinformation suggestibility can be measured ("Yield" score), as well as vulnerability to interpersonal pressure ("Shift" score). Those two factors have been empirically identified through factor analysis (Gudjonsson, 1984).

* The Yield score differs from Loftus' misinformation effect in that 75% of the questions are misleading in the GSS, while 1 to 4 questions only are misleading in the Loftus' experiments.

* Normative data support the view that interrogatory suggestibility is a *stable trait* which requires two elements to be operative :

- *misinformation*

- *vulnerability to social pressure*

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Interrogatory Suggestibility (continuation)

* There exists of subpopulation who is highly suggestible to interrogatory suggestion.

* S*uggestibility and memory capacity* are negatively correlated, lending support to the contribution of general uncertainty about past events to suggestibility. Similar findings were also observed with memory decay.

* The GSS also provides a "Confabulation" score, or commission errors made in the free recall portion of the memory test; usually, this score is very low in normals. Memory decay and emotional feedback increase the Confabulation score.

* As there is a highly significant correlation between suggestibility and accuracy, the GSS can be useful in psychotherapy settings to ascertain the degree to which memory reports of an individual are likely to be accurate or not in a context of misinformation and social pressure.

* Leavitt (1997) reported that psychiatric controls produced higher GSS scores than recovered memory patients who presented with very low GSS scores.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Hypnosis and Suggestibility

* The American Medical Association's scientific report (1985) on hypnosis led by Martin Orne has been criticized. It is not endorsed by other professional organizations for many reasons :

- their definition of hypnosis (the presence of a formal induction ceremony rather than the verified induction of an hypnotic trance)
- their limited focus on laboratory studies on nonmeaningful details of unstressed memories
- the paucity of good studies on hypnosis and memory before 1985, and the acceptance of conclusions without supportive data (e.g., hypnosis alters memory)
- the creation of incomplete and inaccurate guidelines intended for forensic hypnotic settings (i.e. the use of hypnosis invalidates a a witness' testimony)
- a fundamental misunderstanding that errors in memory are artifacts of hypnosis

* Hypnosis is a phenomenon that is characterized by a *state of attention* and *receptive concentration* which contains three elements: *dissociation, absorption, and suggestibility*. Hypnosis may be suggestive or insight-oriented in nature.

* In courts, hypnosis is usually defined as whether or not a hypnotic induction ceremony has been performed or not, regardless of the hypnotizability and the actual induction of a trance (Brown et al., 1997).

* *The use of hypnosis in reviewing traumatic events will most likely impede a patient's right to testify in court*. It is necessary to inform patients of this serious limitation of the use of hypnosis on their civil rights as patients can sue psychotherapists for not having provided information in that respect.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Hypnosis and Suggestibility (continuation)

* According to Brown et al. (1997) :

- Hypnosis may produce *hypermnesia*, that is, an increased memory accessibility that results in a significant increase in the total amount of information recollected about a target event, which is independent of its accuracy.

- Laboratory studies have shown that hypnosis *does not* produce hypermnesia for *nonpersonally relevant details* associated with unemotional events that have been briefly observed in normally functioning individuals. *A generalization from these studies to clinical or forensic situations is scientifically unsound.*

- When meaningful information is used (e.g. prose learned a year or more before), increases in correct units of recall varied between 54-67%, although Orne called those gains "a modest increase in accurate recall".

- When studies found no superiority for hypnotic memory enhancement efforts and an increase in confident recalls of incorrect items was observed, there was a serious flaw in the research design in that a forced-choice procedure required everyone to answer all questions, conveying to the subjects that they must guess when they are unable to remember, as it was experimentally demonstrated. *Such results are therefore not generalizable to a sound clinical or forensic practice where free recall is employed.*

* Brown et al. (1997) wrote :"*Indeed, the assertions that hypnotically assisted recall represents an invitation to enter fantasy land is inherently distorting, are substantially a result of drawing conclusions from certain studies that by their very design have required subjects to fantasize and guess when they did not recall an answer."* (p.299)

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Hypnosis and Suggestibility (continuation)

* In a well designed-study, Hofling et al. (1971) found that repeated recall efforts of a diary content led to an 11% increase of information, while hypnotically enhanced repeated recall efforts produced a unique improvement of 43%. There was only 1% of contradictions (as in commission errors) observed in the hypnotic group in comparison to 0.5% in the control group. Additional units of information (those which were not present in the diary) were observed in only 8% of the recall accounts in the hypnotic group in comparison to 20% in the control group. Accurate hypermnesia was thus observed with an age regression hypnotic induction and personally meaningful information (experiences during the day). Such findings are more generalizable to clinical or forensic settings.

* Similarly, Stager & Lundy (1985) found that highly hypnotizable subjects produced greater recall in a hypnotic condition than medium or low hypnotizable subjects in a nonhypnotic state, without a concomitant increase of inaccurate information. The memory retrieval procedure was performed using open-ended questions rather than a forced-choice procedure. Similar findings were obtained by Shields & Knox (1986) who used a similar procedure.

* However, highly hypnotizable subjects are more likely to respond to leading questions than low hypnotizable subjects, whether they are hypnotized or not. *Therefore, hypnotizability as a trait appears to be a vulnerability factor to the misinformation effect, rather than hypnosis per se*.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Hypnosis and Suggestibility (continuation)

* According to Brown et al. (1997), "confabulation" or commission errors under hypnosis were observed only in studies involving cognitive misinformation, social influences, a very brief retention interval (as longer retention intervals increase memory performance in free recall of meaningful information) and/or very little emotional involvement, and especially with high hypnotizables.
* Therefore, it appears that, under conditions resembling clinical or forensic practice (free recall after long retention intervals for emotional or meaningful events), hypnosis (including mental imagery) increases the amount of accurate information obtained with fewer incorrect items, especially in highly hypnotizable subjects.

* Yuille & Kim (1987) found that, in police investigations, hypnosis tripled the amount of information provided in regular interviews, without increased errors.
* Kluft (1996) found that, with 34 patients with dissociative identity disorder, 56% were able to provide corroboration for the abuse recovered in treatment, and, of that, 85% were recovered under hypnosis.

* The Los Angeles Police discovered that, in 151 cases of hypnotic interviews where corroboration was obtained, hypnotically obtained information was verified in 90% of the time. Of the 113 cases which have been solved using hypnosis, case investigators felt that hypnosis was instrumental in 66% of the time (Ross, 1977).

* *The closer the research design is to real-life uses of hypnosis, the more likely hypnosis will facilitate memory without an increase in errors or confabulation*. However, hypnotically enhanced memories should not be taken as representing historical truth as commission errors do occur (Laurence, Day, & Gaston, 1999).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Hypnosis and Suggestibility (continuation)

* Research shows that a mild *increase in false feelings of confidence* in one's memory may often happen in the laboratory when hypnosis is used to elicit memories in highly hypnotizable subjects, but this effect might be mostly due to expectations conveyed through explicit suggestions about the nature of hypnosis.

* Consequently, *clinicians need to be cautious and careful in the phrasing of suggestions associated with memory retrieval*.

* Clinicians need to structure neutral and appropriate expectations about the nature of hypnosis :

- *hypnosis can produce both accurate and inaccurate information,*

- *hypnosis may or may not increase recall*

- *only through independent corroboration, one may know the accuracy of the information obtained under hypnosis*

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Hypnosis and Pseudomemory Reports

* While *hypnotic pseudomemory suggestion* has been the focus of considerable research, it now seems questionable that pseudomemory reports are the product of hypnosis per se, but rather of social influences and situational demands.

* According to Brown et al. (1997), there are three generations of studies on pseudomemory reports :

- the first generation represents a pre-controlled experimental period which led to Orne's recommendations and audiovisual demonstrations of how pseudomemories can be easily created and believed by the subjects (one by Orne and one by H. Speigel, which were brought in courts to make demonstrations).

- the second generation consists of elementary experiments which did not control for hypnotizability in and out of hypnosis (e.g. Laurence & Perry, 1983) :

Highly hypnotizable subjects were told under hypnosis that one night of the previous week they were awakened by a loud noise. A total of 48% accepted the suggestion, and 22% (1.9% of the general population as 9% are highly hypnotizable) reported that they were unequivocal in their certainty about the event, even when they were demonstrated that it was suggestion.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Hypnosis and Pseudomemory Reports (continuation)

- the third generation represents sophisticated studies which have controlled for hypnotizability level, whether or not a hypnotic state was induced using a formal induction ceremony, and the nature of the social/contextual demands (conducted by Spanos, McConkey, etc).

They found that : *Highly hypnotizable subjects are more prone to produce suggested reports of pseudomemories, especially for peripheral details imbedded in plausible events, and pseudomemories can be created with or without hypnosis, especially under conditions of social influence and uncertainty about the event.*

* *Therefore, if an individual believes from reading various literature, viewing television documentaries, attending incest survivors groups, that abuse may have occurred, this expectation may increase the likelihood that the person may "recall" such an event. Especially if this person if highly hypnotizable, and the therapist conveys the message that sexual abuse might be at the root of the problems and that hypnosis is likely to assist in eliciting accurate abuse memories.*

* In Coon's study (1994) of satanic ritual abuse (SRA) cases in dissociative disorders, 17 of 29 patients came forward within 2 years after a Geraldo Rivera show on SRA and 10 came forward 1 year after a local workshop on SRA. In other words, 92% entered the program after one of these two media events. Only 2 came in with memories that were not elicited through memory recovery techniques. No confirmatory evidence was found.

* In hypnotically induced pseudomemories, significant perceptual distortions can occur in a small minority of highly hypnotizable individuals (about 6% are hypnotic virtuosos) who seem to mistake hypnotically suggested fantasies for reality. But these individuals believe less their pseudomemories when they are encouraged to provide honest answers and compliance pressure is minimized (Brown et al., 1997).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Dissociation, Fantasy-Proneness and Pseudomemory

* Barrett (1992) has identified two subgroups of high-hypnotizable patients:

- *fantasizers* (most produce entirely realistic imagery, can have an orgasm through fantasy absorption, and report having memories as early as 2-3 years old, none experience spontaneous amnesia, all rapidly enter a deep trance similar to their daydreaming state, none present with PTSD or dissociative identity disorder)

- *dissociators* (none produce realistic imagery, none can have an orgasm through fantasy absorption, none has memory before 3 years old, most experience spontaneous amnesia while all experience suggested amnesia, all dissociators needed time to reach a deep trance, and many present either with PTSD or dissociative identity disorder, along with psychophysiological reactivity and spontaneous amnesia after an anxiety-provoking stimuli)

* *Individuals who are highly hypnotizable and fantasy-prone thus appear to be likely to accept suggestions for pseudomemory production*.

* Fantasy-proneness may also be a reaction to early trauma, such as physical punishment, and a predisposition to mental disorders (Brown et al., 1997).

* Importantly, subjects who were found to respond to a *dissociative suggestion* for having a hidden observer have also been found to be more likely to express belief in the accuracy of a hypnotically suggested pseudomemory (Laurence et al., 1986). *Therefore, therapists need to be especially careful in using dissociative hypnotic techniques as they may increase the likelihood of pseudomemories.*

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

MEMORY SUGGESTIBILITY

Hypnosis in Trauma Treatment

* In conclusion, when using hypnosis in psychotherapy, ...

- patients should be educated about hypnosis

- neutral expectations should be structured first

- an informed consent should be obtained before using insight-oriented hypnotic techniques

- the informed consent must inform the patient that participating in such hypnotic session will most likely deprive him or her of the possibility of testifying in court against a perpetrator if any is identified

- free recall interviewing techniques should first be employed, and testimony should be audiotaped (ideally more than once)

- clinicians should pay attention to the phrasing of suggestions employed for memory retrieval

- such hypnotic techniques should be used only within a comprehensive treatment plan and for complex problems (resistant to simpler interventions)

- clinicians are advised to follow the guidelines issued by the American Society of Clinical Hypnosis (Hammond et al., 1995)

* *These cautions should also be applied to journaling as a memory recovery technique (Brown et al., 1997; Knapp & Vandecreek, 1997).*

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Complaints Against Psychotherapists

* In general, there are three types of complaints that psychotherapists can encounter when or after having treated someone who claimed having been abuse as a child:

- complaints before ethics committees or state licensing boards, which can lead to letters of reprimand or censure, an obligation to seek supervision, or revocation of license or membership. The very existence of a sanction may identify the practitioner as high risk for malpractice insurance or managed care panels. Such complaints are easy to file.

- malpractice lawsuit before a civil court of law, which legal requirements are: the psychotherapist owed a duty to the patient, the psychotherapist deviated from acceptable professional standards, and that deviation directly damaged the patient (e.g. worsened psychological state and impaired family relations). In California, a third party cannot instigate such lawsuit against a psychotherapist since 1999 as parents do not have a fiduciary relationship with the therapist of their adult child (Caudill, 1999; seminar communication).

- defamation may be the reason for a lawsuit by a third party when a public comment (as in a letter) identifies the third party as a perpetrator rather then making it clear that the information about abuse is based on the patient's report.

* Nontraditional treatment procedures, as those employed in trauma treatment, may be especially vulnerable to malpractice lawsuits unless the patient has been fully informed of the procedures and has given informed consent to the procedures.

* Proving damage may be easier to do when the therapist assumed responsibility for retrieving lost memories of childhood abuse and the patient disrupted the family relationships based on that belief.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

The Standard of Care

* The standard of care is defined by professional peers in terms of regulatory and ethical guidelines, and by the experts within a given clinical domain such as trauma treatment.

* In a malpractice suit, the plaintiff would have to demonstrate that you provided substandard treatment which directly caused harm.

* According to Brown et al. (1997), to meet the standard of care, a clinician needs to :

- occasionally seek consultation, practice within a professional group where cases are regularly reviewed, or practice without peer supervision but sufficiently document the treatment. Consultation is a very effective risk management procedure (Knapp & Vandecreek, 1997).

- secure a license and maintain membership to professional organizations, and familiarize oneself with the state mental laws and code of ethics

- familiarize oneself with the evolving clinical and scientific literature on trauma, memory and trauma treatment, and/or participate in ongoing continuing education on trauma treatment and related issues

* Therefore, clinicians who practice without becoming knowledgeable in the literature on memory fallibility and suggestibility are at risk of being sued for malpractice, as the standard of care is defined at the time of the treatment (Brown et al., 1997). *The overall goal is to improve the patient's functioning*.

* *Trauma treatment needs to be phase-oriented in order to meet the standard of care, and memory recovery techniques should be employed only after the patient is stabilized and only if symptoms or problematic behaviors persist (Gaston, 1995).*

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Training

* According to Brown, Scheflin and Hammond (1997),

- practitioners have a duty to be trained in trauma treatment before offering such treatment to their patients

- the same logic applies to hypnosis; practitioners have a duty to get adequate training in hypnosis before employing hypnotic techniques with patients, especially with respect to insight-oriented techniques

- practitioners should also be familiar with the current legal rulings about the admissibility for hypnotically refreshed memories

* Before offering trauma treatment, practitioners should have a working knowledge of developmental theory, memory theory, suggestibility, trauma theory, dissociation, psychopathology, and assessment.

* Those claiming to be trauma specialists will be held against higher standard of care in a court of law.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Informed Consent

* For an informed consent to be valid, the patient needs to be informed before consenting; the clinician has a duty to sufficiently inform a patient about the nature of the treatment, and its limitations and risks.

* Previous court dealings with informed consent have ruled that patients must have the opportunity to learn the risks and benefits of the treatment procedure (Knapp & Vandecreek, 1997).

* According to Brown et al. (1997), the patient needs to be informed of the following :

- the general nature of treatment and what to expect; a description of trauma treatment, along with its goals and interventions, with a focus on the chief complaints for which the patient sought treatment

- information about memory functioning and its influences; memory is imperfect and that emotionally arousing memories which are vivid and evoke one's confidence in them can be quite inaccurate; memories do not represent historical truth; detail reconstruction, source misattribution, dating errors and filling in the gaps often happen

- the myths associated with such techniques, such as the idea that recovered memories are accurate, if treatment involves memory enhancement techniques

- the benefits and risks of memory enhancement should be discussed

- the suggestive influences potentially happening outside or inside therapy

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Informed Consent (continuation)

- without corroborative evidence, a testimony of childhood abuse will be challenged in an adversarial legal system

- trauma treatment and legal actions against perpetrators will most likely work at cross purposes, with the destabilizing effects of the legal action cancelling out the benefits of trauma treatment and potentially undermining the legal action, especially if hypnosis is used by making memory claims potentially perceived as invalid due to the possibility of undue suggestion. In Poole et al. (1995) study, 6% of patients who recovered memories of "lost abuse" took legal actions against the alleged perpetrators.

- explicit warnings that all that we remember is not true, to report only what is really remembered, to remind about the cost of wrongly identifying a perpetrator, because these strategies have been found to decrease misinformation suggestibility. Psychotherapists should not be oblivious to the consequences for others as the APA code of ethics (1992) states that:

> in their professional actions, psychologists weigh the welfare and rights of their patients or clients, students, supervisees, human research participants, and other affected persons... (Principle E)

* Patient should receive a written summary of these points.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Informed Consent (continuation)

* Before using hypnosis, patients should have signed a consent form as provided by the American Society of Clinical Hypnosis (Hammond, 1995).

* Sample Consent Form provided by Knapp & Vandecreek (1997):

Informed Consent Form

My psychotherapist, _____, has informed me, _____, of the benefits and limitations of using _____ (hypnosis, age regression, etc.).

My psychotherapist has informed me that the perceptions or impressions uncovered under _____ (hypnosis, age regression, etc)

a. may not be accurate;

b. may be perceived as vivid and real, even if they did not occur; and

c. may be influenced by the method of presentation by the psychotherapist, my personal experiences, and other extraneous factors.

_____ _____

signature of patient date

_____

signature of psychotherapist

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Evaluating Expectations and Beliefs

* Brown et al. (1997) advise getting information on the patient's expectations and beliefs about the treatment, as well as the patient's explanatory model for the presenting problems in order to :

- identify and rectify unrealistic expectations and cognitive errors about therapy

- to ascertain that the patient has neutral and realistic expectations with respect to the treatment and memory functioning

- to establish some hope that the treatment can be helpful

* Therapists must also identify their own *beliefs and possible biases* about psychotherapy, trauma and memory. Therapists who have been abused themselves as children must be especially careful in ascertaining that their own experience does not contaminate their perceptions of the patient's experience.

* The goal is to build a healthy scepticism (Knapp & Vandecreek, 1997).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Assessing the Problem

* The central goal of the intake is to conduct a comprehensive assessment and establish an integrated treatment plan. In doing so "Psychologists rely on scientifically and professionally derived knowledge when making scientific or professional judgments or when engaging in scholarly or professional endeavors (APA 1992). And, psychologists are encouraged to take seriously Standard 2.04(b) of the ethics code, which states that "psychologists recognize limits to the certainty with which diagnoses, judgements, or predictions can be made about individuals (APA, 1992).

* In that respect, psychotherapists should ask patients about past abuse, but should be careful in overidentifying past abuse (as in improperly using checklists of symptoms to define the occurrence of abuse, using overly broad definitions of abuse, using an unfounded belief in symptoms indicating abuse, and overemphasizing denial) (Knapp & Vandecreek, 1997).

* Psychotherapists should also be careful in correlating past abuse with actual dysfunctioning of patient. Patients' difficulties may be due to temperamental dispositions, personality disorders, past family dysfunctioning, or actual stressors. Knowledgeable psychotherapists do not confuse correlation with causation (knapp & Vandecreek, 1997).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Assessing the Problem (continuation)

* Intake notes should include the chief complaint, the diagnosis(es) on the DSM axes, the history of the present illness(es) and of previous ones, the familial, educational, occupational and interpersonal history of the patient, the psychiatric condition of the members of the family of origin, a case formulation and treatment plan (short-term and longer-term objectives, and short-term and longer-term interventions). In particular, it is important that clinicians document previous psychotherapies, any past or present chemical dependence, any past or present violent behavior, developmental problems, ego strength, coping resources, current level of functioning, current stressors, *and a trauma history*.

* According to Brown et al. (1997), when allegations of childhood abuse are present, the individual should be evaluated for the presence of certain traits which may predispose them to suggestibility and the production of pseudomemories, even if the use of hypnosis is not planned. They are :

- *hypnotizability*

- *memory suggestibility*

- *dissociative capacity*

* The capacity for hypnotizability or memory suggestibility should not be equated, however, with the likelihood that the memory productions of the patient are necessarily inaccurate. To ascertain a memory as being true, only corroborative evidence is acceptable. Otherwise, the clinician needs to consider a probabilistic perspective toward the patient's memories (Brown et al., 1997).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Assessing the Problem (continuation)

* The benefits of assessing hypnotizability resides in the possibility that spontaneous hypnotic trances may occur in highly hypnotizable individuals, which will increase the risk of suggestibility. With such an assessment, a clinician is warned about a patient's vulnerability regarding the production of pseudomemories, with or without hypnosis. Documenting that the patient scored low on a standardized hypnotic suggestibility scale provides support for the low likelihood that this patient would develop pseudomemories (Brown et al., 1997).

* In *People vs. Caro* (1988), a score of low hypnotizability was retained as evidence that a person was not hypnotized although a formal hypnotic induction ceremony was conducted (Brown et al., 1997).

* Memory suggestibility should be measured by the Gudjonsson Suggestibility Scale, GSS (Gudjonsson, 1984). According to Brown et al. (1997), the GSS should be given at the beginning of an intake with an immediate memory performance test. The delayed memory test can then be conducted at the end of the intake, followed by the 20 interrogatory questions, the negative feedback instructions and the 20 interrogatory instructions again.

* If a patient scores high on the GSS, the therapist needs to carefully document the potentially suggestive interactions with this patient who is at risk of developing pseudomemories. The patient needs to be informed of that vulnerability, and memory enhancement procedures should be avoided. If they cannot be avoided, a written consent form should stipulate that the patient was informed of that vulnerability and that any memory production can be inaccurate due to suggestive influences (Brown et al., 1997).

* The GSS should be administered by another clinician because the administrator is required to give negative feedback to the patient in an authoritative manner, which may unnecessarily induce negative feelings.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Assessing the Problem (continuation)

* *Diagnoses which have been empirically associated with memory distortions should also be considered: dissociative disorders, hysteria, and borderline personality disorder*. A formal assessment procedure should be employed; e.g., the Structured Clinical Scale for DSM-IV, or SCID, or PTSD scales on the MMPI (Gaston, Brunet, Kosycki, & Bradwejn, 1998).

* With patients who have recovered memories of abuse, the clinician needs to document the presence of PTSD symptoms, the course of the associated problems (somatic complaints, PTSD symptoms, etc), the exact conditions under which the abuse memories have been recovered, whether the patient has been reading books or seen television programs about childhood abuse, participated in self-help groups for sexual abuse survivors, or associated with people who had reported similar abuse. Clinicians need also to consider that these circumstances may not necessarily have acted as suggestive influences but rather as triggers of unaccessed memories of abuse (Brown et al., 1997).

* When patients come to therapy without any memory of childhood abuse but present signs or symptoms, a probabilistic approach has been suggested (e.g. Brown et al., 1997). Extreme caution should be exercised with a probablistic approach, and it is discouraged by Gaston.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Assessing the Problem (continuation)

* Brown et al. (1997) suggest that, if one might seriously suspect any childhood abuse, two assessments are required :

- the patient's *dissociative capacity* should be high since amnesia for abuse if associated with dissociation

- the patient's *hypnotizability* score should be low

* According to Brown et al., several mistakes need to be avoided :

- making an "abuse diagnosis" because such diagnosis does not exist

- making a PTSD diagnosis in the absence of criterion A; PTSS (posttraumatic stress symptoms) would be more appropriate
- communicating a suspicion of abuse before evaluating the patient's suggestibility and hypnotizability

- presenting the suspicion of abuse as the only plausible hypothesis

- over or under diagnosing dissociative identity disorder, DID. Those scoring high on the Dissociative Experience Scale (Bernstein & Putnam, 1986) should go through a formal assessment of DID with the SCID-D (Steinberg, 1993).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Treating Trauma Patients

* The standard of care requires that treatment be *phase-oriented* (e.g., stabilization, integration, and consolidation).

* The standard of care also requires that treatment be eclectic and *integrative* with the inclusion of dynamic, humanistic, existential, cognitive, behavioral and neurobiological elements depending on the patient's characteristics, the phase of treatment, and the treatment goals (Brown et al., 1997; Gaston, 1995).

* The clinician should make every efforts to minimize the stress associated with being interviewed, and therefore minimizing the risk of suggestive influences. The clinician must make the patient feel free to discover, and to consider alternative hypotheses (Brown et al., 1997).

* Memory enhancement is within the standard of care as remembering, integrating and making sense of previous trauma experiences has a clinical utility apart from the issue of memory accuracy (Nash, 1994).

* Such frame of reference aims at enhancing the patient's functioning level.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Documenting Therapy

* According to Brown et al. (1997), the more serious or unusual the allegations of childhood abuse are, *the more the therapeutic work needs to be documented.*

** Extensive process notes are required, if not notes taken during the interview. In court, a clinician's best defense rests on extensive notes about a psychotherapy delivered according to the standard of care.*

"If it isn't written, it didn't occur."

* In addition to what was previously mentioned, notes should document :

- the maintenance of a neutral stance toward the alleged abuse and perpetrator, and the avoidance of offering any opinion without corroborative evidence

- a summary of the content of each session (the treatment foci, the interventions and the goals, along with the criteria that assess progress toward these goals)

- the efforts made to encourage a critical evaluation on the part of the patient toward the material elicited through memory enhancement techniques, minimizing suggestive influences (e.g. phrasing of suggestions and questions asked)

- the efforts made to discourage confrontation with alleged perpetrators, and explore the negative consequences of such confrontation, for both the patient and family (Caudill urges against therapists to refrain from family confrontation as part of therapy; Knapp & Vandecreek, 1997)

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Documenting Therapy (continuation)

- a detailed description of the abuse memory account using free recall retrieval strategy, and more than once (as memory completeness increases with repeated free recall), before utilizing any memory enhancement procedure

- the use of any memory enhancement technique should be recorded, ideally on a videotape in order to be able to demonstrate that no suggestive influences were provided

- the patient's recollections before, during and after any memory enhancement procedure. The information to be obtained is: details of the abuse actions, duration, location and time, what happened before and after, the identity of the alleged perpetrator, the presence of recovered memories and the context in which the memories have been recovered. In this way, the clinician protects the legal rights of the patient by minimizing the risk that pre-therapy recollections of abuse will be dismissed in a court of law (Brown et al., 1997)

* Notes should document that diagnosis and treatment procedures were reconsidered when patient did not improve. Patient progress should also be documented regularly.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Framing the Therapeutic Relationship

* The APA ethics code requires that psychologists avoid multiple relationships with patients that may compromise their objectivity (boundary violations). The therapist should give patients with as much control as possible, avoid overuse of interpretations, avoid encouraging patients to detach from their families, avoid inappropriate personal disclosures, and maintain appropriate boundaries (e.g. frequently accepting patient phone calls).

* The actual standard of care requires clinicians to obtain informed consent regarding the therapy-defeating or self-defeating behaviors which will or will not be tolerated to pursue the treatment, as victims of childhood abuse may present boundary difficulties (for specific details, the reader is invited to consult Pearlman & Saavitne (1995)).

* Clinicians needs to be aware that an authoritarian attitude may contribute in creating a closed social interaction, which in turn may foster the production of false reports of abuse if other elements are present. Such an attitude also unnecessarily reiterates for trauma victims the experience of having to submit to someone in an authority position with the risk of suffering consequences otherwise. An expert, supportive and egalitarian attitude is recommended, thus respecting the patient's sense of control and points of view, as well as fostering the patient's autonomy. This is in fact one of the major goals of the first phase of trauma treatment (Gaston, 1995).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Enhancing Memory

* The APA (1992) code of ethics Standard 1.04(c) cautions psychologists about using unproven techniques. General Principle A (Competence) reads as

In those areas in which recognized professional standard do not yet exist, psychologists exercise careful judgement and take appropriate precautions to protect the welfare of those with whom they work

These apply to enhancement memory techniques which goal is to retrieve memories rather than integrate traumatic information.

* According to Brown et al. (1997), the question is not whether memory enhancement techniques should be used or not, but how they should be used. "*The task of memory enhancement is to decrease memory omission errors without increasing memory commission errors*" (p.517).

- The therapist must have confidence in the patient's capacity to remember, and not suggest that memory may be increasingly clear and vivid.

- The therapist must invite the patient to tolerate ambiguity and uncertainty about past events, rather than prematurely trying to fill in the gaps in order to reduce the associated anxiety. The therapist should explicitly tell the patient to say "I don't know" or "I don't remember" whenever it is indicated. A scientific attitude must be adopted, considering every plausible alternative hypothesis.

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Enhancing Memory (continuation)

* The clinician must be able to differentiate the various strategies for memory retrieval :

- *free recall*, lowering the risk of memory commission errors, and repeated free recall increasing the chance of producing accurate information
- cued recall
- leading recall
- misleading recall (with memory commission increasing from cued to misleading recall)

Suggestions that supply content to the patient need to be avoided at all costs. Questions about the specific details should follow the complete narration of the abuse.

* When free recall is not sufficient, the therapist must consider the advantages and disadvantages of employing any other strategy, paying particular attention to the risk of commission errors.

* Cued recall in terms of *context or state-dependent* strategies should be employed next, as focusing on the details of the context of an event or the associated emotions has been found to increase memory performance without increasing memory commission errors (Brown et al., 1997).

* Dissociative techniques which involve asking explicitly or implicitly to use one's imagination should be employed with great caution, balancing the patient's well-being with historical accuracy (Brown et al., 1997; Laurence, Day, & Gaston, 1999).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Enhancing Memory (continuation)

* When managing elicited memories, the first goal is to reduce the patient's stress and intense emotions associated with their production because high stress can lead to memory commission errors. While providing support and empathy to the patient, the therapist needs to assist the patient to critically evaluate the elicited memories in light of our knowledge of memory (Brown et al., 1997).

* If the retrieval of abuse memories may affect the lives of others, the therapist is advised to explore the issue of external corroborative evidence, without having a duty to investigate the question and actively seek corroborative evidence as false memory advocates recommend (Brown et al., 1997).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

STANDARD OF CARE

Identifying "Red Flag" Situations

* Hammond et al. (1995) have identified several situations in which a therapist must consider whether or not treatment should be undertaken and the validity of a recovered memory may be questioned :

- history of switching therapist

- when the possibility of litigation is raised, and the patient is very familiar with psychological and litigation concepts

- highly manipulative patients with characterological issues

- when confirmation for abuse is saught from treatment

- a previous therapist has suggested childhood abuse

- uncovered memories are from the age of 3 and before

- amnesic memories for abuse in adolescence, or a lack of memory for abuse after the middle of childhood without demonstrating dissociative signs

- when the past relationship with the alleged perpetrator was entirely positive

- when patients have seen unlicensed therapists or followed unusual forms of psychotherapy

- when patients have participated in a self-help group without the supervision of a licensed clinician

- when the therapist has a history of childhood abuse

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

DIFFERENTIATING TRUE AND FALSE MEMORIES

Allegations of Sexual Abuse

* There is no way that one can know the exact rate of false allegations of sexual abuse, or false positives, as it is impossible to know the rate of false negatives, although the latter is believed to be greater than the former (Sorenson & Snow, 1991).

* In investigations of child sexual abuse, Everson & Boat (1989) found that 8% could be classified as false positives, with the evidence failing to substantiate the claim. This rate changes dramatically when allegations of *first time* child sexual abuse are made within the context of a custody battle, ranging from 28-36%. These figures represent the influence of intrafamilial pressures.

* Brown et al. (1997) have presented research data demonstrating that trained professionals are unable to distinguish between true and false allegations of child sexual abuse. There is thus a need to develop guidelines to help clinicians distinguish between true and false claims of child sexual abuse, although no method is likely to be absolute and replace the role played by corroborative evidence.

* There are now, however, criteria by which a trained professional can evaluate whether or not an interview with a child has been suggestive and placed undue influence on reporting abuse. Interview guidelines are available from the American Academy of Child and Adolescent Psychiatry (Brown et al., 1997).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

DIFFERENTIATING TRUE AND FALSE MEMORIES

Criteria Approach

* As it was reviewed previously, the validity of an abuse report does not rely on the vividness of the memory, the richness of details, the associated emotionality, and the confidence the patient has in the accuracy of the memory. Other aspects of the memory productions may, however, be employed as indicators that abuse may have occurred.

* As reported by Brown et al. (1997), studies showed that abuse-related memories, in contrast with non-abuse autobiographical memories, contain more sensory and perceptual information and overgeneralizations, are more fragmented and disorganized, and are likely to emphasize the past and deemphasize the role of the self.

* Subjects simulating having been abused in childhood report more psychological distress, more dissociative experiences and more negative perceptions of the perpetrators than women who have been abused as children (Koopman et al., 1994).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

DIFFERENTIATING TRUE AND FALSE MEMORIES

Statement Analysis

* A method developed in Germany, *statement analysis*, focuses on the analysis of the abuse allegations themselves. In Germany, psychologist or psychiatrist expert witnesses are required to evaluate the degree of credibility of a witness testimony and, usually, statement analysis is used.

* Criteria for distinguishing genuine and false statements have been derived empirically and comprise statement analysis (Undeutsch, 1989).

* Genuine statements have been found to be *logically structured* (internal coherence) while their *production is unstructured*, and to contain *specific details* about the location, the people involved and the actions that took place. Specifications are definite and distinct for single events, while complex events are described with a wealth of details (Undeutsch, 1989). However, recovered memory of abuse may be fragmented and overly general according to three studies (see Brown et al., 1997, p.627).

* Genuine statements are *contextually embedded* (time, place, in regard to life context of the victim), having the potential for development of sexual activity. *Interactions* between victim and perpetrator are described in details, often reproducing the *conversations* and containing *unexpectable complications* (e.g., failure to have an erection). Genuine statements also contain *unusual details* consistent with the type of sexual offense, and a report on the *perpetrator's justifications, threats and attempts at concealing the evidence*. A genuine statement may involve statements representing a *misinterpretation* of a detail (e.g., "He showed me how to make ice cream" rather than "He ejaculated"). *Related external associations* refer to the evidence about other relationships relevant to the abusive situation. Genuine statements also contain descriptions of the *victim's state of mind* during and after the abuse, as well as of the *perpetrator's state of mind* (Steller & al., 1988).

* Whether statement analysis can differentiate genuine from false recovered memories of childhood abuse is still to be determined (Brown et al., 1997).

MEMORIES OF ABUSE AND THE ABUSE OF MEMORY

DIFFERENTIATING TRUE AND FALSE MEMORIES

Psychophysiological Testing

* Psychophysiological assessment has been shown to further support a PTSD diagnosis, in terms of establishing or refuting the presence of PTSD arousal symptoms related to conditioned stimuli associated with the traumatic event (Pitman & Orr, 1993).

* Heart rate to trauma-related stimuli has been shown to be the most stable predictor of the presence of a PTSD, whether subjects were exposed to trauma-related sounds and/or images, or whether they were read their own script about the traumatic event. EMG and skin conductance responses were also successfully employed as indicators of arousal.

* Belgian investigators have reported augmentation of contingent negative variation (an electroencephalographic phenomenon) following exposure to traumatic events, and such are included in forensic reports (Timsit-Berthier & Timsit, 1988).

* The physiological response of PTSD subjects is particular in that, after the presentation of an abuse-related stimuli, their responses tend to fail to habituate. Brown et al. (1997) even reported that the EMG responses tended to continue to increase after the presentation of trauma-related cues.

* Gerardi et al. (1989) have compared the psychophysiological responses of simulators versus PTSD patients. *Some simulators were capable of producing increasing physiological responding in relation to trauma cues, but none presented a failed habituation to the trauma-related stimuli*.

* However, as physiological tagging resulting from a lie detector is often not admissible in court, psychophysiological testing for traumatic memories might be of no value in many forensic settings.

REFERENCES

American Psychological Association (1992). Ethical principles of psychologists and code of conduct. American Psychologist, 47, 1597-1611.

Barrett, D. (1992). Fantasizers and dissociators: Data on two distinct subgroups of deep trance subjects. Psychological Reports, 71, 1011-1014.

Belicki, K. et al. (1994). Reports of sexual abuse: Facts or fantasies? Unpublished manuscript. Brock University, St.Catherines, Ontario.

Bernet, C.Z. et al. (1993). Differential factors in the repression of memories of childhood sexual abuse. Poster presented at the Annual Convention of the Association for the Advancement of Behavioral Therapy, Atlanta, Georgia.

Bernstein, E.M., & Putnam, F.W. (1986). Development, reliability, and validity of a dissociation scale. Journal of Nervous and Mental Disease, 174, 727-735.

Brewer, W.F. (1986). What is autobiographical memory? In D.C. Rubin (Ed.), Autobiographical memory (pp. 25-49). New York: Cambridge University Press.

Briere, J., & Conte (1993). Self-reported amnesia for abuse in adults molested in childhood. Journal of Traumatic Stress, 6, 21-31.

Brown, D., Scheflin, A.W., & Hammond, D.C. (1997). Memory, trauma treatment, and the law. New York: W.W. Norton.

Cardena, E., & Spiegel, D. (1993). Dissociative reactions to the San Francisco Bay area earthquake of 1980. American Journal of Psychiatry, 150, 474-478.

Caudill, O.B. (1995, February). The repressed memory war. Presentation made at the Annual Meeting of the California Psychological Association, LaJolla, CA.

Ceci, S.J., & Bruck, M. (1995). Jeopardy in the courtroom: A scientific analysis of children's testimony. Washington, DC: American Psychological Association.

Christianson, S.A., (1992). The handbook of emotion and memory: Research and theory. Hillsdale, NJ: Erlbaum.

Coons, P.M. (1994). Confirmation of childhood abuse in child and adolescent cases of multiple personality and dissociative disorder not otherwise specified. Journal of Nervous and Mental Disease, 182, 461-464.

Dalenberg, C.J. (1996). Accuracy, timing and circumstances of disclosure in therapy of recovered and continuous memories of abuse. Journal of Psychiatry and Law, 24, 229-275.

Elliott, D.M., & Briere, J. (1995). Posttraumatic stress associated with delayed recall of sexual abuse: A general population study. Journal of Traumatic Stress, 8, 629-647.

Elliott, D.M., & Fox, B. (1994). Child abuse and amnesia: Prevalence and triggers to memory recovery. Paper presented at the Annual Meeting of the International Society for Traumatic Stress Studies, Chicago, IL.

Everson, M.D., & Boat, B.W. (1989). False allegations of sexual abuse by children and adolescents. Journal of the American Academy of Child & Adolescent Psychiatry, 28, 230-235.

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

Femina, D.D., Yeager, C.A., Lewis, D.O. (1990). Child abuse: Adolescent records vs. adult recall. Child Abuse and Neglect, 14, 227-231.

Finkelhor, D. (1980). Risk factors in the sexual victimization of children. Child Abuse and Neglect, 4, 265-273.

Fish, V., & Scott, C. (in press). Childhood abuse recollections in a non-clinical population: Forgetting, secrecy, dissociation, and absorption.

Gaston, L. (1995). Dynamic therapy for post-traumatic stress disorder. In J.E. Barber & P. Crits-Christoph (Eds.), Dynamic therapies for psychiatric disorders, Axis I (pp. 161-192). New York: Basic Books.
Gaston, L. Brunet, A., Koszycki, D., & Bradwejn, J. (1998). MMPI Scales for Diagnosing Acute and Chronic PTSD in Civilians. Journal of Traumatic Stress, 11, 355-365.
Gerardi, R.J. et al. (1989). Ability of Vietnam veterans to simulate a psychophysiological assessment for posttraumatic stress disorder. Behavior Therapy, 20, 229-243.
Golding, J.M., Sanchez, R.P., & Sego, S.A. (1996). Do you believe in repressed memories? Professional Psychology: Research and Practice, 27, 429-437.
Grassian, S., & Holtzen, D. (1996). Sexual abuse by a parish priest: I. Memory of the abuse.
Gudjonsson, G.H. (1984). A new scale of interrogative suggestibility. Personality and Individual Differences, 5, 303-314.
Gudjonsson, G.H., & Clark, N.K. (1986). Suggestibility in police interrogation: A social psychological model. Social Behavior, 1, 83-104.
Hammond, D.C. et al. (1995). Clinical hypnosis and memory: Guidelines for clinicians and for forensic hypnosis. Des Plaines, IL: American Society of Clinical Hypnosis Press.
Henderson, J.L., & Moore, M. (1944). The psychoneurosis of war. New England Journal of Medicine, 230, 273-279.
Hofling, C.K., Heyl, B., & Wright, D. (1971). The ratio of total recoverable memories to conscious memories in normal subjects. Comprehensive Psychiatry, 12, 371-379.
Horowitz, M.J. (1976). Stress Response Syndrome. New York: Aronson.
Horowitz, M.J., & Reidbord, S.P. (1992). Memory, emotion, and response to trauma. In S.A. Christianson (Ed.), The handbook of emotion and memory: Research and theory (pp.343-358). Hillsdale, NJ: Erlbaum.
Hyman, I.E., Husband, T.H., & Billings, F.J. (1995). False memories of childhood experience. Applied Cognitive Psychology, 9, 181-197.
Kluft, R.P. (1996). Treating the traumatic memories of patients with dissociative identity disorder. American Journal of Psychiatry, 153, 103-110.
Kluft, R.P. (1997). The argument for the reality of the delayed recall of trauma. In P.S. Applebaum, L.A. Uyehara, & M. Elin (Eds.), Trauma and memory: Clinical and legal controversies (pp.25-57). New York: Oxford University Press.
Koopman, C., Classen, C., & Spiegel, D. (1994). Predictors of posttraumatic symptoms among survivors of the Oakland/Berkeley, Calif., Firestorm. American Journal of Psychiatry, 151, 888-894.
Kristiansen, C.M. et al. (1995). The Ottawa survivors' study: A summary of findings. Unpublished manuscript.
Laurence, J.R. et al. (1986). Duality, dissociation and memory creation in highly hypnotizable subjects. International Journal of Clinical and Experimental Hypnosis, 34, 295-310.
Laurence, J.R., Day, D., & Gaston, L. (1999). From memories of abuse to the abuse of memories. In S.J. Lynn & McConkey (Eds.), Truth in Memory. New York: Guilford Press.
Leavitt, F. (1997). False attribution of suggestibility to explain recovered memory of childhood sexual abuse following extended amnesia. Journal of Child Abuse & Neglect, 21, 265-272.
Loftus, E.F. (1994). The reality of repressed memories. American Psychologist, 48, 518-537.
Loftus, E.F., Burns, T.E. (1982). Mental shock can produce retrograde amnesia. Memory and Cognition, 10, 318-323.
Loftus, E.F., & Pickrell, J.E. (1995). The formation of false memories. Psychiatric Annals, 25, 720-725.
Lynn, S.J. et al. (1991). Hypnosis and pseudomemories: The effects of prehypnotic expectancies. Journal of Personality and Social Psychology, 60, 318-326.
McFarlane, A.C. (1988). The longitudinal course of posttraumatic morbidity: The range of outcomes and their predictors. Journal of Nervous and Mental Disease, 176, 30-39.
Melchert, T.P. (1996). Childhood memory and a history of different forms of abuse. Professional

Psychology: Research and Practice, 27, 438-446.
Pearlman, L.A., & Saakvitne, K. (1995). Trauma and the therapist. New York: Norton.
Pezdek, K., & Roe, C. (1994). Memory for childhood events: How suggestible is it? Consciousness and Cognition, 3, 374-387.
Pitman, R.K., & Orr, Scott (1993). Psychophysiologic testing for post-traumatic stress disorder: Forensic Psychiatric Application. Bulletin of the American Academy of Psychiatry and Law, 21, 37-52.
Poole et al. (1995). Psychotherapy and the recovery of memories of childhood sexual abuse: U.S. and British practitioner's opinions, practices, and experiences. Journal of Consulting and Clinical Psychology, 63, 426-437.
Rauch, S., et al. (1996). A symptom provocation study of posttraumatic stress disorder using positron emission tomography and script-driven imagery. Archives of General Psychiatry, 53, 380-387.
Robins, L.N. (1996). Deviant children grown up: A sociological and psychiatric study of sociopathic personality. Baltimore, MD: Williams & Wilkins.
Roe, C.M., & Schwartz, M.F. (1996). Characteristics of previously forgotten memories of sexual abuse: A descriptive study. Journal of Psychiatry and Law, 24, 189-206.
Roesler, T.A., & Wind, T.W. (1994). Telling the secret: Adult women describe their disclosures of incest. Journal of Interpersonal Violence, 9, 327-338.
Ross, K. (1977). Evaluative study of the Los Angeles Police Department Hypnosis Project. B.A. project, University of Redlands, CA.
Sargant, W., & Slater, E. (1941). Amnestic syndromes in war. Proceedings of the Royal Society of Medicine, 34, 757-764.
Sorenson, T., & Snow, B. (1991). How to tell: The process of disclosure in child sexual abuse. Child Welfare, 70, 3-15.
Stager, G.L., & Lundy, R.M. (1985). Hypnosis and the learning and recall of visually presented material. International Journal of Clinical and Experimental Hypnosis, 33, 27-39.
Steinberg, M. (1993). Structured clinical interview of DSM-IV dissociative disorders (SCID-D). Washington, DC: American Psychiatric Press.
Steller, M. et al. (1988). Empirical validation of criteria-based content analysis. Paper presented at the NATO Advanced Study Institute on Credibility Assessment, Maratea, Italy.
Terr, L. (1994). Unchained memories: True stories of traumatic memories, lost and found. New York: Basic.
Torrie, A. (1944). Psychosomatic casualties in the Middle East. Lancet, 1, 6283-6287.
Timsit-Berthier, M., & Timsit, M. (1988). Intérêt de l'étude des potentiels lents cérébraux dans l'expertise psychiatrique en matière civile. Acta Medica Leg Soc (Liège, Belgium), 38, 291-306.
Undeutsch, U. (1989). The development of statement analysis. In J.C. Yuille (Ed.), Credibility assessment (pp.101-119). Deventer, The Netherlands: Kluwer.
van der Kolk, B.A., & Fisler, R. (1995). Dissociation and the fragmentary nature of traumatic memories: Overview and exploratory study. Journal of Traumatic Stress, 8, 505-525.
Wagenaar, W.A., & Groeneweg, J. (1990). The memory of concentration camp survivors. Applied Cognitive Psychology, 4, 77-87.
Westerhof, Y., Woertman, L., & van der Hart, O. (in press). Forgetting child abuse: Feldman-Summers & Pope study replicated among Dutch psychologists. Journal of Consulting and Clinical Psychology.
Widom, C.S., & Morris, S. (1997). Accuracy of adult recollections of childhood victimization: Part 2. Childhood sexual abuse. Psychological Assessment, 8, 412-421.
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, 1167-1176.
Williams, L.M. (1995). Recovered memories of abuse in women with documented child sexual victimization histories. Journal of Traumatic Stress, 8, 649-673.
Yuille, J.C., & Cutshall, J.L. (1986). A case study of eyewitness memory of a crime. Journal of Applied

Psychology, 71, 291-301.
Yuille, J.C., & Kim, C.K. (1987). A field study of the forensic use of hypnosis. Canadian Journal of Behavioral Sciences Review, 19, 418-429.