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Exploring the Flashback Experience

by

Elizabeth Moulton Milo

A dissertation submitted in partial fulfillment
of the requirements for the degree of

Doctor of Philosophy

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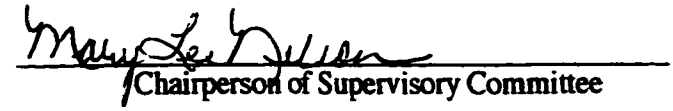
Approved by 
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University of Washington

## Abstract

Exploring the Flashback Experience

by Elizabeth Moulton Milo

Chairperson of the Supervisory Committee
Professor Mary Lee Nelson
College of Education

This study explored the subjective experience of flashbacks in 93 trauma survivors who completed a survey. Three groups of participants were surveyed : 34 combat veterans, 31 adult survivors of childhood sexual abuse, and 28 survivors of other traumas. The purpose of the study was to establish a detailed normative description of the flashback experience in combat veterans, adult survivors of childhood sexual abuse, and in those who experienced other trauma such as assault, accidents, rape or injury. A flashback, a common feature of Post Traumatic Stress Disorder, is defined as reexperiencing aspects of a trauma with realistic intensity as if it were happening in the present. This study explored the antecedents, triggers, perceptual elements, emotional details, coping strategies and the perceived significance of the subjects' most recent flashbacks. The research design was a combination of a comparative survey design looking at the overall experience of flashbacks, and a multiple regression design that explored at some specific relationships. Results showed considerable variability of the flashback experience within survivor groups, as well as group differences. Five main areas are discussed: the differences between groups in the way the flashback is defined and experienced including different triggers, different emotions during and after the flashback, and evidence for variability in dissociative experiences; differences in the type of memory for the original trauma and in the meaning of discontinuous memory reported by the different groups; differences in perceptions of the flashbacks as useful or merely disruptive and association with type of memory for the event : subjects' view of accuracy of the flashback and consideration of flashbacks as the "worst case scenerio" : and finally, differences in coping strategies and their relationship to type of trauma and gender .

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## Acknowledgments

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**Dedication**

To my husband Yori
and to Jeremy, Sarah, Rebecca and Kimi
who remind me every day of the important things in life
and how very blessed I am

## Chapter One

## Introduction and Literature Review

In the realm of memory flashbacks hold a unique and curious position. They may seem to be a powerfully pristine replay of the past because the image is vivid, the emotions are intense and some traumatic scenes may be played over and over again unbidden by the subject. Little is known about them, and therefore a mystique surrounds them for clients and counselors alike. A flashback is commonly defined as reliving a traumatic experience with realistic intensity as if it were happening in the present. Flashbacks are a common feature of Post Traumatic Stress Disorder (PTSD, DSM IV), in which a subject who has experienced trauma later cycles between an intrusive phase in which nightmares, flashbacks and unbidden thoughts are prevalent, and an avoidant phase in which the subject experiences emotional numbing, avoidance of related stimuli, and cognitive constriction. PTSD may be experienced by survivors of all types of traumatic experiences including combat, assault, rape, sexual abuse, accidents, injuries, psychological abuse, or even witnessing harm to another ( Rodriguez, Ryan, Rowan and Foy , 1996; Wilson, Smith and Johnson, 1985; Vitanza , Vogel and Marshall, 1995)

Flashbacks differ from regular memories or intrusive thoughts in that they are often experienced with vivid perceptual images and intense emotions leading those who experience them to say "I was there, I was reliving it all over again!" The ways in which flashbacks are experienced vary widely. They may occur just once or over and over again, remaining relatively constant. They may be triggered by external cues or internal states of high arousal. They may be highly disruptive or mere fleeting images (Burstein, 1985; Mellman and Davis, 1985)

There is a sparsity of literature focused on flashbacks and confusion about their nature. In a recent review of the literature on flashbacks it was clear the term is used loosely

and there is very little consensus on how we are to regard the veridicality, or accuracy, of the flashback content (Frankel, 1994). While several studies of flashbacks have been done, each has looked at only a small piece of the phenomenon, and none of the studies explored the subjective experience in a comprehensive way. Because we know so little about flashbacks a mystique persists for some who experience them and for professionals and the public alike. Flashbacks may be regarded as a pristine form of memory giving them a unique place in the construction of one's personal narrative. It is imperative that we, as counselors, learn more about flashbacks so that we can better understand their impact on clients and deal with them effectively in the counseling profession.

Purpose

My purpose in this research is to establish a detailed normative description of the flashback experience in combat veterans, in adult sexual abuse survivors, and in those suffering from other trauma such as assault, accidents, rape or injury. I explore the antecedents, consequences, perceptual elements, coping strategies and the significance of the subjects' most recent flashbacks. While combat veterans and sexual abuse survivors are clearly two very disparate groups, they are casually compared in the literature ( Herman, 1992) and several empirical studies have compared posttraumatic stress symptomology between the two groups. Studies have determined that overall, very different trauma experiences can result in similar PTSD symptoms. (McNew and Abell, 1995; Wilson, Smith and Johnson, 1985) While we may be assured that PTSD symptomology has striking similarities across survivors of different types of trauma, there is as yet no published research focusing specifically on the experience of flashbacks across trauma survivor groups. In selecting survivors that differ across many variables, yet suffer from similar PTSD symptomology, greater generalizability may be possible.

In addition to developing a normative description of the flashback experience, I explore, perhaps for the first time, the perceptions of the significance of the flashbacks for these subjects. Significance in this context means whether the subject perceives the flashback to be meaningful, veridical, informative or healing or rather only a disruptive, distressing, negative reminder of the past. There is reason to believe that our culture has created a myth around flashbacks that may be endorsed differentially by different survivor groups ( Frankel, 1994). If one looks at popular literature and self-help books, it appears that within the veteran group flashbacks are interpreted in a negative light. They are distressful, disruptive and must be coped with (Matsakis, 1988; O'Brien, 1990). Within the literature written for survivors of other traumas flashbacks are treated as an unfortunate fact of life, perhaps as a signal that more work needs to be done integrating the trauma into the narrative history ( Janoff-Bulman, 1992; Ochberg, 1988; Spiegel, 1994). In contrast, in literature written for the sexual abuse survivors, flashbacks are often construed as useful means of piecing together one's history, as a window into the past, and thus a necessary part of healing. (Ainscough & Toon, 1993; Bass and Davis, 1988; Blume, 1989; Finney, 1990; Kritsberg,1993).

By purposefully selecting survivor groups that differ in almost every respect, including type of trauma, gender, age, and societal support, I attempted to tease out the consistency of the flashback phenomenon. If there is remarkable consistency in the flashback experience from these very different groups, it may be hypothesized that flashbacks are a universally consistent component of PTSD. If, on the other hand there appear to be differences in the subjective experience of flashbacks related to variables such as type of trauma, gender, or continuity of memory for the trauma this exploratory study will point the way for further research.

This study is important for those in the counseling profession. Many clients report that they have flashbacks of traumatic experiences which they may or may not recall from their past. What are we to make of them? How do our clients interpret them? We already

know that many counselors and practicing psychologists regard vivid, intensely experienced memories as likely to be more accurate than other memories (Yapko, 1994; Loftus, Garry, Brown and Rader, 1994). But this is only half of the formula. The understanding of the client's story is a collaborative effort, a joint construction of the "truth", with the therapist's beliefs intersecting with the client's beliefs. A better understanding of the experience, perceptions and beliefs concerning flashbacks coming from those who suffer from PTSD will contribute greatly to a counselor's ability to understand, guide and heal their clients.

PTSD Across Survivor Groups

The literature concerning trauma and its wake forms the basis for understanding Post Traumatic Stress Disorder (PTSD) and the flashback phenomenon. As a starting point it should be established that Post Traumatic Stress Disorder is experienced in a fairly consistent way across survivor groups that form the basis of my study. Horowitz (1978) described the general response tendency through which survivors of trauma typically progress. Horowitz believed that what we now call PTSD could affect anyone subjected to "enough stress" regardless of the nature of the stressor. Several studies have supported Horowitz's early observation that the human response to trauma is remarkably consistent. Wilson et al. (1985) conducted a comparative analysis of PTSD by assessing 74 veterans and 334 nonveterans including victims of rape, assault and natural disasters, using a person across situation conceptual framework. They determined that while PTSD symptomology was similar among survivors, the war veterans followed by rape victims exhibited the most severe PTSD symptomology. They concluded that the most important dimensions in determining the severity of PTSD symptoms were Loss and Life Threat.

McNew and Abell (1995) studied posttraumatic stress symptomology in Vietnam veterans and adult survivors of childhood sexual abuse. They assessed a total sample of 127 subjects including 49 male and 8 female veterans and 62 female and eight male adult abuse

survivors with ages ranging from 37 to 61 for the veterans and 18 to 63 for the abuse survivors. They determined that "overall, results indicated that childhood sexual abuse can be considered a traumatic event that can result in symptoms similar to those demonstrated by individuals who have experienced war-related trauma" (p.115).

McNew and Abell (1995) selected PTSD variables that were representative of symptom clusters described in the DSM-IV and for which appropriate reliable and valid measures were available. Variables selected included intrusion-avoidance, anger experience and expression, intimacy experience and behavior, and anxiety severity and stimuli. Instruments used were the Impact of Event Scale (IES) which measures intrusion-avoidance, the State-Trait Anger Expression Inventory (STAXI), the Miller Social Intimacy Scale (MSIS) and the Beck Anxiety Inventory (BAI). In most areas, the veterans and sexual abuse survivors did not show significant differences in PTSD symptomology. Scores on the STAXI measures of anger in and anger out indicated that both sexual abuse survivors and veterans experienced and expressed angry feelings to a degree that may have interfered with optimal functioning. In the area of intimacy, scores suggest that both the abuse survivors and veterans experienced intrapersonal conflict in regard to intimacy. Scores on the BAI were in the moderately high range indicating that both veterans and abuse survivors were experiencing much anxiety as compared with norms achieved by psychiatric populations.

Of particular interest to the present study are McNew and Abell's (1995) findings on the intrusion-avoidance scale as flashbacks are an intrusive phenomenon. Mean scores achieved on the IES indicated that both veterans and abuse survivors experienced moderately high levels of both intrusion and avoidance but a significant difference between the veterans and the abuse survivors was found on the intrusion variable ($F=5.66$, $p.02$) with the veterans scoring higher than the abuse survivors. Intrusion was the most important variable in discriminating between the two groups. This finding suggests that while overall PTSD is experience in a similar way, intrusive episodes which include flashbacks are experienced

differently by the two survivor groups. Not surprisingly, there was a difference in how flashbacks were triggered. The veterans typically reported that large crowds, helicopters, vehicle backfiring, or movies about Vietnam triggered their intrusive episodes. The abuse survivors reported that crowds, angry people, people who reminded them of the abuser, tastes and smells, noises or things around their necks triggered the fear and anxiety. Clearly, further research in the area of the flashback experience across survivor groups is indicated by the NcNew and Abell findings.

The Nature of Flashbacks

What do we know about the flashback experience in general? Flashbacks are intrusive memories that feel as if one is reliving a traumatic event with realistic intensity in the present, or as Burstein writes, "flashbacks are the revisualization of a traumatic scene that occurs with realistic intensity in the presence of a clear sensorium" (1985, p.374). Jensen, Keller, Pesking, McFall, Veith, Martin, Wilkinson and Raskin (1997) defined flashbacks as "a sense of unreality accompanied by vivid images of a past traumatic situation as though it were actually present." (p. 266) In almost every definition of flashbacks two essential elements are included: a heightened sense of arousal and a triggering stimulus which may be from the external environment or from internal states of arousal. Common external cues are sounds such as backfiring or helicopters, sights such as a familiar face or locality, or smells such as blood, perfume or food. An internal stimulus such as a disturbing thought, intense anxiety, or a memory may also trigger a flashback episode. Flashbacks are often accompanied by dissociation, derealization and depersonalization that last from seconds to minutes. The flashback may include visual, auditory, olfactory, kinesthetic, or tactile sensations and may appear as a snapshot or play out as a movie (Burstein, 1985).

Flashbacks are very similar to panic attacks, in that the arousal is quite high and they are often followed by a period of depression and dysphoria, but there are important

differences. Flashbacks are precipitated by identifiable triggers which may be internal or external, whereas panic attacks do not have a discernible trigger. Falcon, Ryan, Chamberlain and Curtis (1985) note that in contrast to panic attacks or agoraphobia with panic attacks, the symptoms of PTSD are organized around a set of real occurrences, and the nightmares and intrusive memories of flashbacks are related to real trauma. However, these authors did not give evidence that the flashbacks are an accurate portrayal of past trauma.

The incidence of flashback among trauma patients varies widely, partly depending on definition and the population sampled. Burstein (1985) reports that among widows, veterans and other trauma victims the incidence is between 8% and 13%, and he reports 30% in a private practice population. In contrast, using a very loose definition of flashbacks, Blume (1989) reports, " flashbacks....along with sensory flashes, are virtually a universal component of Post-Incest syndrome," the incidence of which she finds to be quite high, perhaps half of all women ( pxxii).

Flashbacks can vary in incidence from a one time occurrence to daily events which cause major disruption in the life of a subject. They may begin shortly after a trauma or appear only years later. They may disappear with or without intervention, but often are extremely difficult to extinguish in spite of attempted remediation and may last a lifetime (Brodsky, 1987). In a study by Mellman and Davis ( 1985) of 25 patients with flashbacks it was found that 56% of the patients experienced daily flashbacks, 16% experienced them 1-3 times a week, 20% experienced them 1-3 times a month and 8% had flashbacks 1-3 times a year.

It is important to note that not all survivors of trauma have flashbacks, although it is not understood why some are more prone than others. Although it is easy to induce flashbacks in individuals who normally experience them in their daily lives, it has not been possible to induce flashbacks in those who do not experience them outside of the laboratory

(Rainey et al., 1987). Jensen et al. (1997) administered sodium lactate to PTSD subjects, panic disorder subjects and healthy controls to induce flashbacks. Six out of seven PTSD subjects, but no panic disorder or healthy subjects reported flashbacks or other intrusive PTSD symptoms. There is much speculation over this finding. It may be that those who experience flashbacks have a vulnerability to the phenomenon, may have tendencies in their current lives which bring on flashbacks, or there may have been something different in the way the memory was recorded that leads to the flashback experience.

There are numerous explanations for the etiology of flashbacks ranging from the psychodynamic to the biological, and many corresponding remediation techniques. For example, Horowitz following in the tradition of Freud, Janet, Ludwig and Breuer believes that flashbacks or intrusive memories are aspects of the trauma that remain in active memory and are continually triggered and replayed until the person is able to integrate the trauma into his or her existing schemata or world view ( Horowitz, 1978).

Researchers such as Van der Kolk (1994), Rauch (1993), and Elliot (1994), give support to a biological basis for flashbacks but advocate working through in therapy to integrate the trauma into one's life story. These researchers believe that arousal at the time of the trauma was too high to encode the event in narrative or episodic memory, but that the memory instead became encoded at a somatic level.

McFall, Murburg, Ko and Veith (1990) suggest a learned, conditioned response. They found that Vietnam combat vets with PTSD responded more strongly than controls to combat related stress films with greater increases in epinephrine, pulse, blood pressure and subjective distress. They posit that there is a sympathoadrenal activation in reaction to memory evoking triggers of traumatic events in PTSD. According to McFall et al., unconditioned emotional, behavioral and physiological responses to life threatening situations become conditioned to innocuous internal and external stimuli so that these conditioned stimuli begin to elicit elements of the original fight or flight response.

On the biological end of the spectrum, Brodsky, Deorman, Palmer, Slade and Munasifi (1987) speculate that flashbacks represent an amalgam of abnormal neural firing along with the expression of a dynamically charged event.

Stress, PTSD and Memory

The Yerkes- Dodson Law predicts that there is an optimal arousal level with either too high an arousal or stress level or too low a level leading to impairment of memory. Emotional events may be remembered vividly, without much alteration over time. Conversely, if the emotional arousal is too high , it is theorized that the events will not be well recorded in episodic memory. Laboratory studies have shown that stress affects the selectivity of attention whereby there is focus on the central details with clear recall, but less attention on peripheral details leading to poor recall ( Christianson and Loftus, 1991)

Many clinicians and researchers believe that some events are so traumatic that they are encoded in a way that they are unavailable for recall in narrative form for many years, or are "repressed", only to surface years later (Janet, 1907; Bremner and Brett, 1997; Elliot, 1994; Ledoux, 1996; Van der Kolk ,1994; Williams, 1994). Elliot and Briere (1995) offer support for the theory of dissociated memory or traumatic amnesia which would account for the existence of flashbacks for which there is no conscious memory or only partial memory.

In recent years several studies have sought to enlighten the functional neuroanatomical correlates of the effects of stress on memory (Bremner and Brett, 1997; Bremner, et al., 1995; Bremner et al., 1997). Both the amygdala and the hippocampus are now known to be involved in memory for emotional events. Briefly, the amygdala is most clearly involved in evaluation of emotional meaning of incoming stimuli, signaling "this is important" and passing stimuli on to the neocortex for further attention. The amygdala is also thought to integrate internal representations of the external world in the form of memory images with emotional experiences associated with those memories. The hippocampus is

thought to be involved in the categorization and storage of incoming stimuli in memory necessary for explicit or declarative memory. The hippocampus is also believed to be involved in evaluation of spatially and temporally unrelated events and associating them with previously categorized material.

The hippocampus in particular has been the focus of recent research with PTSD subjects. It is currently believed that the amnestic episodes of PTSD subjects may relate to deficient hippocampal functioning, resulting in fragmented memory elements from diverse primary cortical areas and leading to the subjective sense of memory gaps. Deficits in the hippocampus, and perhaps in adjacent cortical areas, could lead to deficits in explicit memory encoding. Bremner et al. (1995) have shown that patients with combat related PTSD had a statistically significant 8% smaller right hippocampal volume based on MRI measurement, relative to that of comparison subjects. Deficits in short term verbal memory were associated with smaller right hipppocampal volume in the PTSD subjects. In a 1997 study by Bremner et al., it was further found that subjects with childhood abuse-related PTSD had a 12% smaller left hippocampal volume relative to matched control subjects. They concluded in the second study that either a surge of cortisol at the time of childhood sexual abuse led to damage of the hippocampus, or alternatively that patients who were born with a smaller left hippocampal volume were more vulnerable to develop pyschopathology in response to childhood abuse. The discrepant results between the combat veterans and the abuse patients might be related to the stage of development at which the trauma occurred There may be a difference in vulnerability of the hippocampus to stress-induced damage early in life in comparison to later stages of life.

Other studies with non-human primates have shown that high levels of cortisol associated with stress have neurotoxic effects on the hippocampus. In conclusion, Bremner et al. (1995) believe that alterations in neuromodulators important to memory formation could have the paradoxical effect of abnormally strengthening memories for some traumatic

events while creating amnestic gaps for others. This paradoxical effect is crucial to the understanding of PTSD in which hypernesia and amnesia may coexist or may alternate with the intrusive and avoidant phases.

Memory Deficits in Veterans

A study by Yehuda et al. (1995) measured memory functions in combat veterans with PTSD and in normal subjects. They found that veterans with PTSD showed normal abilities in most areas of memory function: initial attention, immediate memory, cumulative learning, and active interference from previous learning. However, following exposure to an intervening word list they showed a circumscribed cognitive deficit, manifested by the presence of substantial retroactive interference as evidenced by a decrement in retention of the original memory content. Yehuda et al. concluded, "These results may be compatible with the idea that memory dysfunction in PTSD may involve the intermingling of past experiences with current experience in the form of intrusive thoughts or flashbacks. The data suggest that patients with PTSD may have fairly specific deficits in the monitoring and regulation of memory information." (p.137).

Southwick, Morgan, Nicolaou and Charney (1997) conducted a prospective investigation of memory for serious combat-related traumatic events in veterans of Operation Desert Storm. Veterans were asked whether they had experienced some serious traumatic events such as seeing others killed, the death of a close friend, sitting with the dying, and witnessing bizarre disfigurement of bodies shortly after returning from the Gulf War, and then again two years later. They found that in the 59 subjects there were many instances of inconsistent recall for traumatic events including "forgetting" events originally reported and "suddenly remembering" events that were not reported in the original survey two years prior. Eighty-eight percent of the subjects changed their responses on at least one of the 19 items while 61% changed two or more responses.

The authors suggested that changes from "yes " to "no" on items may have been due to several factors. They speculated "no" responses in the post-survey might be due to simple forgetting or due to the onset of repression or denial, making them no longer accessible. They speculated that the events were possibly altered by postevent information, or perhaps the veterans were reducing prior exaggeration .

Southwick et al. 1997) proposed that changes from "no" to "yes' might have been due to the lifting of denial or repression, or were perhaps due to exaggeration based upon media accounts, contact with other survivors, or multiple retellings. Southwick et al. concluded that as PTSD symptoms increase, so does amplification of memory for traumatic events. Pertinent to my study, they proposed that individuals who experienced intrusive memories, nightmares, and flashbacks gradually recalled memories as a result of their involuntary re-experiencing of symptoms .

Changing Memory and Rape Victims

A study by Foa, Molnar and Cashman (1995) shows how narrative memory for rape changes over time as a result of exposure therapy. This study offers illumination of the process by which a memory may change from a preponderance of narrative focusing on actions and dialogue, to narrative focusing more on thoughts and feelings that seemed an attempt to organize the trauma memory. Subjects exhibited a tendency to establish a memory that was organized, piecing together the fragmented bits into a coherent whole. A weak association between the decrease in fragmentation and reduction in trauma related symptomology was detected. Thus from Foa et al.'s study we may see not only the human tendency to form a coherent, narrative memory for an event, and the process by which it may happen, but we also see that PTSD symtomology is reduced when the fragmented bits become a coherent whole which can then become integrated into the personal history.

Discontinuous Memory in Children

There are several retrospective studies that give evidence for memory deficits in adult survivors of childhood sexual abuse. Briere and Conte (1993) surveyed 450 women who were in treatment for sexual abuse. They were asked, " during the period of time between when the first forced sexual experience happened and your 18th birthday, was there ever a time when you could not remember the forced sexual experience?" When asked this rather ambiguous question 59% of the sexual abuse survivors replied "yes." However, no corroboration was asked to verify that the abuse ever occurred, and since the question was worded in such an ambiguous way, there is no way to tell what was meant. Was the event too painful to think about, was the incident truly inaccessible to recall, or was it simply out of mind due to other preoccupations ?

Herman and Schatzow (1987) surveyed women in group therapy for incest survivors. They reported that 28% of their sample had "severe memory deficits " for the abuse. Although they reported that 74% of their patients could supply independent corroboration for the sexual abuse, the nature of the evidence was not detailed and the proportion of the women with memory deficits who supplied corroboration was not reported.

Loftus, Polonsky and Fullilove (1994), interviewed 100 women who were in outpatient treatment for substance abuse. They reported that over one half of these reported a history of childhood sexual abuse, and of these 19% reported a period of discontinuous memory. Elliot and Briere (1995) report a study in which 42% of the subjects in a stratified random sample of the population (n=505) reported that they had some period of time in which they had less memory for abuse that they did at the time of the data collection. Joslyn, Carlin & Loftus ( in press) surveyed 799 college students. One fourth reported an incident of childhood sexual abuse and of these, about a third reported that there was a period of time in which they would not have been able to remember the event if asked directly.

Although intriguing, each of these retrospective studies has methodological problems. Each is based on self reports of childhood sexual abuse and none of them offer definite corroboration for the events. In addition, several of these ask about the discontinuous memory in an ambiguous way, leading to confusion about the respondent really intended, and leading researchers to make claims that may go beyond the data.

Recently several prospective studies of the effects of naturally occurring traumatic events have been reported which correct for these methodological deficits and show more clearly the effect of stress or trauma on children's memory. Parker, Bahrick, Lundy, Fivush, and Levitt (1995) investigated the effects of stress on memory in three and four year olds for events surrounding Hurricane Andrew. Unlike retrospective studies that rely on subjective memory, these researchers were able to define stress as low, moderate or severe according to the severity of storm exposure and actual damage to the children's homes. Children were given a structured interview assessing memory for the 1) prehurricane preparations, 2) the hurricane itself and 3) the recovery period. Results showed a main age effect with four year olds recalling more than three year olds. There was also a main effect of severity and a quadratic function with children experiencing moderate severity recalling the most. Results suggest that memory is a curvilinear function of stress and that extremely stressful experiences lead to impairment in recall.

Ornstein, Merrit & Baker-Ward (1995) and Goodman, Eisen & Qin (1995) studied the effects of highly stressful medical procedures on children's memory. Ornstein et al. found that stress-recall linkage may vary considerably across different measures of stress, depending whether stress is measured biologically with salivary cortisol measures, or behaviorally with judgments of medical personnel. Goodman et al. examined children's memories for a psychiatric exam and for an ano-genital exam which was presumed to be more stressful, and perhaps comparable in some ways to sexual abuse. They found that

there were age differences in memory for stressful ano-genital exams and age differences in suggestibility. However, they did not find a relationship between stress and memory.

Perhaps the best evidence for the existence of discontinuous memory for childhood sexual abuse is provided by Williams (1994, 1995). Williams reports a study in which adult subjects with a documented history of childhood sexual abuse were interviewed seventeen years later. She found that 38% of the women, who were primarily inner city African-American women, did not report the abuse incident when asked a series of fourteen separate, detailed screening questions to elicit any history of sexual victimization. Presumably, they did not remember the specific abuse event as they reported other traumatic incidences. Furthermore, 16% of those who did recall the abuse reported that there was a period of time in which they had less memory of the abuse than they did at the time of data collection. They were asked "Was there ever a time when you did not remember that this had happened to you?" If they answered affirmatively they were asked, "What was your age at the time you forgot and the time you remembered?" and "What resulted in your remembering?" Williams concluded that the women with "recovered memories" were younger at the time of abuse and were less likely to have received maternal support than the women who had always remembered the abuse.

Ornstein (1995) has summarized research on the abilities of three to seven year olds to remember stressful and non-stressful events. He discusses the research on memory for childhood sexual abuse in the context of a framework for considering how information is recorded in the developing memory system. Four general themes are discussed which are pertinent to the consistent findings that episodes of childhood sexual abuse may not be continuously remembered into adulthood. 1) Not everything gets into memory. Children remember most clearly when they have prior knowledge of an event and can therefore understand and make sense out of the events. Sexual abuse is not a topic that is readily discussed in most households, nor is its significance understood by most children.

Therefore, if the molestation is not painful nor frightening it may not be encoded in memory as anything particularly significant. 2) What gets into memory may vary in strength. Two factors in particular are known to influence the strength of a memory that is actually encoded: the amount of exposure to a specific event, and the age of the individual. In general, the longer the exposure to an event, the greater number of repetitions of an event, and the greater age of a child are known to increase the strength of a memory trace. Strong memory traces are readily retrieved even with minimal cues, whereas weak traces may require more prompts or cues. This is relevant in that for many individuals incidences of sexual abuse are isolated and brief, and furthermore, many of the subjects are young. 3) Once in the memory system many factors such as the passage of time or the exposure to misleading or inconsistent information can alter reports of previously experienced events, and younger children are more prone to forgetting over time. The opportunity to discuss an event may serve to strengthen a memory trace. In the case of childhood sexual abuse, there is rarely the opportunity to discuss this very clandestine activity. Furthermore the child may be presented with inconsistent information in the form of the perpetrator telling the child it never happened or simply failing to acknowledge the event afterwards. 4) Retrieval is not perfect: what a person "remembers" and reports may not always be from the actual representation of the event in storage. Particularly when there have been long delays, the event may have been reconstructed to fill in the gaps of a faded, fragmented memory.

Ornstein (1995) concludes that older children should understand and store more organized information about abusive experiences than younger children. "An implication of research on children's knowledge is that a child who does not understand what is happening to him or her--as may be the case in certain 'mild' types of abuse that do not involve penetration and physical pain--will have little basis for subsequently remembering what was experienced...considerable interference would be expected, particularly when the details of

an early (and possibly poorly understood) experience have been lost over a period of months and years." (p.601)

Researchers report other associations they have found between forgetting and factors of the alleged childhood sexual abuse. Contrary to Ornstein's (1995) analysis, both Briere and Conte (1993) and Herman and Schatzow (1987) found that discontinuous memory was associated with more violent episodes of abuse in addition to younger age at the time of abuse. They suggest that this is due to an active defensive process resulting from trauma that is in line with repression, rather than denial or dissociation that is due to conflict resulting from shame or guilt. Terr (1991) suggests that repeated trauma, leading to dissociation, is associated with discontinuous memory. Goodman and Quas (1994) have found that mother's communications about a traumatic event and emotional support are related to memory accuracy, at least in the short term. Williams (1995) found that women with "recovered memories" were younger at the time of abuse and were less likely to have received support from their mothers. In Elliot and Briere's (1995) study delayed recall was associated with the use of threats at the time of abuse. Joslyn et al. (in press) have found that failure to understand the significance of a sexually abusive episode is associated with periods of discontinuous memory.

Dissociation, Trauma and Memory

Dissociation is associated with trauma and its aftermath. Van der Kolk defines dissociation as "a compartmentalization of experience: elements of the experience are not integrated into a unitary whole, but are stored in memory as isolated fragments consisting of sensory perceptions or affective states" (1994). According to Van der Kolk, dissociation refers to four interrelated phenomena: the sensory and emotional fragmentation of experience, depersonalization and derealization at the moment of trauma, ongoing "spacing

out" after the trauma as a defense and, containing the traumatic memories within distinct ego states.

Courtois (1993) elaborates on how dissociation may effect memory in children who are chronically abused. Courtois believes that childhood sexual abuse is particularly damaging because it often occurs over a period of time in the crucial developmental years. She reports that, " most commonly it involves multiple sexual contacts that escalate over time. The average duration of incest is four years, with onset usually occurring before puberty when the child is especially accessible, immature, and lacking in power.... It constitutes a chronic and inescapable stress that impacts, becomes entwined with, and usually distorts the child's development in significant ways. The child is captive to a psychologically intolerable situation and often develops a repertoire of coping skills to endure it until the abuse ends or other physical escape is possible" (p.435). One of the most effective coping skills in the short term is dissociation.

However, dissociation at the time of the trauma effects memory for the event and may set up a pathological pattern of dissociating to avoid stress throughout the adult years. This prediction by Courtois (1993) is supported by research on other trauma populations. Peritraumatic dissociation has been found to be the strongest predictor of PTSD in follow-up assessment in combat vets, ( Bremner et al, 1992) and natural disaster victims (Koopman, Classsen & Spiegel, 1994).

Dissociation is not only associated with memory deficits, but with long term psychopathology. Bremner and Brett (1997) conducted a study to find the association between dissociative responses to trauma and long-term psychopathology. They report that there is a division among clinicians and theorists as to the benefits of dissociation. While many clinicians believe that dissociation is a defense mechanism which screens the individual from the overwhelming horror of traumatic stress and reduces long-term psychopathology,

there are others who believe that the original dissociation leaves the individual at increased risk for long-term dissociative psychopathology (Janet, 1907; Van der Kolk, 1994).

Bremner and Brett (1997) found in their sample of 62 veterans that the PTSD patients reported higher levels of dissociative symptomology at the time of combat -related traumatic events than vets without PTSD. Moreover, there was almost no overlap between the two groups--almost all of the PTSD patients had high levels of dissociation during combat trauma, while almost all of the non-PTSD patients reported being free of dissociative symptoms during combat. The veterans with PTSD also reported higher levels of dissociative symptomology in response to later stressful events. Tichenor, Marmar, Weiss, Metzler and Ronfeld (1996) conducted a study looking at peritraumatic dissociation and PTSD in female Vietnam theater veterans. They concluded that when the effects of both general dissociative tendencies and war-zone stress exposure were removed, there was still a strong relationship between dissociation at the time of trauma and self-reported PTSD symptoms.

In sum, the findings of many researchers are consistent with Bremner and Brett's conclusion, "Our data did not support the idea that dissociation is universally protective for the development of pyschopatholgy related to trauma. One might argue that dissociation is an effective defense for moderate stress levels, or alternatively, dissociation represents an effective short-term strategy that is detrimental to long term functioning." (p.46) I would support the second alternative, as it appears there is a strong association between dissociation at the time of trauma and later PTSD when studied both across gender and across trauma.

Veridicality of Flashbacks

We have evidence that PTSD subjects may have special difficulties with the fluctuating nature of their memories. As such, we may be able to say that flashback memories are not likely to be pristine "replaying" of original trauma, but are they accurate at

all ? Flashbacks hold a unique position in the world of memory. Flashbacks may be unusually vivid, experienced with intense emotion, and may be repeated over and over with apparent consistency. However, paradoxically, they may have no corresponding conscious memory, and may seem to emerge unbidden from the deep within the unconscious. They are a form of hypernesia that may coexist with or follow on the heels of amnesia. As such, can flashbacks be interpreted as accurate, pristine, immutable memories of past trauma? Or are they especially vulnerable to the problems inherent in reconstructed memories? Are they always related to real traumatic events as Falcon, Ryan, Chamberlain and Curtis ( 1985 ) state? Several recent studies bear on the question of the veridicality of flashbacks.

A controlled laboratory experiment conducted by Rainey et al. (1987) used intravenous infusions of lactate to induce flashbacks in six out of seven clients who had a history of PTSD with flashbacks. The flashbacks obtained in the placebo controlled double blind study were similar to naturally occurring flashbacks. Interestingly, the laboratory setting and the intrusive experimental procedures appeared to influence both the content and the severity of the flashbacks. Three of the six patients had flashbacks to hospital settings in Vietnam, including staff with white coats and intravenous infusion equipment similar to the experimental laboratory. This experiment brings to question the effect a current setting may have on the content of a flashback. Were these vets flashing back to their actual Vietnam experience or were they incorporating elements of the experimental lab into the flashback? Although the authors concluded that "all flashbacks were to events the patients had actually experienced," no evidence was offered as to how these events were corroborated, or whether some of the subjects experienced flashbacks that were accurate images of the actual experienced events or merely similar to them. Several of the flashbacks showed a clear demonstration of the impossibility of their historical accuracy. One vet saw himself in surgery watching his own operation while another vet flashed back on a Vietnamese woman being killed repeatedly and getting up only to be killed again.

Grunert, Devine, Matloub, Sanger, and Yousif (1988) studied patients who had flashbacks following traumatic hand injuries. They classified flashbacks into three categories: "replay flashbacks," "appraisal flashbacks," and "projected flashbacks." "Replay flashbacks" were a replaying of the events just before the trauma and continuing until the moment of the trauma. "Appraisal flashbacks" were more like a snapshot, a vision of the hand at the moment that the trauma occurred. "Projected flashbacks" were more severe than the trauma as it actually occurred. In the "projected flashbacks" the content of the flashback was more detailed, more horrific or the story line extended further than the actual event. Grunert et al. found that 60% of the subjects had flashbacks that could be defined as "projected." Those with "projected flashbacks" had a worse prognosis for returning successfully to the workplace, while those who may have rehearsed prevention strategies in "replay flashbacks" had a much better return to work prognosis. Since in this instance the researchers were able to compare the flashback to the actual hand injury, they could say with conviction that some flashbacks were in fact a "worst case scenario." These flashbacks were a realistic imagining of a scene that was much worse than the actual trauma. It might be that many flashbacks would fall into the "projected" category, but without corroboration of the actual event we can only speculate.

Bryant and Harvey (1996) reported on two patients with closed head injury who were amnestic for events surrounding motor vehicle accidents. Both of these patients developed vivid images of the accidents, which were phenomenologically similar to flashbacks. However, in both of these cases, the vivid images were based on information learned following the trauma or based on anxiety around the trauma and could not have been veridical flashbacks of the event. In one case the subject "flashed back" frequently on images of himself bleeding in the front seat of the car, which were similar to newspaper photographs that he had seen. In the other case the driver began to have flashbacks of his children lying dead in the wrecked car, whereas in reality they were not present at the

accident. This subject realized that the imagery could not have been an accurate memory of what had occurred, but was in fact based on the anxiety he experienced as a result of the accident.

Lipinski and Pope (1994) also question the veridicality of flashbacks. It appears that obsessive compulsive clients may dwell on a horrible image until the arousal is so high that a flashback occurs. In the three cases cited there was evidence that the trauma never occurred, but the flashback was nevertheless experienced with realistic intensity. It seems possible that flashbacks to less plausible trauma such as alien abduction or Satanic Ritual Abuse may fall under this explanation. If one thinks hard enough and draws on mental imagery, which we know can be created, and one's level of arousal is raised through stress, anxiety or fatigue, a flashback could occur. It may seem convincingly real to the subject in spite of the fact that the original trauma never occurred.

The studies cited above show that subjects may have flashbacks that do not in fact correspond to the actual trauma. When the original trauma is available for objective comparison as in the Grunert et al. (1988) or Bryant and Harvey(1996) study, the discrepancy is, of course, evident. But what about flashbacks that cannot be readily compared to a trauma which is in the distant past or that is only hazily remembered if at all? How then does a subject interpret the significance of the flashback and its correspondence to the trauma? Is the flashback interpreted as historic truth or as narrative truth?

Beliefs About Special Memories

Given the evidence above, why do flashbacks apparently hold a certain mystique making them extremely significant to survivors and therapists alike? We hold some memories that are unusually vivid, detailed and seemingly unchanged over many years in special esteem. "Flashbulb" memories, a term coined by Brown and Kulik in 1977, are those vivid memories each of us has of unusually surprising and consequential or

emotionally arousing events in our lives. The moment one heard of President Kennedy's assassination or of the explosion of the Challenger are such events in the public realm, but there may also be vivid memories of very private yet highly significant experiences. Popular and professional opinion originally supported the notion that these memories were recorded by a special mechanism that had survival value hypothesized by Livingston to be a "Now Print" (1967). Supporters of the special mechanism theory believed that some traumatic memories are immune to the usual distortions and fading over time. Terr, in her analysis of the Chowchilla kidnapping victims stated that

> the memory of trauma is shot with higher intensity light than is ordinary memory, and the film doesn't seem to disintegrate with the usual half-life of ordinary film. Only the best lenses are used, lenses that will pick up every last detail, every line, every wrinkle, and every fleck. (1990, p.170)

Research by other memory researchers such as Neisser (1982), Rubin and Kozin (1984), Christianson (1989), Christianson and Loftus (1991), and Tromp, Koss, Figueredo and Tharan (1995) soon proved that these "special memories" were not really so special. Although "flashbulb memories" are indeed vivid across decades they are by no means accurate, complete, nor immune to reconstruction. In fact, Tromp et al. found that memories for a rape were in fact less clear and vivid, contained less meaningful order, were less well-remembered and were less thought and talked about than other unpleasant memories. Yet, despite the fact that flashbulb memories have not held up to empirical scrutiny, the myth that shocking, significant events may be recalled in pristine form decades later lives on in our culture.

Professionals and the lay population alike also have inordinate confidence in memories that are brought forth from the unconscious by special mechanisms such as

hypnosis, guided imagery, age regression or sodium amytal. The confidence that counselors and clients may have in vividly recalled memories in no way corresponds to the accuracy of the memory, and thus represents a danger in accepting memories at face value. (Loftus, Garry, Brown and Rader, 1994; Loftus, 1993; Lynn & Nash, 1994; Ofshe & Watters, 1994; Orne, Soskis, Dinges, & Orne, 1984; Spanos & McClean, 1986; Stevenson, 1994; Yapko, 1994).

Flashbulb Memory and Flashback Memory

Interestingly, flashbulb memories and flashbacks memories share some of the same characteristics. They both may originate from a highly salient, novel, surprising event and may persist with vivid clarity over the years so that subjects feel they are burned indelibly into their brains. Livingston's " Now Print" theory makes sense etiologically for both types of memories. However, whereas flashbulb memories are associated with both positive and negative events, flashbacks by common usage are associated with trauma. Furthermore, flashbulb memories are usually brought about by a process that seems within our conscious control and the subject remains aware of his or her surroundings and aware that the memory is after all only a memory. Flashbacks are usually unbidden--shocking, surprising, unwanted; and subjects often become so unaware of their surroundings as to say that they "relived the trauma." These are much, much more than an intense, vivid memory. Flashbulb memories are those that remain for years, easily recalled by minimal cues, perhaps rehearsed over and over. Flashback memories may remain out of the subjects awareness for a long period of "discontinuity" before erupting into consciousness by a powerful trigger. Are the two kinds of memories related?

A study by Tromp et al ( 1995) set out to compare rape and other pleasant and unpleasant memories among employed women. They expected that rape memories would be unpleasant, whereas others would be either pleasant or unpleasant. They looked at

"flashbulb" characteristics including high levels of surprise, consequentiality, and intensity of feelings at the time of the event, as well as clarity and detail of the stored material, and the frequency of subsequent rehearsal for the memory to determine if vivid pleasant memories differed from unpleasant ones. They found that the "affect factor " accounted for the majority of the variance differentiating pleasant and unpleasant memories. Pleasant memories involved more positive feelings and more positive consequences and were less surprising. Unpleasant memories tended to involve more negative feelings and consequences and were more unexpected. What differentiates a " flashbulb memory " from a flashback memory" may well be the emotional valence and the level of surprise. Perhaps a "flashbulb" becomes a "flashback" when it is unexpected and unpleasant.

Berntsen ( 1996) has written a provoking article titled "Involuntary Memories in Everyday Life: Stressful, Repetitive Memories Need No Special Mechanism." She believes the assumption that involuntary memories in everyday life serve as defense mechanisms is unwarranted. She concluded, based on a diary study of 14 subjects, that stressful intrusive memories are an anomalous subclass of the larger class of involuntary memories which are often positive. She explains what we call flashbacks in terms of normal principles of memory. Because the subjects' mood following a traumatic event is distinctly negative, the availability of negative memories is likely to increase due to the principle of mood congruence. Further, the involuntary recollection of the stressful event, the flashback, will typically enhance the negative mood, which in turn increases the probability of more involuntary recollections. Secondly, since the intrusive memories usually occur during the months following the stressful event, a recency effect is likely to contribute. Thirdly, by definition a traumatic event is novel, which would assure it priority in involuntary recollections. Berntsen concludes, " In sum, we need not assume intrusive memories to be governed by specialized mechanisms of memory, such as the Zeigarnik effect (as proposed by Horowitz, 1975; Klos & Singer, 1982) or repetitive compulsion in the Freudian sense.

More likely, they are governed by the same constraints as are involuntary memories under normal conditions. These constraints work in a way beyond the subject's control--for which reason they cannot readily be switched off when the subject has experienced something traumatic, although it seems desirable.... Subsequent to a trauma, they generate maladaptive effects in terms of stressfully repetitive memories, whereas under normal conditions, they may be functional for the subject's well-being and integrity of identity." (p.21) In conclusion, flashbacks, once studied more intensively, may go the way of flashbulb memories--"special, but not so special."

Coping with Flashbacks

Green, Lindy and Grace (1988) studied coping strategies that chronic PTSD sufferers use to deal with flashbacks and other recurring memories. They found that four coping strategies were extensively used by male Vietnam veterans: 1) event processing (efforts to understand and give meaning to the war experience); 2) time out for reflection (turning to non-work activities or seeking contact with other); 3) denial (trying not to think about the war; and 4) turning to religion or philosophy for consolation.

Fairbank, Hansen and Fitterling (1991) found that in comparing repatriated prisoners of war with PTSD, repatriated prisoners of war without PTSD, and noncombat veterans from W.W.II, that the repatriated prisoners of war with PTSD reported more frequent use of self-isolation, wishful thinking, self-blame and seeking social support in coping with distressing memories than did the two comparison groups.

A study by Hyer, McCranie, Boudewyns and Sperr ( 1996) reported on eight modes of long term coping with trauma memories in 110 Vietnam veterans with chronic PTSD. They found that Escape-Avoidance ( e.g., "I wished that the situation would go away or be over with") was the single most frequently used strategy (19%), followed by self-control (e.g., "I tried to keep my feelings to myself" -- 15%), then Distancing ( e.g. "I tried to forget

the whole thing"--14%), accepting responsibility ( e.g. " I criticized or lectured myself"-13%), and Confrontive Coping ( e.g." I expressed anger or let my feelings out" --13%). Together, these emotion-focused and avoidant coping strategies accounted for 74% of subject's total coping efforts in dealing with Vietnam war memories. The least frequently used coping methods were planful problem solving(10%), seeking social support (9%) and positive reappraisal (7%).

These three studies show differences in the coping strategies used, but in all three studies denial is a common denominator. Taken together, these studies show that the coping strategies commonly used have not resulted in success, if success is defined as recovery from PTSD. Rather, Green et al. state, "these patterns can be viewed as reflecting coping exhaustion inherent in the illness of PTSD itself." (1988, p.409). Sadly, many Veterans have not yet found a way of coping with PTSD in spite of the fact that their combat experience was over 30 years ago.

Remediation of Flashbacks

Traditionally, flashbacks have been treated in group or individual psychotherapy with the goal of helping the patient integrate the traumatic experience into consciousness by working through the trauma and reducing anxiety associated with the memory. This type of approach is the basis for most of the therapies aimed at recovery from memories of sexual abuse, such as that proposed by Blume ( 1989) and Herman and Schatzow (1987). However, for many childhood abuse survivors, veterans, and other trauma survivors this approach has been unsuccessful in eliminating the flashback experience.

Perhaps the combination of reliving and retelling the trauma is the key to successful therapy. Foa et al (1995) have reported that for rape survivors "exposure" therapy involving repeated reliving and recounting of the trauma has been effective in reducing depression and trauma related symptoms of PTSD. It was found that in comparing the pre- and post-treatment

narratives of rape victims that the narrative changed from a focus on action and dialogue to a greater percentage focused on thoughts and feelings, particularly thoughts reflecting attempts to organize the trauma memory. As expected, an increase in organized thoughts was correlated negatively with depression. Fragmentation of the memory slightly decreased (though not to a significant level) and this decrease was correlated with a reduction in trauma-related symptoms. Thus it appears, consistent with clinical thinking, that retelling the trauma story over and over is indeed effective.

Musicar and Josefowitz (1996), believing that flashbacks are memories which have not been integrated into everyday consciousness and therefore return as intrusive symptoms, suggest a four stage treatment model. Their model includes 1) education, 2) assisting clients in identifying their flashback patterns, 3) designing coping strategies, and 4) processing the flashback. Although they don't report empirical data based on a large sample, they do provide one case study outlining the sequence of interventions and demonstrating success of their model.

Various drug therapies have been attempted with some success. Burtstein (1985) found that three quarters of the PTSD patients treated with imipramine ceased experiencing flashbacks and the one quarter that remained experienced flashbacks with less intensity. Falcon et al. (1985) noted the similar symptoms of PTSD and panic disorder or agoraphobia with panic disorder, which led them to study the effects of tricyclics on flashbacks. In an open trial of desipramine, imipramine and amitriptyline they found that 82% of the subjects were "much improved" when rated by two therapists on the Clinical Global Impression Scale and 18% were minimally improved. They suggest further research in a double blind placebo control study. He feels that the question still remains as to whether PTSD is a real entity or is a part of the major depressive disorder or panic disorder continuum, as all of these disorders respond to tricyclics. Mellman and Davis (1985) also noted the overlapping diagnostic criteria for PTSD and anxiety disorders or agoraphobia with anxiety disorder and suggested

treatment with a monoamine oxidase inhibitor (p.381). They found that phenelzine reduces PTSD symptoms. Lipinski and Pope (1994) have found that both the SSRI's fluoxetine and clomipramine were effective in producing prompt remission of the flashbacks.

Brodsky et al. (1987) build upon the findings that carbamazepine has been effective in controlling flashbacks, and propose a Tri-Modal approach of carbamazepine pharmacotherapy, short term focal dynamic therapy, and behavioral interventions to alleviate PTSD symptomology. Carbamazepine is used to control flashbacks, along with traditional psychotherapeutic approaches that foster abreaction and begin a process of desensitization to the highly charged events. The sessions in which the client has had a flashback , or "relived " the traumatic event, are taped and then the client is encouraged to play the tape repeatedly over the next few months to facilitate desensitization. Bills and Kreisler (1993) report that naltrexone, a long lasting opiate antagonist, was associated with a 50% reduction in flashbacks with two flashback subjects. They postulate that because reduction of flashbacks was effected by the opiate antagonist, naltrexone, that the neurobiology of flashbacks may be similar to that already proposed for self-injurious behavior.

Serendipitously, Shapiro (1989 ) discovered that rapid saccadic eye movements have a dramatic therapeutic effect for clients suffering from flashbacks. She found that in just one session using Eye Movement Desensitization and Reprocessing (EMDR) therapy that there was lasting reduction in anxiety, dramatic changes in the cognitive assessment of the memory, and cessation of flashbacks, intrusive thoughts and nightmares. In an empirical study of 22 veterans and rape/ molestation victims, the EMDR group made dramatic shifts in reducing anxiety, in beliefs about the memory, and in eliminating flashbacks, whereas the control group made none.

Several studies attempting to replicating Shapiro's findings have been conducted, and some support has been found for the effectiveness of EMDR with various trauma groups. However, the findings are not as consistent nor as dramatic as Shapiro first

reported. When comparing EMDR to control group, Renfrey and Spates (1994) did not find differences. Rothbaum (1997) studied the efficacy of EMDR administered in four weekly sessions to 18 female sexual assault victims. They were compared to the wait-list control group on measures of clinician- and self-administered PTSD scales and related psychopathology scales pre-treatment, post-treatment and again three months later. The EMDR groups improved significantly more than the control subjects.

Social Construction of the Significance of Flashbacks

In a recent review of the literature on flashbacks, Frankel (1994) reported that the common view of flashbacks has undergone a radical transition since the term was first coined in the 1960's. In a review of 55 papers indexed under "flashbacks," he examined the phenomenon of the flashback from its appearance as metaphor in the substance abuse literature in 1969 to its reification as fact in the trauma literature. Frankel believes that "despite the imprecise nature of the label 'flashback', experienced licensed therapists with a special interest in trauma victims tend to assert that the accuracy of a patient's delayed recall is affirmed by the content of his or her flashbacks" (p.321.) However,

> The variability in the use of the term [flashbacks] leaves many unresolved questions regarding the veridicality of the imagery. Nothing in the presentations reviewed by the author clearly demonstrates the unidimensional nature of flashbacks nor any recognizable neurophysiological correlates. The content of a flashback appears to be as likely to be the product of imagination as it is of memory (p.321).

Frankel cautions that the scenes from a flashback must be viewed with care and taken neither as a return to an earlier experience, nor as proof of the existence of a presumed childhood event, and calls for more empirical study on the topic. He queries, "the question is

this, 'when such memories have the vivid and intense quality of a full-blown flashback, is their historical accuracy thereby validated?' " It appears many think so.

In spite of the lack of empirical evidence supporting the veridicality or accuracy of flashbacks, popular literature aimed at trauma victims promotes the notion that flashbacks are an important way of retrieving memories long forgotten. In the sexual abuse survivors' literature flashbacks are often treated as valuable windows into the past, as precious bits and pieces of the survivors' history that are necessary to integrate into consciousness in order to heal. Flashbacks, if not encouraged, are at least tolerated. They are treated as horrifying and distressing, but also very significant. Bass and Davis in the Courage to Heal (1988) regard flashbacks as just one of the several ways of remembering, "a flashback is like a slide compared to a film. It's the difference between getting one shot or one look into a room and getting the expanded version. A full memory is more like panning over the whole scene, with all the detail, sound, feelings and visuals rolled into one" ( p.72). Bass and Davis distinguish between the flashbacks which may be valuable in helping a survivor put together missing pieces of the puzzle and those which are merely distressing without adding further information, understanding, or insight. They believe that a survivor has some control over whether they "stay with the flashback and open it up or stay with the present." In Secret Survivors, Blume explains her concept of the function of flashbacks, "they are controlled experiences--events relived to cleanse and heal....flashbacks are an opportunity to learn and to be free....in fully experiencing it all--the events, the feelings and her sensory experience in all of its pain and horror--she can work through it and let the trauma go." (1989, p. 101) Ainscough and Toon write in Breaking Free: A Self Help Guide for Adults Who Were Sexually Abused as Children, " Flashbacks are a way in which buried memories and feelings surface" (1993, p.80). Finney, in Reach for the Rainbow: Advanced Healing for Survivors of Sexual Abuse, reassures the reader that when the flashbacks become less frequent, one

can say, "Oh, that again. What can I learn from it? It will just be an additional piece of information that you can plug into the puzzle of your life." (1990, p.86).

Tedeschi and Calhoun (1996) have gone so far as suggesting that there are many positive outcomes reported by those who have experienced trauma. After conducting many interviews they have developed a Post Traumatic Growth Inventory. They conclude "Women tend to report more benefits than do men. Persons who have experienced traumatic events report more positive changes than do persons who have not experienced extraordinary events." It appears that believing that flashbacks are useful may not be just trauma related, but in fact gender-related.

In contrast support for a positive reframing of the flashback experience in popular literature aimed at Veterans and other trauma victims was not evident. Indeed, in a search for popular books for survivors of combat experience, vehicular accidents, rape and assault under the headings of PTSD, victim, war recovery, healing, Vietnam, assault, rape and trauma only a few self-help recovery books emerged, in contrast to the dozens of books written for survivors of sexual abuse. Within the combat veteran population flashbacks are viewed as highly disruptive, distressing and dangerous. Matsakis in Vietnam Wives explains the impact of flashbacks on the family,

> to the wives and children of Vietnam veterans, flashbacks are always frightening. When their loved one falls to the ground or commands them to "walk the point" with him, they fear not only for their own safety, but for his. His moves are unpredictable. He could easily hurt himself in so many ways. How can they protect him? How can they protect themselves? How long will it take until he "comes back" this time? what if he never "comes back" or kills himself to end his anguish? (p.9-10, 1988)

Many veterans experience flashbacks daily and have not been able to control them for 30 years, and yet they serve no apparent positive function. Flashbacks are associated with

substance abuse, and the inability to hold a job, drive a car, enjoy activities, maintain relationships or tolerate isolation. Books of writings by vets such as Soldier's Heart (1995) speak only of the horror of flashbacks. A poem titled "Every Night After Johnny Carson" goes as follows, " He kneeled behind the bed with his rifle, didn't make a sound, while NVA troops walked into the house, searched through each room and then left." (p.29). Another Vet writes in Soldier's Heart, a narrative titled "There is a Fear": " You are flung back as if it were happening right then. The smell, the flashes, the explosions, the concussions, the smell, the smell, the God awful smell of powder and flesh and blood and screaming and crying and swearing..."( p.32, 1995). In Achilles in Vietnam (1994) flashbacks are explained: " Traumatic memory is not narrative. Rather, it is experience that reoccurs, either as full sensory replay of traumatic events in dreams or flashbacks with all things seen, heard, smelled and felt intact, or as disconnected fragments. These fragments may be inexplicable rage, terror, uncontrollable crying, or disconnected body states such as the sensation of suffocating .." (p. 172, 1994).

Most of the images of flashbacks in the veteran literature are of rage, terror, helplessness and horrible atrocities. Nowhere was there the image that flashbacks are healing, cleansing and informative. The focus of research for this population has been on how to control the distressing phenomenon. In the case of combat veterans, there is little question that they experienced life threat, loss or atrocities and in most cases there is little interest in recovering the exact details of what might have been experienced. The aim is not to question what happened, and whether it really happened, but simply to alleviate the distressing and debilitating symptoms. (Brende and Parson 1985; Burstein, 1985; Matsakis, 1988; Mellman & Davis, 1985).

It is important to note that the difference in the view of flashbacks portrayed in the "survivor literature" is not merely based on a difference in time. One could easily argue that the self help literature written in the decades of the 60's and the 70's is different than that

written in the 90's, regardless of audience. However, if one focuses only on the post-trauma books published in the 1990's the difference in the significance of flashbacks is still evident in the literature aimed at the two survivor groups. In books aimed at survivors in general such as I Can't Get Over It: A Handbook for Trauma Survivors by Matsakis (1992), a more positive reframing of flashbacks is offered for all trauma survivors.

While the literature aimed at the veteran population does not portray flashbacks as positive or illuminating experiences, the sexual abuse survivor literature stresses the benefits and importance of flashbacks as ways to illuminate the past and through this knowledge heal from the trauma. Perhaps the critical predictor is not actually the type of trauma, but whether memory for the trauma is continuous or discontinuous. That is, whether a memory for the trauma has always been available or whether the original incident is only partly remembered, merely suspected or not remembered at all. Is the survivor struggling to forget a horrific experience or striving to remember past trauma only suspected or hazily remembered? Flashbacks may be regarded as the "to be forgotten" by some and as the "to be remembered" by others, but it appears that the latter view is the mode of the 1990's. How much of our current understanding of flashbacks has been constructed by popular literature, and have different survivor populations differentially accepted the positive reframe of the experience? These are important questions for the counselor.

## Flashbacks in the Counseling Setting

No study has as yet explored the significance of flashbacks to the subjects. The questions about how subjects construe meaning of the flashbacks, whether they are considered disruptive or instructive, whether they are believed to be metaphoric or veridical has not yet been reported, and yet these questions are extremely important to counselors working with clients who report flashbacks. In the counseling sessions should flashbacks be treated as historical truth, an accurate window into the past, or should they be treated as a

narrative truth--important but not necessarily veridical? This problem has in recent years come to the forefront and has been widely discussed by such authors as Lynn and Nash (1994), Stevenson (1994) and Spence (1994). The interpretation of any memory brought forth in psychotherapy is a collaborative endeavor between the therapist and the client, with beliefs on each side undoubtedly influencing the interpretation of ambiguous memories. Recent studies have already shown that therapists have higher confidence in memories retrieved by "special mechanisms" (Yapko, 1994); but we do not yet know how therapy clients interpret their own flashbacks, or even if there is a typical flashback experience. Thus we are missing an important part of the equation. The intent of this research is to fill in this gap, thus giving counselors a clearer idea of the significance of flashbacks to those clients who report them in their counseling sessions.

The Research Questions

Five specific areas are studied. To begin with I explore and describe the normative experience of flashbacks in three groups: combat veterans (Vets), adult survivors of childhood sexual abuse (CSA group,
) and a group of those with other types of trauma (Mixed group). Specifically, what is the experience of a flashback from the subject's point of view? The study describes flashbacks in some detail including triggering stimuli, perceptual elements: visual, auditory, tactile, kinesthetic, gustatory and olfactory sensations, feelings before, during and after the flashback and coping strategies.

Secondly I explore the significance of flashbacks as it relates to type of trauma. Are flashbacks perceived to have some positive healing value or are they merely distressing and disruptive? Do the survivors perceive that flashbacks give information, cleanse, or contribute to the healing process in some way as some self help literature suggests? Do survivors believe that flashbacks will go on forever, or will they diminish when their work

has been done? Do these groups view the significance of flashbacks in the same way or do they view them differently?

Thirdly I explore the relation between type of memory for the event and the perceived significance of the flashbacks. Do those with continuous memories of the original trauma perceive flashbacks in the same way as those whose memories for the original trauma are absent, murky, or discontinuous? Are flashbacks perceived in a more positive light when the survivor is trying to remember rather than trying to forget?

Fourth, I seek to understand the factors that contribute to the perception that the flashback portrays the past trauma with historical accuracy, or conversely whether it portrays a the trauma in a more metaphoric or more exaggerated form. What factors are associated with a person's confidence in the historical accuracy of their flashback? For example, do subjects with discontinuous memories take into account the possibility of errors inherent in the reconstruction process?

And lastly, I explore how the nature of the flashback relates to disruptions in the subject's life in the short term and in the long term. Are flashbacks that are more horrific and extensively detailed than the original event more distressing and disruptive than flashbacks that seem to portray an accurate or lesser trauma than the original event? How do subjects cope with the disruption and distress of their flashbacks?

Specifically, five key questions are addressed:

1) How do survivors of combat, childhood sexual abuse and other traumas experience and describe their flashbacks? What are the similarities and differences in triggers, perceptual elements, sense of reality, and coping strategies?

2) What is the significance attributed to flashbacks by subjects in the different survivor groups? Are they perceived as useful or merely distressful ?

3) What relationship is there between memory for the original event and perceptions of usefulness and distress? What are the strongest predictors of perceptions of usefulness or distress?

4) What variables are associated with belief in the veridicality or accuracy of a flashback?

5) What variables are associated with flashbacks being disruptive in a person's life? Are flashbacks that are actually the "worst case scenario" more disruptive?

## Chapter Two

## Method

Research Design.

The research design for this study is a combination of a comparative survey design looking at the overall experience of flashbacks in three groups, and a multiple regression design that looks at some specific relationships. I chose the comparative survey design to examine the phenomenon of flashbacks including triggers, sensory perceptions, perceptions of significance or accuracy, and coping strategies to determine if the flashback experience is similar or dissimilar across disparate groups.

I selected a multiple regression design to determine the strongest predictors for the perceptions that flashbacks are 1) useful 2) disruptive and 3) veridical. In particular, I ran multiple regressions to determine whether gender, trauma status, or type of memory for the original event were the strongest predictors for these three attitudes.

Subjects: In the final study I surveyed three groups of participants: 34 combat veterans (Vets), 31 adult survivors of childhood sexual abuse (CSA group), and 28 survivors of other traumas including vehicular accidents, assault, rape, kidnapping, injuries and botched surgery ( Mixed group). Subjects were eligible for the study if they had a history of at least one flashback, were not in a fragile psychological state, and had access to a current or past therapist to turn to in case of distress. It should be noted that I made no effort to corroborate the self-reported trauma history of any of the participants, nor did I attempt to assess the psychological state of participants who responded to newspaper ads.

I recruited the combat veteran group through the Seattle Veterans Administration's Post Traumatic Stress Disorder Program. The veterans on the PTSD inpatient ward remain

for 15 to 21 days for intensive treatment of their symptoms before returning to the community. Subjects were introduced to the study during the morning meeting of staff and patients and requested a survey if they wished to participate. Completed surveys ( Appendix A) and consent forms ( Appendix B) were left for me o pick up.

The 34 combat veterans ( Vets) who responded to the survey were a rather homogeneous group in terms of gender, age, education and tendency to be unemployed, or in jobs requiring little training. Table 1 reveals that 100% of the Vets were male and primarily of the Vietnam War era, with a mean age of 48. The ethnic background of the Vets was more diverse than that of the other two groups with 71% Caucasian, 9% African American, 6% Native American, and 6% of mixed ethnicity ( Table 2). Few of the Vets had pursued extensive education after high school, with a mean of 14 years of education. As a result, they tended to be employed in non-professional jobs, if at all. While 38% of the Vets worked in "blue collar " jobs, and 6% were self-employed, about half of this Veteran group were unemployed, collecting disability or retired ( Table 3). The data suggest that the Combat Veteran Group had difficulty maintaining relationships, with 34% married at the time of the survey. About half reported that they were divorced or separated while many had never married at all ( Table 4). The Vets had been in psychotherapy for a mean of 7 years (Table 1).

I recruited subjects in the CSA and the Mixed groups through referrals in the therapeutic community and by soliciting volunteers through local newspapers or flyers posted in mental health clinics ( Appendices C, D and E). Subjects were included in the CSA group if they reported a history of childhood sexual abuse, and all others were included in the Mixed trauma group. I mailed an explanation of the study (Appendix F) and a copy of the survey to each volunteer who called with the instructions that they be mailed back after completion. For the participants in the last two groups a $10.00 participation fee was offered and mailed to the subject upon receipt of the completed survey.

Table 1

Demographics of Subjects

| Variable | Trauma Groups | | |
|---|---|---|---|
| | Vets | CSA | Mixed |
| Gender | | | |
| % male | 100 | 4 | 33 |
| % female | 0 | 96 | 67 |
| Mean age | 48 | 37 | 34 |
| Mean years of education | 13 | 15 | 15 |
| Mean years of therapy | 7 | 7 | 6 |

Table 2

Percentage of Subjects in Each Trauma Group in Different Ethnic Groups

| | Trauma Groups | | |
|---|---|---|---|
| | Vets | CSA | Mixed |
| Ethnic group | % | % | % |
| Caucasian | 71 | 81 | 93 |
| African-American | 9 | 3 | 0 |
| Asian-American | 0 | 0 | 4 |
| Native-American | 6 | 7 | 0 |
| Mixed or other | 6 | 0 | 0 |
| Missing data | 9 | 10 | 4 |

Table 3

Percentage of Subjects in Each Trauma Group in Various Occupations

| | Trauma Groups | | |
|---|---|---|---|
| | Vets | CSA | Mixed |
| Occupation | % | % | % |
| Professional | 0 | 23 | 21 |
| White collar | 0 | 19 | 7 |
| Blue collar | 38 | 3 | 11 |
| Homemaker | 0 | 3 | 11 |
| Arts | 0 | 3 | 4 |
| Student | 0 | 13 | 21 |
| Self-employed | 6 | 13 | 4 |
| Retired | 9 | 0 | 0 |
| Unemployed | 27 | 7 | 4 |
| Disabled | 15 | 7 | 11 |
| Missing | 6 | 10 | 7 |

Table 4

Marital Status of Subjects in Each Trauma Group

| | Trauma Groups | | |
|---|---|---|---|
| | Vets | CSA | Mixed |
| Marital Status | % | % | % |
| Single | 16 | 46 | 62 |
| Married | 34 | 18 | 15 |
| Divorced | 44 | 21 | 12 |
| Separated | 3 | 0 | 4 |
| Committed relationship | 3 | 14 | 8 |

The 31 Adult Survivors of Childhood Sexual Abuse ( CSA group) were more heterogeneous than the Veteran population. As a group they were all female except for one, primarily Caucasian, younger with a mean of 37 years, and slightly better educated with a mean of three years of college ( Tables 1 and 2). As a whole, the CSA group were more skillfully employed than the Vets, with many employed as professionals ( 23% ) or in "white collar " jobs ( 19%). There were many who reported being students, homemakers, or self employed while only 14% were unemployed or on disability ( Table 3). Of the CSA group 46% were still single, 14 % in a committed relationship, 18% married, and 21 % divorced, painting a different picture from the Vets who had already ventured into marriage and failed (Table 4 ). The CSA group reported that they had been in psychotherapy a mean of 7 years, very similar to the Vets.

The Survivors of Mixed Traumas (Mixed group) were the youngest group with more respondents tending to be students who were still single. A total of 28 respondents were in the Mixed group with a mean age of 34 years. This is the only group in which there was a gender split with 33% male and 67% female (Table 1). However, this group showed even less ethnic diversity than the other two groups with 93% reporting Caucasian background (Table 2). Of the Mixed group the mean years of education reported was 15, but it must be noted that a fifth of this group were still students. As a group they were very heterogeneous professionally. In the Mixed group 21% were professionals, 7% "white collar" workers, about one tenth were "blue collar" workers, a tenth homemakers, a tenth disabled, 4% unemployed, 4% working in the arts, and 4% self-employed (Table 3). This younger Mixed group reported that 62% were single, 15% were married, 8% were in committed relationships, 12% were divorced, and 4% were separated (Table 4). The Mixed group reported a mean of 6 years in psychotherapy, somewhat less than either of the other groups.

Changes and Compliance with Human Subjects Review Board

I anticipated only two groups in the original research plan. The veteran group was relatively easy to recruit as potential subjects were readily available, and the veterans viewed the survey as a way to further the knowledge base and "help out their buddies." Recruitment of the sexual abuse survivors group through therapist referral was surprisingly unsuccessful. Many therapists declined to participate because their clients were seen as fragile, because they did not wish to disturb the client/therapist relationship, or because the therapists feared their subjects would become victims in the "repressed memory debate." When therapists were willing to ask their clients, clients were not interested, perceiving little benefit to themselves, or were reluctant to risk their confidentiality. Several asked to use an alias.

After collecting only three surveys for the CSA group in the first six months, with the approval of the Human Subjects Committee, I began recruiting through local independent and college newspapers and flyers in Mental Health Agencies offering a $10.00 participation fee. The ads asked for trauma survivors with flashbacks in general, and as result, a third subject group of trauma survivors emerged. From that point recruitment was quick, with volunteers seemingly eager to share their experience. Because I determined with the Human Subjects Committee that the consent form requiring a signature (Appendix G) represented more risk to the participants than filling out the survey, risks and benefits for the CSA and Mixed groups were explained in a cover letter (Appendix F) and consent was implied by the fact that the entirely voluntary survey was mailed in.

While acknowledging the differences in recruitment described above, I made efforts to standardize the instructions as much as possible. Efforts were made to avoid any kind of coercion, and to protect confidentiality. I designed the survey to focus on the flashback itself, not the original trauma, in order to minimize the discomfort which is always possible

when dealing with a sensitive area. I requested that each subject have current access to a therapist who could be called on to help deal with any discomfort that arose.

Instruments

I developed the structured questionnaire ( Appendix A) with input from a memory research psychologist, three clinical psychologists who work with trauma survivors, and the clinical psychologist who is the director of the Veterans Administration PTSD Program. I derived the approximately 90 items from the existing literature on flashbacks, from studies on memories for traumatic events, and from the clinical experience of the consultants. The questions focus on antecedents to the flashback, visual details, auditory details, tactile/kinesthetic details, taste/smell, a sense of reality, feelings during the flashback, feelings and thoughts after the flashback, and coping strategies. Questions were designed to yield data similar to that of Grunert et al.(1988) so that flashbacks could be classified into "replay," "appraisal," or "projected" categories (if there was any corroboration for the original event).

I constructed a section to get at subjects' perceptions of the significance of their flashbacks. Do they believe that flashbacks are an accurate replaying of the original trauma or are they perceived as more metaphoric or even exaggerated? How do flashbacks compare to other types of memory in the subject's eyes? Are flashbacks useful or instructive? In addition subjects identified the type of memory they have for the original event so that they could be classified as "continuous" or "discontinuous."

I constructed the items for the most part as a Likert type scale with choices between 1 and 5, with 1 representing "strongly disagree" and 5 representing "strongly agree," while three represented "undecided" or "not applicable." I worded the questions in such a way that the answer indicative of a more positive interpretation is sometimes represented by the 1 and at other times by the 5. A few of the questions were presented as multiple choice with

the instruction that the subject should pick as many answers as applied. Occasionally I included a blank space for respondents to elaborate with a word or phrase. I constructed the questionnaire to be as simple as possible for the subject to fill out, understanding that it was relatively long and would be given to subjects who often have difficulty concentrating because of the very nature of their PTSD. I piloted and revised the survey, using feedback from three pilot subjects.

Procedure

Volunteers read a brief introduction and signed a formal consent form or read a detailed letter with implied consent. They answered some brief historical questions such as when the flashbacks began and how often they experienced flashbacks and were invited to write a brief description of their most recent flashback. I instructed the subjects to select a number from 1 to 5 or to select appropriate descriptors in the multiple choice sections. Where blank spaces were provided subjects were encouraged to fill in an explanatory word or phrase. After completion of the survey, which took around half an hour, the subject placed it in a sealed envelope to be picked up or mailed back. I encouraged subjects to discontinue the survey if they experienced distress. Subjects who experience any distress as a result of the survey were encouraged to contact their therapist. I was available for phone contact to answer any questions or concerns.

Data analysis

The research design was a combination of a comparative survey design and a multiple regression design. In order to arrive at a normative description of the experience of flashbacks and in order to compare the three groups I computed the mean and standard deviation for most responses.

In addition, in order to get a better picture of the distribution of responses in each group, I computed percentages of those who agreed and those who disagreed. Responses of 1 and 2 were collapsed into a "disagree" category and reported as " % no" while responses of 4 and 5 were collapsed into an "agree" category and reported as "% yes" The responses of 3 on the Likert scale which represented neutral, not applicable, or "not sure" were dropped out. For many of the items, subjects were quite definite about their experience and the cumulative percentages of those who agreed and disagreed total nearly 100%. For other items, such as the question about hypnosis, subjects were rather neutral, or felt the question did not apply to them, marking 3 on the Likert scale. For these items the additive percentages for "no" and "yes" are much less than 100%.

On a few items where the standard deviation is larger than the mean, such as the frequency of flashbacks, the mode and median are more informative and are also reported. For several items where multiple responses were possible, I reported percentages of subjects who endorsed each option rather than the mean. All data are reported in the tables in the Results Section.

I used a multiple regression design to address complex relationships between variables. Specifically, I chose the multiple regressions to determine if gender, trauma status or type of memory were the strongest predictor for the indexes used as the dependent variables. With variables entered in a stepwise fashion it was possible to sort out in particular whether trauma status or gender, which were highly colinear, was the stronger predictor for a dependent variable.

I planned six multiple regression analyses to reveal the existence and strength of relationships between such factors as memory for the original event and subjective perceptions which are attributed to the flashback. The anticipated dependent variables were indexes of "usefulness", "disruption/ distress," "projected outcome, " "veridicality" ,

"perceptual clarity" and "confidence in memory." I constructed indexes because an index as a indicator of an attitude is less likely to be affected by random error than a single variable, and is therefore more reliable and gives better support for validity. I constructed each index or scale from the combined results of four to eight questions which get at a slightly different aspect of the same attitude. The items were originally grouped theoretically, and then I ran Alpha analyses to determine if in fact the items hung together. I eliminated items from the indexes or scales of the Alpha could be improved by that item's deletion. I did not use scales if the Alpha did not reach the 0.7 cutoff. The surviving indexes are fully described in the results section and the original indexes are found in Appendix H.

I chose the independent variables for each multiple regression based on empirical studies outlined in the review of literature and on clinical experience. If the variables were nominal rather than ordinal such as gender and type of trauma, I created dummy variables. Variables selected a priori included type of memory (collapsed into continuous or discontinuous), type of trauma (Vet, CSA or Mixed), type of flashback ( projected or non-projected), gender, age, number of years since flashbacks began, and some coping or learning strategies that I believed would affect a subject's beliefs. Because of strong colinearity between gender and trauma status, I entered variables in stepwise progression to tease out their relative strength as predictors. The existence of colinearity in pairs of variables such as type of trauma and gender, predicted with certainty that when entered in stepwise progression the weaker of each pair of would not survive in the final equation. In the end, only three multiple regression analyses were run due to the low Alpha levels in three of the indexes. Details of each regression that was run will be described in the results section.

# Chapter Three

# Results

## Description of the Flashback Experience

One aim of this study was to develop an normative description of flashbacks and to highlight any differences that appeared across trauma groups. The descriptive section of the study addressed the first two research questions: 1) How do survivors of combat, childhood sexual abuse and other traumas experience and describe their flashbacks? What are the similarities and differences in triggers, perceptual elements, sense of reality, and coping strategies? 2) What is the significance attributed to flashbacks by subjects in the different survivor groups? Are they perceived as useful or merely distressful ?

Definition of a flashback. As I did not wish to restrict what was considered a flashback experience for any of the subjects, no definition was supplied in the introductory instructions. Rather, on the last page of the survey I asked subjects to pick one of five options that best described what they call a flashback, or to supply a definition if none of the options fit. Interestingly, many subjects picked more than one option, or jotted in the comment that they have experienced several of the types of flashbacks. As seen in Table 5, the largest percentage of the Vets (39%) said that their flashback was "like reliving the past trauma so that it seemed real and I lost track of where I really was." About one sixth of the Vets chose, " like a video replay of the past trauma," while another sixth chose "an intrusive memory of the past trauma, almost like a daydream." A final sixth indicated that their flashbacks were some combination of the five definitions.

Table 5

Percentages of Subjects in Each Group Who Describe Flashbacks in Various Ways

| | Trauma Groups | | |
|---|---|---|---|
| Description of Flashback | % Vets | % CSA | % Mixed |
| Reliving the trauma | 39 | 23 | 0 |
| Like a daydream | 18 | 19 | 22 |
| Like a video replay | 15 | 7 | 22 |
| Like a snapshot | 3 | 10 | 19 |
| A strong emotional reaction | 0 | 13 | 19 |
| Multiple responses | 18 | 23 | 15 |
| Other | 6 | 7 | 4 |

In contrast, only about a fourth of the CSA group (23%) selected the "reliving the trauma" option, while the same number selected a combination of the options and a fifth of the subjects said their flashbacks were like a daydream. A tenth selected, "a quick visual flash or a snapshot of the trauma." A further 13% of the CSA group selected " a strong emotional reaction, having the same quality as the trauma," a rather loose option never selected in isolation by the Vets. The Mixed group showed almost an even split with one fifth selecting each of the following: "strong emotional reaction," a "daydream," " a snapshot," "a video replay," and mixed responses. Interestingly, in contrast to the Vets and even to the CSA group, none of the Mixed group said that their flashbacks were a " reliving of the past trauma."

It appears that there is not a universal understanding of the term "flashback" nor is there only one way in which individual trauma survivors experience their flashbacks. Rather there is a tremendous amount of variability. The Vets are most likely to describe their experience of flashbacks as a virtual replay of the trauma where they lose track of where the are, the Mixed group never experienced flashbacks as such, and the CSA group fell in between. The data reveal that the CSA and Mixed groups experience the flashbacks in a more limited way, perhaps as a metaphorical reliving, a quick visual flash, a daydream, or a strong emotional reaction. Most revealing was the fact that many subjects said that their flashbacks continually vary and that they experience them in a variety of ways.

Background Information. The three groups differed widely when asked about the history of their flashbacks as revealed in Table 6. However, there was so much variance within groups that meaningful comparison between the groups was precluded. The Veterans reported that the mean number of years that had passed since their flashbacks first began was 23, with a mean of 4 years elapsing between the trauma and the first flashback. There

Table 6

Background Information About Flashbacks

| Variable | Trauma Groups: Vets | CSA | Mixed |
|---|---|---|---|
| Mean number of years since flashbacks began | 23 | 10 | 10 |
| Mean number of years since trauma and first flashback | 4 | 14 | 3 |
| Number of flashbacks per year | | | |
| Mean | 153 | 85 | 179 |
| Median | 80 | 12 | 76 |
| Mode | 365 | 365 | 365 |
| Percent saying that last flashback occurred within: | | | |
| last week | 53 | 39 | 46 |
| last month | 9 | 29 | 29 |
| last year | 12 | 23 | 14 |
| last five years | 12 | 0 | 0 |
| last ten years | 3 | 7 | 0 |
| Percent saying that flashbacks have changed over time | 71 | 81 | 89 |
| Percent saying that flashbacks occur in a pattern | 53 | 65 | 64 |

was great variability in the frequency of flashbacks with a mean of 153, a median of 80, and a mode of 365 flashbacks a year. Thirty years after the Vietnam war these Veterans were still having, on the average, two to three flashbacks a week! Just over half of the Vet group reported that their most recent flashback had occurred within the last week, 9% within the last month, 12% within the last year, 12% within the last five years and 3% within the last 10 years. About three fourths of the Vets reported that their flashbacks have changed in frequency over time, and half reported that they see a pattern to their flashbacks.

The CSA group reported a much longer delay, averaging 14 years, between the index trauma event and the onset of their flashbacks. On the average, the CSA group's flashbacks began 10 years ago, around 1987. The CSA group reported that they experienced fewer flashbacks than the Vets, with a mean of 85, a median of 12, and a mode of 365 flashbacks a year. About three fourths of the CSA group reported that their flashbacks have changed over time and two thirds said that there is a pattern to how their flashbacks occur. Of the CSA group, 39% reported that their most recent flashback had occurred within the last week, 29% within the last month, 23% within the last year, and 7% within the last 10 years.

The Mixed Trauma group reported that the mean number of years between the occurrence of the trauma and their first flashback was 3 years, and that similarly to the CSA group their flashbacks began on the average 10 years ago. The Mixed group reported the highest frequency with a mean of 179, a median of 76, and a mode of 365 flashbacks per year. Approximately 90% of the Mixed group reported that their flashbacks have changed over time and two thirds said that there is a pattern to how their flashbacks occur. About half of the Mixed group reported that their most recent flashback had occurred within the last week, 29% within the last month, and 14% within the last year making their last flashback relatively more recent than the other two groups.

Memory for the Event. Subjects were asked to report on "the memory you may have for the event that corresponds to your most recent flashback." Did they have a clear episodic memory for the trauma, a hazy memory, or did the flashback content come as a total surprise? Subjects were asked to choose one of four main options: 1) " I have always remembered the event clearly, throughout my life" ("always remembered"); 2) " I have always had some vague memory of the event, or have always remembered some parts of the event, but not all of it ( " partial/vague memory"); 3) "There was some period of time in which I had no memory for the event, but only later the memory returned" ("discontinuous memory"); or 4) " Other than the flashback, I still have no memory for any event that corresponds to the flashback ("no memory"). If subjects picked the "discontinuous memory" option, they were asked for further clarification. Although subjects were instructed to pick only one of the main options, they did not always follow this instruction. Several subjects indicated that they had both a vague or partial memory and a period of discontinuous memory for the event. In these cases, a rule was devised stating that the most conservative response, or that which indicted the highest degree of clear, continuous memory would be scored. Therefore, the percentages reported in Table 7 are conservative, and a greater amount of delayed or discontinuous memory was actually reported.

As can be seen from Table 7, the Mixed group were the most likely to pick the "always remembered" option, with nearly two thirds of them stating that their memory was clear and continuous. Slightly fewer than half the Vets picked this option and just over one fourth of the CSA group. The "partial/vague memory" option was selected by approximately one fourth of all groups. The "no memory" was selected by only one subject in each of the groups, indicating that the content of the flashbacks was not coming as a total surprise to most of the subjects.

Of special interest then is the "discontinuous memory" option. This was selected by nearly half of the CSA group, by a full quarter of the Vets, and by a tenth of the Mixed

Table 7

Percentages of Subjects in Each Group Who Endorsed Type of Memory for the Original Event

| | Trauma Groups | | |
|---|---|---|---|
| Type of Memory for Original Event | % Vets | % CSA | % Mixed |
| Always remembered event clearly. | 41 | 26 | 63 |
| Always had a vague or partial memory. | 29 | 23 | 22 |
| Period of time no memory, later memory returned. | 27 | 48 | 11 |
| Still no memory for event | 3 | 3 | 4 |

trauma group. Researchers have found previously that many subjects claim a period of time in which they " could not remember" a traumatic event, but as the wording has been ambiguous, it has been difficult to determine just what a subject meant. Therefore, in this study subjects choosing the "discontinuous memory " option were asked to clarify what they meant. They did so by selecting one of the following options: a) " If someone had asked me if this event ever occurred I would have said 'no'" ("would say no" ); b) " I did not think about the trauma for a period of time because it was too painful, but I would have said 'yes' if someone had asked me if it ever occurred." ("too painful"); c) " I did not think about the trauma for a period of time because I was too busy or preoccupied, but if someone had asked me I would have said 'yes'," ("preoccupied/ busy" ); d) "I had a hunch that something happened, but didn't know, and if asked would have said, ' I'm not sure,'" ("hunch/ not sure").

Looking at Table 8, it must first be noted that the number of subjects, n, in each group is rather small, making percentages misleading. Nevertheless, the data reveal that the Vets and the Sexual Abuse Survivors may mean different things when they talk about discontinuous memory. For the Vets the most common clarification, chosen by over half, was the "too painful" option. The remaining half of the Vets split their choices between the "preoccupied/ busy" option and the "hunch/not sure" option. None of the Vets chose the "would say no" option alone. However, this option was chosen by three of the Vets in combination with other options indicating that specifying memory for a traumatic event was not as simple as expected. Again a rule was devised whereby the option indicating the highest degree of memory was scored ( i.e.. "too painful" or "preoccupied/ busy " was scored over "hunch/ not sure," which in turn was scored over "would say no.")

As opposed to the Vets, more than one fourth of the CSA group claimed that they would have rejected the trauma as part of their experience during the period of "discontinuous memory." Four subjects in the CSA group (28%), chose the option stating that even if asked

Frequency and Percentage of Subjects in Each Group Who Reported Discontinuous Memory for the Original Event. What Did Subjects Mean?

| | Trauma Groups | | | | | |
|---|---|---|---|---|---|---|
| Meaning of Discontinuous Memory | Vets n=9 | | CSA n=14 | | Mixed n=3 | |
| No memory, if asked would have said "no." | (0) | | (4) | 29% | (1) | 33% |
| Didn't think about, too painful. | (5) | 56% | (3) | 21% | (2) | 67% |
| Didn't think about, too busy or preoccupied | (2) | 22% | (2) | 14% | (0) | |
| Always had a hunch, would have said "not sure." | (2) | 22% | (5) | 36% | (0) | |

specifically about the event in their flashback they would not have been able to remember it, and would in fact have said "No, it did not happen to them." (See Appendix I for further analysis of these four subjects.) A further 35% said that they had a hunch that something had happened, but if asked directly they would have said that they were "not sure." A fewer number compared to the Vets said that they pushed the memory aside because it was too painful ( 21%) or they were too preoccupied (14%). Only three of the Mixed group reported that they had a discontinuous memory for the trauma, but of these three one said they would not have been able to remember while two said the trauma was too painful to think about.

Before the Flashback. For most of the remaining survey items, a Likert scale was used ranging from 1 representing " strongly disagree" to 5 "strongly agree." For each trauma group both the mean response M and Standard Deviation SD are reported. In addition, the percentage of those who disagreed marking either 1 or 2 on the Likert scale ( % no), and those who agreed marking either 4 or 5 (% yes ), are reported in order to show more clearly the distribution of responses.

For example the data for " surprise" is presented in Table 9. Reading across the table, you will see the data first for the Vets: the mean, M=2.8 the Standard Deviation, SD= 1.9, and then the percentages of Vets who disagreed (50% no) and those who agreed (41% yes). This same sequence is repeated for the CSA and the Mixed groups as you go across the row. In each table the items are presented similarly for the three subject groups. The exact wording of each item is in the thematically organized survey (Appendix A ). The trauma groups are strikingly different in a number of ways with gender and age confounding the effects of type of trauma. Therefore, I do not report any inferential statistics on the descriptive data. Rather, I offer some cautious observations when responses appear strikingly different from one group to another.

Table 9

Mean Scores and Percentages of Disagreeent and Agreement for Emotional State Before the Flashback

| | Trauma Groups | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vets | | | | CSA | | | | Mixed | | | |
| Variable | M | SD | %no | %yes | M | SD | %no | %yes | M | SD | %no | %yes |
| Surprise | 2.8 | 1.9 | 50 | 41 | 3.3 | 1.9 | 39 | 52 | 2.9 | 2.0 | 50 | 43 |
| Dreams before | 3.7 | 1.7 | 24 | 59 | 2.8 | 1.9 | 48 | 39 | 3.0 | 1.8 | 37 | 37 |
| Stress before | 3.8 | 1.5 | 15 | 53 | 3.8 | 1.6 | 19 | 61 | 3.3 | 1.8 | 32 | 46 |
| Anxiety before | 3.9 | 1.6 | 18 | 62 | 4.3 | 1.3 | 10 | 74 | 3.6 | 1.7 | 25 | 54 |
| Intense emotions | 3.2 | 1.7 | 32 | 41 | 4.1 | 1.5 | 13 | 67 | 3.2 | 1.9 | 37 | 48 |

Subjects were asked to report on their psychological state before the onset of their most recent flashback (Table 9). The Vets reported many dreams before the flashback, more than the other two groups, and when asked if they were surprised by the flashbacks they fell nearly evenly into two camps with half reporting surprise and half not. While the Vets felt neutral about experiencing intense emotions in general, they agreed that both stress and anxiety were quite high before their most recent flashback.

The CSA group were more surprised than the Vets by the occurrence of their flashbacks, and reported fewer dreams beforehand. Perhaps the two variables are related in that increased frequency or intensity of dreams serve as a warning that a flashback is impending. In contrast to the Vets, the CSA group reported overall a high degree of intense emotions preceding the flashback with very high anxiety (M= 4.3) and high stress equal to that of the Vets (M=3.8). The Mixed group's responses fell between the Vets and the CSA group on the questions of surprise and dreams preceding the flashback, and they felt slightly less stress and anxiety than either the Vets or the CSA group .

Triggers for the Flashback . Subjects were asked what they believe triggered their most recent flashback. Each subject could, and often did say that their flashbacks were triggered by more than one stimulus. The most informative way of looking at the data is the order in which triggers were most often selected by each group. Within each group the triggers that were most often selected produced a higher mean score as revealed in Table 10. For the Vets the most commonly selected trigger was auditory, followed by visual and emotional, then olfactory, and finally tactile/kinesthetic cues. The CSA group were most likely to select emotional triggers, then visual, tactile/kinesthetic, and auditory triggers. In the CSA group olfactory triggers were very rare. Overall, the Mixed group were less likely to select multiple triggers for their flashbacks. For the Mixed group the most common

Table 10

Mean Scores and Percentages of Disagreeent and Agreement for "Triggers" Setting off the Flashback

| | Trauma Groups | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vets | | | | CSA | | | | Mixed | | | |
| Variable | M | SD | %no | %yes | M | SD | %no | %yes | M | SD | %no | %yes |
| Visual | 3.5 | 1.7 | 27 | 50 | 3.2 | 1.9 | 39 | 48 | 2.9 | 1.9 | 44 | 41 |
| Auditory | 3.8 | 1.5 | 15 | 56 | 2.7 | 1.8 | 48 | 36 | 3.0 | 1.9 | 43 | 43 |
| Olfactory | 3.2 | 1.7 | 29 | 41 | 1.8 | 1.2 | 68 | 6 | 1.7 | 1.3 | 70 | 7 |
| Tactile | 2.7 | 1.6 | 38 | 23 | 2.9 | 1.9 | 45 | 39 | 2.3 | 1.6 | 52 | 19 |
| Emotional | 3.5 | 1.7 | 24 | 49 | 4.2 | 1.5 | 16 | 74 | 3.2 | 1.8 | 32 | 43 |

triggers were emotional, then auditory, visual, and tactile/kinesthetic while olfactory cues were rarely selected.

Of particular interest is the data on olfactory triggers. Of the Vets, 41% agreed that their flashbacks were triggered in part by a smell such as burning flesh, blood, rotting bodies, diesel fuel, gasoline, cooking smells, fish, jungle vegetation, and gun oil. In contrast only 6% of the CSA group and 7% of the Mixed group reported olfactory triggers.

Also outstanding is the high Means in the CSA groups for emotional triggers ( M=4.2), which may be associated with the intense emotions they reported before the flashback. There may be a pattern specific to the CSA group in which intense emotions not only serve as a warning of an impending the flashback, but also end up triggering the flashback.

Visual Details. The next section focuses on visual details of the flashbacks as summarized in Table 11. Many of us think that flashbacks are visual replays of a traumatic event, and this belief was strongly upheld by the data. The Vets, CSA and Mixed groups are quite similar in their report that their flashbacks were visually very clear with means of 4.8, 4.2 and 4.4 respectively. Furthermore, they agreed that their flashbacks were much more like a movie than like a single snapshot. The CSA and the Mixed groups were more likely to indicate that their flashbacks were not in slow motion nor a "narrow scene" than were the Vets who were neutral on both items.

There are striking differences between the groups on two items. Whereas the Vets reported that their flashbacks were in bright colors (M=4.2, ) both the CSA and the Mixed trauma groups were less likely to agree (M= 3.2 and M=2.8 respectively) One does not know from this response, however, if the images were in black and white, or merely in muted colors as would be expected in a nighttime vision. Another striking difference was the response to "the scene seemed to be from my own eyes," to which the Vets strongly agree

Table 11

Mean Scores and Percentages of Disagreeent and Agreement for Visual Details of the Flashback

| | Trauma Groups | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vets | | | | CSA | | | | Mixed | | | |
| Variable | M | SD | %no | %yes | M | SD | %no | %yes | M | SD | %no | %yes |
| Picture clear | 4.8 | 1.0 | 6 | 94 | 4.2 | 1.5 | 16 | 77 | 4.4 | 1.3 | 11 | 82 |
| Like snapshot | 2.3 | 1.7 | 59 | 22 | 1.9 | 1.6 | 73 | 20 | 3.0 | 2.0 | 46 | 46 |
| Like movie | 4.0 | 1.7 | 21 | 73 | 3.8 | 1.8 | 29 | 68 | 3.6 | 1.9 | 33 | 63 |
| Bright colors | 4.2 | 1.4 | 12 | 70 | 3.2 | 1.9 | 39 | 48 | 2.8 | 1.8 | 44 | 33 |
| Slow motion | 3.3 | 1.7 | 28 | 44 | 2.6 | 1.8 | 53 | 33 | 2.6 | 1.8 | 48 | 30 |
| View from eyes | 4.8 | 0.8 | 3 | 94 | 3.3 | 1.9 | 39 | 55 | 4.3 | 1.4 | 11 | 78 |
| Camera view | 2.4 | 1.7 | 52 | 24 | 2.9 | 2.0 | 48 | 45 | 2.3 | 1.8 | 59 | 26 |
| Narrow scene | 3.2 | 1.6 | 28 | 38 | 2.5 | 1.8 | 55 | 29 | 2.5 | 1.6 | 46 | 23 |

with 94% saying yes. In comparison 78% of the Mixed group but only 55% the CSA group reported seeing the scene from their own eyes. The CSA group was the most likely of the three to report seeing the scene as if from a camera.

Auditory, gustatory, olfactory and kinesthetic details. Looking at Table 12, there were no striking differences in the way the three groups reported the auditory details of their flashbacks. Subjects in the three groups agreed that there were sounds in their flashbacks, but within each group there was a split as to whether these sounds included voices, although the CSA group were more likely to report hearing voices in their flashbacks. Within the CSA and the Mixed groups, approximately one half disagreed that they experienced the voices "inside their head" in the way that people often describe hallucinations, while the Vets were slightly more likely to agree. Very few subjects in any group reported having the sensation of taste in their flashbacks, but about half of the Veterans and the CSA group reported olfactory sensations.

In reviewing Table 13 on the tactile and kinesthetic details of the flashbacks there are several findings of importance. Of the CSA subjects, 68% report that something seemed to touch them or that they touched something else during their flashbacks, about twice as often as subjects in the other two groups. Interestingly, although all three groups reported slight agreement with feeling that their body was moving or that they felt muscles contract, the CSA group were more likely to describe their physical sensations as painful. While the vast majority of each group was quite adamant that their sensations were not pleasant, a minority of 21% of the Vets did endorse this item. It is not immediately clear what the Vets considered pleasant, but some of the data presented later might illuminate this item.

Both the Vets and the CSA group were likely to report a temperature change during the flashback, but interestingly while some reported that they felt hot, others reported feeling

Table 12

Mean Scores and Percentages of Disagreeent and Agreement for Auditory, Olfactory and Gustatory Details of the Flashback

| | Trauma Groups | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vet | | | | CSA | | | | Mixed | | | |
| Variable | M | SD | %no | %yes | M | SD | %no | %yes | M | SD | %no | %yes |
| Sounds | 4.0 | 1.6 | 19 | 69 | 3.8 | 1.8 | 26 | 68 | 3.4 | 1.9 | 37 | 56 |
| Clear voices | 3.0 | 1.9 | 44 | 44 | 3.6 | 1.9 | 32 | 61 | 3.0 | 1.8 | 41 | 41 |
| Inside head | 3.2 | 1.6 | 28 | 38 | 2.8 | 1.9 | 50 | 40 | 2.9 | 1.9 | 48 | 41 |
| Tastes | 2.5 | 1.7 | 52 | 27 | 2.1 | 1.8 | 71 | 26 | 1.8 | 1.5 | 74 | 15 |
| Smells | 3.5 | 1.8 | 29 | 56 | 3.1 | 2.0 | 45 | 48 | 2.3 | 1.8 | 63 | 26 |

Table 13

Mean Scores and Percentages of Disagreeent and Agreement for Tactile and Kinesthetic Details of the Flashback

| | Trauma Groups | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vets | | | | CSA | | | | Mixed | | | |
| Variable | M | SD | %no | %yes | M | SD | %no | %yes | M | SD | %no | %yes |
| Touched | 2.5 | 1.9 | 58 | 33 | 3.8 | 1.8 | 29 | 68 | 2.6 | 1.8 | 50 | 32 |
| Body moving | 3.9 | 1.7 | 21 | 67 | 3.1 | 1.9 | 42 | 48 | 3.6 | 1.8 | 30 | 59 |
| Felt painful | 2.9 | 1.8 | 42 | 36 | 3.5 | 1.9 | 36 | 61 | 2.9 | 1.9 | 44 | 41 |
| Felt pleasant | 2.1 | 1.7 | 67 | 21 | 1.5 | 1.2 | 87 | 10 | 1.4 | 1.0 | 86 | 4 |
| Muscles contract | 3.8 | 1.7 | 24 | 67 | 3.3 | 1.9 | 39 | 52 | 3.3 | 1.9 | 37 | 52 |
| Temperature | 3.4 | 1.8 | 30 | 52 | 3.6 | 1.9 | 32 | 65 | 2.8 | 1.9 | 48 | 37 |
| Acted out | 3.2 | 1.9 | 39 | 52 | 2.4 | 1.8 | 61 | 29 | 2.4 | 1.9 | 61 | 32 |
| Others acted | 1.6 | 1.4 | 81 | 13 | 1.5 | 1.3 | 84 | 10 | 1.1 | 0.4 | 96 | 0 |

a chill. The Vets were more likely to act out their flashback, but pulling other people into the reenactment was rarely reported by any subjects.

Sense of reality. One of the main things this study sought to illuminate was the subjects' view of how accurate or veridical their flashbacks seem to them. Do they believe that the content of the flashback is an accurate representation of a real event in their lives, or might the flashback relate more metaphorically to a trauma, or perhaps be just a figment of their imagination? Table 14 presents results for items that probed these opinions as well as tested the "projected outcome"or "worst case scenario" hypothesis that was suggested by Grunert et al.'s study (1988).

There was very high agreement among all subjects that "overall their flashbacks made sense." Not only did the order in which the scene unfolded make sense to most of the subjects in all three groups, but also the whole gestalt of visual, auditory, olfactory, gustatory, and kinesthetic sensations when put together. The Vets were more likely to reject the statement, " the scene in the flashback seemed dreamlike," while the CSA group and the Mixed group were neutral on this item.

Looking at two related items, it is clear that across all groups, subjects believed that their flashbacks were definitely related to a real event in their lives as opposed to something they only imagined happened with means ranging from 4.6 to 4.8. However, there was also high agreement that the flashbacks differed somewhat from the original event. On two other related items, the data show that the Vets and the CSA groups are very likely to feel that they were actually reliving the original trauma, whereas the Mixed Group were more likely to say they were aware that what they were experiencing was "just" a flashback. It is interesting to note that while the CSA group endorsed the "reliving " item here, they did not pick "reliving the trauma" as the most common way of describing their flashbacks.

Table 14

Mean Scores and Percentages of Disagreeent and Agreement for the Sense of Reality Perceived During the Flashback

| | Trauma Groups | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vets | | | | CSA | | | | Mixed | | | |
| Variable | M | SD | %no | %yes | M | SD | %no | %yes | M | SD | %no | %yes |
| Order sense | 4.2 | 1.5 | 15 | 73 | 4.5 | 1.3 | 10 | 84 | 4.1 | 1.5 | 14 | 71 |
| Overall sense | 4.2 | 1.5 | 15 | 77 | 4.4 | 1.2 | 7 | 74 | 4.2 | 1.5 | 14 | 75 |
| Really happened | 4.6 | 1.1 | 4 | 87 | 4.8 | 0.8 | 6 | 85 | 4.6 | 1.0 | 4 | 82 |
| Only imagined | 1.6 | 1.3 | 80 | 9 | 1.3 | 1.0 | 90 | 7 | 2.1 | 1.7 | 68 | 21 |
| Exactly same | 4.4 | 1.4 | 12 | 79 | 3.5 | 1.9 | 36 | 58 | 4.5 | 1.3 | 11 | 86 |
| Just flashback | 2.3 | 1.8 | 62 | 27 | 3.1 | 1.9 | 42 | 45 | 3.8 | 1.8 | 26 | 67 |
| Reliving event | 4.5 | 1.2 | 9 | 85 | 4.5 | 1.1 | 7 | 84 | 3.9 | 1.8 | 26 | 70 |
| Dreamlike | 2.2 | 1.6 | 59 | 21 | 3.1 | 1.9 | 41 | 48 | 3.1 | 1.8 | 39 | 43 |
| Like original | 3.6 | 1.5 | 18 | 50 | 3.6 | 1.7 | 23 | 53 | 3.7 | 1.7 | 21 | 57 |

Six items were included to test Grunert et al.'s hypothesis (1988) that many flashbacks are actually the projection of what might have happened, and are in fact more extensive, longer and more horrifying than the original trauma. As seen in Table 15 subjects across all three groups did not on the average endorse the items which stated that their flashbacks had "more details, " were "more horrifying," or "went on longer than the original trauma." About one fifth to one third of subjects in each group, however, did indicate that in some way their flashbacks were more horrific or more extensive than the index event. However, about the same number in each group endorsed the statement that the flashbacks were less traumatic. Over three fourths of subjects in each group indicated that the flashback reflected the moment of the trauma, although it may not have included the moments leading up to the trauma nor extended in time beyond the scope of the index event. All of this put together leads to the conclusion that the majority of subjects felt that the flashbacks were pretty much like the original trauma, neither more nor less extensive, traumatic nor horrifying.

Table 16 presents the data from a single multiple choice question that again probes for evidence that flashbacks may seem to be the "worst case scenario." Subjects were given the instructions, "If you had to choose one of the following four descriptions of your most recent flashback, which one most closely fits? Please check one": 1) "the flashback was a replaying of the events just before the trauma and continuing until the moment of the trauma" ("before and during option"); 2) " the flashback was more like a still shot, at the moment the trauma occurred ("still shot option"); 3) "the flashback was more severe than the trauma as it actually occurred, either going on longer, having more details, or it included a worse outcome ("more severe option") or 4) " the flashback was a replaying of the whole event, from start to finish, pretty much the same as the event " ("replay of whole event option"). The "before and during option" was selected by 16% of the Vets, 13% of the CSA group and

Table 15

Mean Scores and Percentages of Disagreeent and Agreement for "Projected Outcome"of the Flashback

| | Trauma Groups | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vets | | | | CSA | | | | Mixed | | | |
| Variable | M | SD | %no | %yes | M | SD | %no | %yes | M | SD | %no | %yes |
| More horrifying | 2.9 | 1.8 | 41 | 35 | 2.8 | 1.5 | 32 | 24 | 2.6 | 1.9 | 56 | 33 |
| More details | 2.3 | 1.6 | 56 | 21 | 2.5 | 1.5 | 45 | 19 | 2.5 | 1.7 | 50 | 25 |
| Time before | 3.0 | 1.7 | 35 | 35 | 2.2 | 1.7 | 61 | 23 | 2.6 | 1.5 | 39 | 22 |
| Went on longer | 2.4 | 1.7 | 56 | 24 | 2.3 | 1.6 | 55 | 19 | 2.2 | 1.5 | 54 | 14 |
| Less traumatic | 2.3 | 1.8 | 64 | 27 | 2.4 | 1.7 | 55 | 23 | 2.9 | 1.9 | 46 | 40 |
| Moment | 4.2 | 1.2 | 9 | 82 | 4.4 | 1.2 | 10 | 84 | 4.0 | 1.3 | 14 | 75 |

Table 16

Percentages of Subjects in Each Trauma Groups Who Endorsed Ways of Describing Flashbacks

| | Trauma Groups | | |
|---|---|---|---|
| Description | Vets | CSA | Mixed |
| Before and during | 16 | 13 | 29 |
| Still shot of moment | 13 | 23 | 46 |
| More severe than event | 6 | 0 | 0 |
| Replaying of whole event | 63 | 65 | 25 |

29% of the Mixed Group, while the "still shot option" was selected by 13% of the Vets, 23% of the CSA group and 46% of the Mixed Group. The "replay of the whole event option" was the most popular among the Vets and the CSA groups with 63% and 65% selecting it, while the Mixed Group selected this option 25% of the time. The "more severe option" was rarely selected, with only two of the Vets endorsing this out of the entire pool of 93 subjects.

Feelings during the flashback. Items in this section assess not only emotions felt during the flashback, but also probe for some aspects of dissociation which subjects may have experienced during the flashback episode. This data is rather interesting. Looking at Table 17, we see first of all that the Mixed group are much more likely than either the Vets or the CSA group to say that they were aware of other people and of their actual surroundings during the flashback. The Vets, consistent with the report that they felt they were "reliving the trauma," were far more likely to claim that they were unaware of their surroundings or other people, while the CSA group fell in between.

However it was the subjects in the CSA group who were more likely to endorse items that may reveal dissociation involving kinesthetic perceptions. Although none of the three groups endorsed the items to a high extent, the subjects in the CSA group were the most likely to say that they felt they were outside of their body (58%) or that they felt their body was changing during the flashback (55%). Again, similar to the data on triggers, the CSA group reported more kinesthetic sensations as they described their sense of dissociation.

Subjects were asked to select as many feeling attributes as they wished out of a list of fifteen, and to add any feelings of their own. The list, in random order, was fairly evenly split between feelings that were negative, and those that had a more positive valence. Table 18 shows the percentages of each trauma group that endorsed the feelings. There were striking differences in the proportions of each group that chose some of the feeling attributes. Most obviously a much higher percentage of the Vets chose words having a more

Table 17

Mean Scores and Percentages of Disagreeent and Agreement of Dissociative Perceptions Experienced During the Flashback

| | Trauma Groups | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vets | | | | CSA | | | | Mixed | | | |
| Variable | M | SD | %no | %yes | M | SD | %no | %yes | M | SD | %no | %yes |
| Aware people | 2.5 | 1.8 | 56 | 29 | 3.1 | 1.8 | 36 | 42 | 4.0 | 1.6 | 19 | 70 |
| Surroundings | 2.7 | 1.8 | 47 | 32 | 3.4 | 2.0 | 39 | 58 | 4.3 | 1.5 | 14 | 79 |
| Outside body | 2.8 | 1.8 | 44 | 35 | 3.4 | 2.0 | 39 | 58 | 2.7 | 1.8 | 48 | 33 |
| Unreal | 1.9 | 1.5 | 71 | 15 | 2.9 | 1.9 | 45 | 39 | 3.2 | 1.8 | 33 | 44 |
| Body changing | 1.5 | 1.0 | 77 | 3 | 3.3 | 2.0 | 42 | 55 | 1.9 | 1.6 | 73 | 19 |

Table 18

Percentage of Subjects in Each Trauma Group who Endorsed Feelings During the Flashback

| | Trauma Groups | | |
|---|---|---|---|
| Feeling | % Vets | % CSA | % Mixed |
| Calm | 15 | 3 | 7 |
| Scared | 76 | 87 | 68 |
| Anxious | 70 | 90 | 75 |
| Powerful | 24 | 6 | 11 |
| Pleasant | 6 | 3 | 0 |
| Aroused | 36 | 16 | 11 |
| In control | 27 | 0 | 7 |
| In danger | 85 | 68 | 61 |
| Powerless | 61 | 90 | 64 |
| Terrified | 67 | 74 | 61 |
| Aggressive | 48 | 6 | 11 |
| Out of control | 33 | 39 | 46 |
| Safe or secure | 3 | 0 | 7 |
| Excited or hyped | 52 | 10 | 11 |
| Shamed or guilty | 36 | 74 | 25 |

positive or powerful valence. Although not a high percentage, many more of the Vets reported feeling powerful, aroused, in control, aggressive, and excited or hyped than either of the other two groups. In contrast, a much higher percentage of the CSA group reported feeling anxious, powerless, scared, and shamed or guilty than either the Vets or the Mixed group. On the other attributes, the groups were more similar. Of note however, is the very high percentage of all groups that endorsed anxiety and feeling in danger, while very few subjects in any group endorsed feeling something pleasant or feeling safe or secure.

Feelings and thoughts after the flashback. In this section subjects were asked to consider the impact of flashbacks in their lives. Items probed whether or not flashbacks serve some useful purpose or whether they are merely disruptive and distressing. They also sought to compare subjects' beliefs about flashbacks relative to other sources of memory. Looking at Table 19, one can see that on items regarding positive aspects of a flashback the CSA group stood apart. The CSA group, to a much greater extent than the Vets, and somewhat more than the Mixed group felt that their flashbacks are useful, part of the healing process, reveal new information, help fit together the missing pieces of the "puzzle" of their past, and will eventually stop, presumably when they have performed their healing function. Overall, the Vets rejected all of the items which view flashbacks as somehow useful or healing while the Mixed group fell in between. In spite of the fact that CSA group found the flashbacks to be useful, informative and part of the healing process, neither this group nor the others look forward to the experience.

Looking at Table 20 one sees that the three groups were very similar not only in rejecting the statement that they look forward to the next flashback, but in endorsing to a slight degree that they do in fact dread another one. The questions concerning the degree of disruption may illuminate the dread that is felt. The CSA group were the most likely to say that flashbacks were disruptive in the short term. The Vets, many of whom have had

Table 19

Mean Scores and Percentages of Disagreeent and Agreement of Thoughts and Feelings After the Flashback

| | Trauma Groups | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vets | | | | CSA | | | | Mixed | | | |
| Variable | M | SD | %no | %yes | M | SD | %no | %yes | M | SD | %no | %yes |
| New information | 2.5 | 1.6 | 47 | 24 | 3.5 | 1.9 | 32 | 58 | 2.5 | 1.8 | 56 | 30 |
| Healing | 2.4 | 1.6 | 50 | 21 | 4.1 | 1.4 | 10 | 65 | 3.9 | 1.5 | 15 | 59 |
| Will Stop | 2.2 | 1.5 | 53 | 15 | 3.2 | 1.6 | 26 | 36 | 3.0 | 1.7 | 35 | 35 |
| Useful | 2.9 | 1.7 | 38 | 35 | 4.1 | 1.4 | 13 | 68 | 3.4 | 1.7 | 29 | 46 |
| Look forward | 1.3 | 0.9 | 88 | 3 | 1.6 | 1.4 | 81 | 13 | 1.5 | 1.3 | 85 | 12 |
| Puzzle | 2.9 | 1.6 | 32 | 29 | 4.2 | 1.4 | 13 | 71 | 2.8 | 1.8 | 44 | 33 |

Table 20

Mean Scores and Percentages of Disagreeent and Agreement of Perceptions of Disruption After the Flashback

| | Trauma Groups | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vets | | | | CSA | | | | Mixed | | | |
| Variable | M | SD | %no | %yes | M | SD | %no | %yes | M | SD | %no | %yes |
| Dread next | 3.5 | 1.8 | 29 | 53 | 3.6 | 1.8 | 29 | 61 | 3.2 | 1.9 | 39 | 50 |
| Disrupt short | 4.0 | 1.7 | 21 | 70 | 4.2 | 1.5 | 16 | 78 | 3.4 | 1.8 | 30 | 52 |
| Disrupt long | 4.1 | 1.4 | 12 | 67 | 3.0 | 1.9 | 42 | 42 | 2.6 | 1.8 | 52 | 33 |
| Hurt work | 4.1 | 1.7 | 21 | 74 | 3.4 | 1.8 | 32 | 52 | 2.7 | 1.8 | 46 | 32 |
| Hurt relations | 4.4 | 1.4 | 12 | 82 | 3.7 | 1.8 | 29 | 65 | 2.9 | 1.9 | 48 | 41 |
| Hurt esteem | 3.7 | 1.8 | 27 | 62 | 3.5 | 1.7 | 27 | 53 | 2.8 | 1.9 | 48 | 37 |

flashbacks for thirty years now, were much more likely than the other two groups to say that flashbacks are very disruptive in the long term. The Vets were the most likely of the groups to say that flashbacks are very disruptive to their work, even more disruptive to their relationships, and hurt their self esteem. On these three measures of disruption, the Mixed group were most likely to reject the items, while the CSA group fell in between.

Table 21 shows the data relating to confidence in the accuracy of the flashback memory as compared to other sources of information including normal memory, dreams or hypnosis. As you can see, subjects in all three groups were extremely confident that the flashback represented a real event in their lives with 88% to 96% endorsing the item. However, all three groups were neutral when they were asked to assess whether they had more confidence in their flashbacks than in normal memories or in hypnosis. While the Vets and the Mixed group were neutral, 68% of the CSA group reported that they had more confidence in the accuracy of their flashbacks than in the accuracy of their dreams.

Subjects were asked to select from a list of 15 thoughts and feelings that might be experienced after the flashbacks. An equal number of attributes thought to be either positive or negative, were presented in random order and subjects could select as many as applied. Again, there were group differences. As shown on Table 22, the Vets were more likely to select the more positive feelings of excitement or heightened sensation than were the other two groups. However, they also endorsed guilt, depression, confusion, numbness, and exhaustion at a higher rate. The CSA group endorsed feelings of shame to a greater degree while none of them endorsed feeling a "high" and only one endorsed excitement. In general, the Mixed group selected fewer thoughts and feelings experienced after the flashback, indicating overall a lesser impact. The Mixed group were outstanding in the fact that many fewer of them endorsed feeling guilt, depression, or anger. Noteworthy, although relief was endorsed by a third of each group, not one subject in the entire study reported feeling any pleasure after the flashback.

Table 21

Mean Scores and Percentages of Disagreeent and Agreement of Confidence Ratings After the Flashback

| | Trauma Groups | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vets | | | | CSA | | | | Mixed | | | |
| Variable | M | SD | %no | %yes | M | SD | %no | %yes | M | SD | %no | %yes |
| Conf. real event | 4.6 | 1.0 | 6 | 88 | 4.9 | 0.4 | 3 | 94 | 4.9 | 0.8 | 4 | 96 |
| Conf. normal | 2.9 | 1.6 | 32 | 29 | 2.9 | 1.6 | 32 | 29 | 3.1 | 1.5 | 26 | 30 |
| Conf. dreams | 3.3 | 1.6 | 24 | 39 | 4.3 | 1.1 | 3 | 68 | 3.7 | 1.7 | 22 | 56 |
| Conf. hypnosis | 2.6 | 1.3 | 31 | 13 | 3.1 | 1.0 | 10 | 13 | 2.8 | 1.2 | 22 | 11 |

Table 22

Percentage of Subjects in Each Trauma Group who Endorsed Feelings After the Flashback

| | Trauma Groups | | |
|---|---|---|---|
| Feeling | % Vets | % CSA | % Mixed |
| Relief | 30 | 32 | 29 |
| Guilt | 52 | 26 | 14 |
| Numbness | 58 | 45 | 46 |
| Exhaustion | 76 | 61 | 54 |
| Shame | 33 | 48 | 21 |
| Sadness | 63 | 68 | 61 |
| Pleasure | 0 | 0 | 0 |
| Depression | 76 | 64 | 46 |
| Excitement | 24 | 3 | 4 |
| Fear | 48 | 52 | 43 |
| Anger | 64 | 61 | 39 |
| Confusion | 61 | 52 | 43 |
| Heightened sensations | 42 | 26 | 32 |
| A "high" | 18 | 0 | 11 |

Coping after the flashback. The data on the ability and means by which trauma survivors cope after the flashbacks is quite interesting when comparing groups. As indicated on Table 23, the Vets reported that they felt relatively unable to cope with their flashbacks, whereas both the CSA group and the Mixed group felt rather successful. About one half of each group said that they always use the same coping strategies, whether or not they seem effective.

When asked "Which of these things, if any, did you do to make yourself feel better after the flashback?" the data were striking. Subjects could check off as many coping strategies as applied to them. Overall, the CSA group used more coping strategies than did the Vets or the Mixed Group who used the fewest strategies. The means by which the groups coped is strikingly different. Looking at Table 24 which reports percentages of subjects who used each coping strategy to deal with the after-effects of a flashback, we see that approximately three fourths of Vets isolated themselves, half did something active to distract themselves, and half used drugs or alcohol. One fourth of the Vets reported taking some medication, and one fourth sought out another person. One fifth did something unique such as "womanizing," writing about the trauma, crying in anger, lying awake-avoiding sleep, "letting it go," "trying to relax," "stuffing it, " "going numb," going to the ocean, seeking the peace and serenity of nature, working out, playing the drum, or sleeping.

In contrast, nearly three fourths the CSA group sought out another person after a flashback, while nearly half did something active. In contrast to the Vets, one third isolated themselves, while one fourth took some medication and only a fifth used drugs or alcohol. Half of the CSA group mentioned a unique coping strategy that works for them including resting, drinking tea, burning incense, listening to music, crying, "owning my truth," looking out the window, or drawing about the abuse.

The Mixed group reported using fewer coping strategies overall, but it must be remembered that they also felt less distress. One half tended to distract themselves, sought

Table 23

Mean Scores and Percentages of Disagreeent and Agreement of Ability to Cope After the Flashback

| | Trauma Groups | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Vets | | | | CSA | | | | Mixed | | | |
| Variable | M | SD | %no | %yes | M | SD | %no | %yes | M | SD | %no | %yes |
| Able to cope | 2.8 | 1.8 | 42 | 33 | 4.0 | 1.6 | 19 | 71 | 4.0 | 1.6 | 19 | 69 |
| Always same | 3.7 | 1.4 | 12 | 45 | 3.3 | 1.8 | 33 | 50 | 3.3 | 1.8 | 31 | 46 |

Table 24

Percentages of Subjects in Each Group Who Endorsed Coping Strategies

| | Trauma Groups | | |
|---|---|---|---|
| Coping strategy | % Vets | % CSA | % Mixed |
| Isolated | 74 | 39 | 29 |
| Did something active | 53 | 47 | 46 |
| Drugs or alcohol | 50 | 19 | 7 |
| Medication | 24 | 23 | 7 |
| Sought another person | 24 | 71 | 46 |
| Did nothing different | 12 | 16 | 11 |
| Other | 21 | 48 | 50 |

out another person, or did something idiosyncratic such as writing in a journal, working out compulsively, dissociating, eating, listening to music, being in nature, biking, going over and over the trauma, trying to see the flashback as a positive step toward recovery, breathing deeply, counting to ten, sleeping, crying, " actively telling my brain turn away," laughing to release tension, or "succeeding in my present life." About one fourth isolated themselves while very few used drugs, alcohol, or prescription medication.

In sum, is interesting to note that while the Veterans were very active in trying various coping strategies, in particular using drugs, alcohol and isolation, they felt relatively inadequate in coping with their long term flashbacks. The CSA group endorsed different coping strategies, in particular seeking out another person, and found them to be successful. The Mixed group felt they coped rather well, using the fewest coping strategies of all.

Ways of learning to understand flashbacks. Subjects were asked to select multiple items from a list of nine options which have helped them to understand or learn to cope with their flashbacks. They were invited to list titles where applicable. The three groups drew on different sources in helping to learn or cope with or understand their flashbacks, and overall they used these resources to a different extent (Table 25).

Three fourths of the Vets found friends, especially their "Vietnam buddies," to be a source of learning and understanding. Of the Vets, 59% found that counseling, usually offered through the Veterans administration had been helpful, and 26% found books to be helpful. One books in particular, Nam Vet by Chuck Dean, was mentioned as a great source by several of the Vets. One fourth of the Vets selected group counseling and one fourth selected lectures. Family served as a source of learning for 18% and movies for 15%. However, many of the Vets mentioned bitterly that movies had been decidedly unhelpful as they glossed over the reality of war. Television and newspapers were rarely

Table 25

Percentages of Subjects in Each Group who Endorsed Sources of Learning or Understanding

| | Trauma Groups | | |
|---|---|---|---|
| Source of understanding or Learning | % Vets | % CSA | % Mixed |
| Friends | 74 | 43 | 21 |
| Counseling | 59 | 87 | 50 |
| Books | 26 | 55 | 36 |
| Group counseling | 26 | 65 | 68 |
| Lectures | 24 | 29 | 14 |
| Family | 18 | 29 | 50 |
| Movies | 15 | 23 | 7 |
| TV | 9 | 39 | 14 |
| Newspapers, journals | 6 | 26 | 11 |

selected and again, there were several angry comments about how much the media had distorted the Vietnam experience.

In the CSA group, individual (87%) and group counseling (65%) were seen as sources of understanding or learning to cope with flashbacks. Books were selected by half, in particular the Courage to Heal by Bass and Davis (1988). Friends, and TV shows like Oprah and John Bradshaw were helpful to slightly less than half, while lectures, family, newspapers, and finally movies each served as sources of information or support to about one fourth of the CSA subjects.

For the Mixed trauma subjects, group counseling was selected most often as a source of learning (68%). Individual counseling and family members were selected by half, while books were selected by a third, and friends by one fifth of the subjects. Lectures, television, newspapers and finally movies were helpful to some.

In comparing the three groups, it is clear that the CSA group found more sources of learning and support than did the Mixed group, who in turn found more sources of support than did the Vets. The Vets were the only ones who bitterly reported that many media sources simply "got it wrong," or deliberately painted an unrealistically positive picture of war. Although the extent to which these sources were used varied, within each population, group therapy, counseling, books and friends were considered among the top five sources of learning to understand or cope.

Multiple Regression Analyses

I ran stepwise multiple regression analyses to address the complex relationships between the dependent indexes and independent variables as outlined in the data analysis section. I designed the multiple regressions to answer the last three research questions: 3)What relationship is there between memory for the original event and perceptions of

usefulness and distress? What are the strongest predictors of perceptions of usefulness or distress? 4) What variables are associated with belief in the accuracy of a flashback? 5) What variables are associated with flashbacks being disruptive in a person's life? Are flashbacks that are actually the "worst case scenario" more disruptive?

Perceiving flashbacks as useful. A multiple regression analysis with the "usefulness index" as a dependent variable was run. The "usefulness index" consisted of seven items that were selected a priori: gaining new information from the flashback, belief in the healing potential of flashbacks, looking forward to another flashback, belief that flashbacks are useful, belief that they help fit together the "puzzle" of one's life, belief that they will stop, and some positive feelings and thoughts after the flashback . Alpha on this scale reached 0.75. The independent variables were type of trauma (CSA , Vet , or Mixed), gender, type of memory for the event, length of time between the trauma and the first flashback, whether the flashback was defined as a "projected outcome" or not, and use of counseling, movies, books or TV as a source of learning.

Three variables were predictors of the "usefulness index." As seen on Table 26, these were in stepwise order : CSA status, discontinuous memory, and reliance on movies as a means of understanding. The first step of the regression accounted for 18% of the variance, the second step increased the variance to 23%, and the third step increased it to 28%. Other variables such as "projected outcome" flashback, length of time between the trauma and the first flashback, gender, and the use of sources of learning such as books, counseling, and TV did not enter into the equation.

Perceiving flashbacks as distressful. A second multiple regression analysis was run using the "disruption/distress index" as the dependent variable. The "disruption/distress index" was composed of seven items including dreading another flashback, disruption in the

Table 26

Summary of Multiple Regression Analysis for Variables Predicting " Usefulness Index"

| Variable | B | SE B | Beta | Sig. T |
|---|---|---|---|---|
| Step 1 | | | | |
| CSA status | 5.16 | 1.32 | .42 | .0002 |
| (Constant) | 16.27 | .80 | | .000 |
| Multiple R .42 | | | | |
| R Square .18 | | | | |
| Step 2 | | | | |
| Discontinuous memory | 3.12 | 1.41 | .24 | .031 |
| CSA status | 4.10 | 1.37 | .34 | .004 |
| ( Constant) | 15.64 | .83 | | .000 |
| Multiple R .48 | | | | |
| R Square .23 | | | | |
| Step 3 | | | | |
| Discontinuous memory | 3.08 | 1.38 | .25 | .029 |
| Movies | 3.92 | 1.87 | .22 | .040 |
| CSA status | 3.47 | 1.37 | .29 | .014 |
| (Constant) | 15.39 | 0.82 | | .000 |
| Multiple R .53 | | | | |
| R Square .28 | | | | |

Variables not in Equation: "Worst case scenario" flashback, books, TV, counseling, gender, time between trauma and first flashback.

short term, disruption in the long term, interference with the ability to work, interference in relationships, impairment of self esteem and endorsing negative feelings and thoughts either during or after the flashback. Alpha on this scale reached 0.83. Eight independent variables were selected based on the literature and clinical experience: type of trauma (CSA , Vet , or Mixed), gender, type of memory for the event, years since the flashbacks began, when the last flashback occurred, frequency of the flashbacks, length of time between the trauma and the first flashback, and whether the flashback was defined as a "projected outcome" or not. The data in Table 27 reveal that Veteran status was the only predictor of distress and accounted for 26% of the variance. None of the other variables that were predicted a priori figured in the equation.

Perceiving flashbacks as veridical. A third multiple regression analysis was run to determine which factors lead survivors to believe in the veridicality or accuracy of their flashbacks. The "veridicality index" was composed of eight items that probed the subject's belief that the flashback was veridical or an accurate portrayal of the original trauma. Items included a report that the flashback was clear, in order, and overall made sense, that it was like the original trauma, that it was about something that really happened, not about something they only imagined, that the same flashback had occurred before, and that it was not dreamlike. Alpha on the Veridicality Index was 0.78.

I hypothesized that those with discontinuous memory might have greater faith in the accuracy of their flashbacks as they had no index event against which to measure the discrepancies. However, when the multiple regression analysis was run with the "veridicality index" as the dependent variable and type of trauma (CSA , Vet , or Mixed) , gender, type of memory for the event, length of time between the trauma and the first flashback, whether the flashback was defined as a "projected outcome" or not, and use of counseling, movies, books or TV as a source of learning, only one variable was predictive

Table 27

Summary of Multiple Regression Analysis for Variables Predicting "Distress/Disruption Index"

| Variable | B | SE B | Beta | Sig. T |
|---|---|---|---|---|
| Step 1 | | | | |
| Vet status | 10.67 | 3.39 | .52 | .004 |
| (Constant) | 26.00 | 1.89 | | .000 |

Multiple R .52
R Square .26

Variables not in the equation: Discontinuous memory, "worst case scenario" flashback, gender, years since flashback began, time between trauma and first flashback, frequency of flashbacks, when last flashback occurred,

of veridicality ( Table 28). A continuous memory was predictive of belief in the veridicality of the flashback but accounted for only 5% of the variance. Thus, my hypothesis that those with discontinuous memory would have more faith in the accuracy of their flashbacks was not supported.

I had planned three more multiple regressions with "projected outcome index," "confidence index" and "perceptual clarity index" as the dependent variables, but these were not run as the Alphas were too low. I did not find much support for the variables that together made up the "worst case scenario" or "projected outcome index" : disagreement that the flashback was about something that really happened, agreement that it was something they only imagined happened, and belief that the flashback was more horrifying, more detailed, or went on longer than the original trauma. Across all three groups there was consistently high disagreement with all of these items, with the exception of very high agreement with the belief that it really happened. Therefore, since there was little variability in these scores, Alpha was considerably less than the necessary 7.0 and the "projected outcome index" was not used.

The "confidence index" clustered items pertaining to the confidence that the flashback memory was to be trusted more than other types of memories such as "regular" memories, memories that come through hypnosis or dreams, and the belief that the flashback was about a real event. Responses to these items clustered around a "3" as subjects in all three groups were unsure or neutral about their opinions. As such, Alpha on this index did not reach 0.70 and the scale was discarded.

The "perceptual clarity index," consisting of items that endorsed sensory input, was also discarded as the items did not seem to correlate. Rather they were often contradictory with a subject saying that they had very clear visual sensations but no auditory sensations at all. Therefore, Alpha did not reach 0.70 and the index was discarded. (See Appendix H for the original indexes as originally proposed).

Table 28

Summary of Multiple Regression Analysis for Variables Predicting "Veridicality Index"

| Variable | | B | SE B | Beta | Sig. T |
|---|---|---|---|---|---|
| Step I | Discontinuous memory | -1.96 | .96 | -.23 | .046 |
| | (Constant) | 29.56 | .56 | | .000 |

Multiple R .23
R Square .05

Variables not in the equation: "Worst case scenario " flashback, books, movies, counseling, TV, Trauma status ( CSA,Vet or Mixed)

# Chapter Four

# Discussion

In the discussion section, I focus on five main topics. First, I discuss the differences between groups in the way flashbacks are defined and experienced including different triggers, different perceptual elements, different emotions during and after the flashback, and evidence for differences in dissociative experiences. A second area of focus is the type of memory for the original trauma reported by the three groups and the meaning of discontinuous memory for each of these groups. A third area of interest is how flashbacks may be viewed as useful or merely disruptive and some factors associated with each of these outlooks. A fourth area of discussion will be the subjects' view of the veridicality of the flashback, consideration of flashbacks as the "worst case scenario," and the relationship between confidence and accuracy. Finally, differences in coping strategies between the groups will be discussed and their relationship to gender.

## The Variability of the of Flashback Experience

One of the most important findings in this study is the confirmation that flashbacks are not a unidimensional experience. Different subjects experience and define them differently, and even the same subject may experience them in a variety of ways at different times. The fact that they term is used loosely, as pointed out by Frankel (1994), may not be a result of carelessness nor ignorance, but is rather an accurate reflection of the wide variety of experiences that are broadly called "flashbacks." This present study confirms Frankel's statement, "nothing in the presentations reviewed by the author clearly demonstrates the unidimensional nature of flashbacks... " (p.321). It appears from this

study, that even the definition offered by Burstein, "flashbacks are the revisualization of a traumatic scene that occurs with realistic intensity in the presence of a clear sensorium," is not broad enough ( 1985, p. 374). Rather, the definition should be extended to reflect how subjects themselves experience flashbacks. I suggest, "A flashback is a re-experiencing of a traumatic episode which may include visual, auditory, gustatory, olfactory and / or tactile sensations and may appear as a virtual reliving, a snapshot, a movie, a daydream and/ or a strong emotional reaction similar to that of original trauma." This is more in line with the looser definition provided by McFall et al. "a sense of unreality accompanied by vivid images of a past traumatic situation as though it were actually present." (1997, p.266).

Differences in the way flashbacks are defined. While there was tremendous variability as to how flashbacks were experienced within trauma groups, there appear to be definite differences between groups in the way subjects experienced flashbacks. The Vets were more likely to experience flashbacks as a virtual reliving of the trauma, while the subjects in the Mixed group never experienced them this way, and the subjects in the CSA group occasionally did. Rather than a virtual "reliving" the CSA and Mixed groups were likely to experience the flashbacks in a more benign, limited way in which they did not lose track of where they were. They, in contrast to the Vets, did not physically act out the original trauma and were more likely to report that they remained aware of their physical surroundings .

A possible explanation for the greater degree of "reliving" flashbacks experienced by the veterans is that the three groups may have been unevenly matched in the overall severity of their PTSD symptomology. In this study all of the Veterans were on an inpatient ward for a short term stay. Although some were there for medication adjustments requiring around-the-clock observation, others were there because they were experiencing PTSD symptoms that were either too intense or too chronic to be treated in the outpatient clinic.

Perhaps this study focused not on the average veteran, but on veterans with the very most severe PTSD symptomology. In contrast, all of the subjects in the CSA and Mixed groups were in outpatient therapy, if at all. It could be argued that had all subjects in all three groups been inpatients they would have described their flashbacks as the more intense "reliving" type in equal numbers. It may not be trauma group status per se, but rather inpatient status that is more predictive of intense "reliving" flashbacks.

On the other hand, there are data from previous studies suggesting that combat veterans in fact do suffer from more intrusive flashbacks. Perhaps both the intensely horrifying nature of combat as well as the chronicity of the war trauma would lead to greater degrees of Loss and Life Threat, which Wilson, Smith and Johnson (1985) have found most predictive of severe PTSD symptomology. When considering these two predictors, Loss and Life Threat, I propose that combat is more traumatic than the milder cases of childhood sexual abuse or single traumatic incidents such as assault or vehicular accident found in the Mixed group. The stories that the Vets reported in their brief narratives were indeed horrifying: watching "buddies" being blown apart, committing atrocities against women and children, burning whole villages, or watching an entire platoon of men walk into an ambush. These incidences included Loss and Life Threat to a high degree: threat to one's own life, loss of loved ones, loss of one's self respect, and loss of faith in mankind.

The finding that a high proportion of Vets suffer from the more intense "reliving" type of flashbacks is consistent with the McNew and Abell (1995 ) study. They concluded that, "Both veterans and abuse survivors experienced moderately high levels of both intrusion and avoidance, but a significant difference between the veterans and the abuse survivors was found on the intrusion variable ($F=5.66$, $p.02$) with the veterans scoring higher than the abuse survivors." (p. 123). It is not clear from the McNew and Abell study just what dimensions were considered in judging "intrusiveness, " but it is likely that the

more intense, disorienting kind of flashback experienced as "reliving the trauma," would be scored as more intrusive.

Although being a victim of childhood sexual abuse has been compared to being in a combat zone by Herman (1992), a more appropriate interpretation may be that Loss and Life Threat are experienced by CSA survivors to a different degree. Sexual abuse may indeed be horrifying-- especially those types of abuse that involve fear, intrusiveness, pain, or feelings of betrayal. However, sexual abuse usually does not entail the same real threat to one's life or the same degree of loss that might predict the highest PTSD symptomology. Furthermore, a child's understanding and emotional reaction to molestation vary widely, and often depend not only on the abuse itself but on developmental level. An abused child may feel the loss of innocence or trust, or alternately may feel especially loved and "chosen" by the perpetrator. They may feel their life is threatened if the abuse is especially intrusive or painful or if they are threatened into compliance by the perpetrator, or alternately they may not. Although some researchers and clinicians may argue, I believe that sexual abuse or single incidents of assault, rape, injury or accident may not entail the same degree of Loss or Life Threat as does combat that goes on for months or years. Therefore, if this logic is followed, the PTSD symptomolgy of the Veterans actually would be higher than that of non-veterans, as found in this study.

Another possible explanation for the differing type of flashbacks reported by the three groups is that they experienced dissociation differently at the time of trauma. I would speculate that the dissociation reported during the flashback is reflective of the type of dissociation experienced during the trauma itself. The data reveal that the ways in which the survivor groups may have experienced dissociation is different. The Mixed group reported that while things seemed slightly "unreal" they were for the most part very aware of their surroundings and of other people--indicating a derealization type of dissociation. In contrast, the Vets who show a tendency to experience flashbacks as a "reliving of the trauma"

report that they often were so caught up in their flashbacks that they were oblivious to other people or their surroundings, indicating a more pervasive and severe type of dissociation .

Of interest, while subjects in the CSA group were neutral on reporting awareness of their surroundings and other people, they answered in a way that may indicate a different form of dissociation, perhaps depersonalization. Many reported that they felt their body was changing, and several noted that their body felt like a child's body during the flashback. Others reported that they felt "outside their body" a dissociative experience consistent with their frequently viewing the scene of the flashback not "from their own eyes," but rather from a camera view. I speculate that the reason many of these subjects report these dissociative experiences during the flashback is because they were dissociated in a similar way during the trauma. Abuse survivors of many types often describe the sensation of leaving their body, floating up to the ceiling or to a corner of the room, and watching the trauma happen from there as if it were happening to another person. This type of dissociation is a very effective coping mechanism for those who cannot in reality escape the trauma. In fact the American Red Cross teaches political prisoners who are subjected to torture dissociative skills as a means of coping with the torture they cannot avoid. (Personal communication with Kate Grutz)

Bremner and Brett (1997) and Tichenor et al. (1996) reach a similar conclusion about the similarity between the way dissociation is experienced during the original trauma and subsequent dissociative responses to stress. Bremner and Brett report, consistent with my speculation, "It was our clinical observation that there was a relationship between the types of dissociative experiences reported at the time of combat-related trauma and dissociative experiences repeated during stressful events after the war."

Differing triggers and sensory details of the flashbacks. In general, the Vets reported that their flashbacks were triggered by a greater number of sensory stimuli than the other two

groups. Why might this be? I suggest that there is greater sensory involvement simply because of the environment of the original trauma. Picture for a moment the foreignness of the Vietnam experience: perhaps there were rotting jungle smells, odors of napalm, diesel fuel, burning flesh, cooking fish, or blood-- all highly pungent and rather novel. Add to it novel auditory elements--helicopters, bombs exploding, gunshots, and then add startling visual details that may produce highly etched memories--a buddy's face blown away, women and children tortured and killed, a village going up in flame. Is there any wonder that many of the Vietnamese Vets have flashbacks full of intense sensory elements? Is there any wonder that there are many, many triggers for veterans -- especially visual, auditory and olfactory triggers?

In contrast, in this study the CSA group were more likely to report that triggers were emotional, then visual, kinesthetic and finally auditory. I suggest that the most salient features of the original trauma were not smells, nor sounds, but rather strong emotions, tactile impressions and visual images. Therefore, the triggers for the CSA group would be different than those of the Vets. Picture again a typical scenario: a child is being molested in the familiar environment of his or her own home. Chances are that emotions would be quite high--fear, confusion, hate, betrayal, or maybe revulsion. While kinesthetic sensations might be extremely high, auditory details might be minimal. Thus it may not be surprising that emotional, visual and kinesthetic triggers would be common, while auditory details were less so. It was surprising in this study to find that olfactory triggers such as the smell of alcohol, aftershave or semen, were rarely reported by the CSA group, given that they are often reported in the self-help literature .

Differences in the Emotional Details of the Flashback. The data on emotions experienced during the flashback give evidence that the flashback emotionally mimics the original trauma. The emotional experience of the CSA group is very different from that of

the Vets which in turn is different from the Mixed trauma group. Looking again at Table 18 one sees that for the CSA group a picture of terror and powerlessness appears. The CSA subjects were most likely to describe their feelings during the flashback as extremely anxious, scared, in danger, powerless and shamed or guilty. These are likely the emotions of a child who is being coerced into something that is confusing, unwanted, and possibly quite painful and revolting to a child. They have no power nor control, safety nor security and absence of these feelings are evident in the flashbacks. Even if the child felt some physical pleasure in the experience, he or she would be likely to also experience shame or guilt, which are indeed reported. Following the flashback the CSA group reveal a high level of exhaustion, depression, and anger. There are no emotions reported that would reflect any kind of "high." Thus, the feelings during and after the flashback seem to mirror the feelings during and after the abuse as reported in anecdotal and clinical reports. (Herman, 1992 ; Bass and Davis, 1988).

For the Veterans an entirely different picture of thoughts and feelings emerge. While the Vets reported feeling scared, in danger, terrified, and powerless as did subjects in the other groups, it is striking that they also reported feeling powerful, aroused, aggressive, excited, hyped and in control to a much higher degree. I suggest that this intense melange of contradictory emotions, both positive and negative, are similar to what a combat vet feels in the heat of the battle or when in imminent danger. One can imagine that combat vets indeed feel powerless and terrified, but in order to survive the adrenaline rises and aggressiveness, excitement, and feelings of power are added to the terror. The fight or flight instinct takes over. After the flashback some of the adrenaline high seems to remain. Following the flashback the Vets reported a higher rate of excitement and heightened sensations than did the other two groups.

There are data from Solursh (1988) related to these findings. Solursh proposed a reinforcement model of flashbacks in his "combat addiction theory." He similarly found that

many veterans reported that flashbacks are not only distressing, but also exciting and powerful. Of his sample of 22 veterans, 86% made reference to flashback or nightmare recall of combat or killing as similar to an adrenergic " rush." Solursh concluded, "indeed for many the re-experiencing of combat memories seems uncontrollable, threatening, unpleasant and fearful, but also exciting, meaningful, important, and indeed desirable" (p.18). A veteran in his sample explained, "The rush or feeling that you get from (flashing back) is one of an addiction to adrenaline, addiction to cocaine...when I get into this high it is just like being in Vietnam, the thrill of killing, the thrill of destroying and it's something that I just cannot overcome, even with medication." (p.20). Solursh believes that when the flashback and the adrenaline rush are over the let-down feelings of powerlessness, helplessness and frustration return, creating a desire to recreate the pain-free highly aroused and excited state of the flashback once more.

The data in my study are consistent with Solursh's findings concerning the mixture of high and low feelings during the flashback and the exhaustion, depression, guilt and sadness after the flashback. Indeed, there might be a kind of adrenaline rush in the aggressiveness, excitement, and power expressed by the Vets. However, the Vets in my study did not endorse their eagerness to have another flashback to create the "pain-free" high. In fact, they indicated that they dread the next flashback.

Of interest is the data on shame and guilt. Subjects in the CSA group endorsed feeling guilt or shame during the flashback twice as often as the Vets and three times as often as the Mixed group. However, many of the CSA subjects indicated that it was shame, not guilt that they were actually feeling. While the lack of endorsement by the Mixed group is understandable, as many of their traumas involved incidents for which they could not be blamed in any way, it is surprising for the Vets. What could explain the lower endorsement of guilt or shame by the Vets during the flashback? I would suggest that the tendency to feel guilt was overridden by the adrenaline rush of aggressiveness, power, and excitement

during the heat of the battle or during the warding off of danger. In the original trauma the Vets had to proceed on "automatic pilot," without attending to any emotions that would inhibit their effectiveness in the face of danger. Guilt or shame would be emotions threatening to their survival. Perhaps the feelings during the flashback reflect this "fight or flight " response.

It was only after the flashback, perhaps mimicking the real trauma, when the adrenaline rush subsided that the feelings of guilt emerged. This would be consistent with the Solursh (1988) data. In the present study, following the flashback the Vets were twice as likely as the CSA subjects to select guilt, whereas the CSA subjects were more likely to select shame. I would speculate that those who had been victims are more likely to select shame, whereas the aggressors, perpetrators of atrocities, or those who "fell short" are more likely to select guilt.

Overall, the Mixed group reported much less of an emotional impact than either of the other two groups. Although they too reported feeling in danger, powerless and terrified during the flashback at a high rate, they reported much less anger and depression after the flashback. Taken altogether, there appears to be an association between the number of negative emotions experienced during and after the flashback, and the amount of disruption caused in subjects' lives. The Mixed group endorsed negative emotions both during and after the flashback at a lower rate than the other two groups. They also felt that flashbacks were not particularly disruptive in the long term nor in the short term, and did not harm their self esteem, their ability to work, nor to have relationships. Both the CSA and the Veteran groups endorsed many more negative emotions, and reported more disruption in their lives due to the flashbacks. However, it is also possible that the direction of the causality is reversed. Perhaps because subjects in the Mixed group find their flashbacks more benign and less intense, they also find them less distressful and disruptive, and subsequently attach fewer negative emotions to them.

Memory for the Event: Differences in Discontinuous Memory

In this is present study a sizable percentage of subjects across all three groups reported a period of "discontinuous memory." Twenty seven percent of the Vets, 48% of the CSA group and 11% of the Mixed group endorsed the statement, " there was some period of time in which I had no memory for the event, but only later the memory returned." While clinicians have long been reporting a high rate of discontinuous, " delayed" or " repressed " memory for adult survivors of childhood sexual abuse, the percentages of those in the Veterans group reporting discontinuous memory may be surprising. Why might the percentages of both CSA and Vets with discontinuous memory in this study be high? I suggest it may simply reflect the fact that these subjects were selected because they experienced flashbacks, one indication of PTSD, which by definition includes periods of both amnesia and hypernesia. I speculate that Vets or CSA survivors without PTSD are less likely to report discontinuous memory. Research shows that during the time that memories are being recalled and for the period of time shortly after, PTSD symptomology is particularly high ( Elliot and Briere, 1995; Southwick et al., 1997).

The growing body of research reported in the review of literature that shows that PTSD subjects are particularly vulnerable to impairments in memory functioning. Janet (1907), Van der Kolk (1984), Williams (1994), Bremner et al (1995), Elliot (1994) , and Elliot and Briere (1995) offer support for the theory of dissociated memory or traumatic amnesia which would account for the existence of flashbacks for which there is no conscious memory, only partial memory, or a period of discontinuous memory.

It is suggested that alterations in neuromodulators or in brain areas such as the hippocampus important to memory formation, could have the paradoxical effect of abnormally strengthening memories for some traumatic events while creating amnestic gaps for others. (Bremner et al, 1995). This would account for the apparently paradoxical symptoms core to the diagnosis of PTSD: both periods of amnesia and periods of

hypernesia for the traumatic event. Thus, it is understandable that overall the subjects in this present study, selected precisely because they have had flashbacks, and would likely be diagnosed with PTSD, would report partial or vague memories, discontinuous memory, or even total lack of memory for the event. However, in spite of the fact that many subjects reported some memory difficulties, there is an obvious group difference.

First of all, it is evident from Tables 7 and 8 that not only do the CSA group reported a much higher incidence of "discontinuous memory," but they also mean something different when they endorse this item. This study is one of a few that have tried to tease out what subjects actually mean when they endorse an item such as "there was a period of time in which I had no memory for the event, but only later the memory returned." Earlier studies such as Briere and Conte's (1993) one did not clarify the issue. Their wording, " during the period of time between when the first forced sexual experience happened and your 18th birthday, was there ever a time when you could not remember the forced sexual experience?" is open to various interpretations.

The recent study by Joslyn, Carlin and Loftus (in press) has made some headway in clarifying the ambiguity. They found that while many of the subjects were willing to admit that they had experienced an event that was defined as sexually abusive, they did not consider themselves " abused." In addition, Joslyn et al. found that approximately one third of participants said that there was a period of time in which they would not have remembered about the abuse if they had been asked directly. If an event was not considered sexual at the time it occurred, it was less likely to have been thought about and therefore, less likely to have been remembered. They conclude that many times a person's failure to report abuse is due to the fact that they did not understand the salience of the event until much later. When they later understand the salience of the abusive act, the classification of "abused" may be so contradictory with one's self-schema that memory is impaired. Each of these mechanisms may account for periods of time in which a subject temporarily "forgets" the abusive event.

In my study the data show that different survivor groups actually mean different things when they say that they had no memory for the traumatic event. Why might the Vets be more likely to mean that they didn't think about the trauma because it was too painful, or because they were too preoccupied while the CSA group were more likely to mean that they had no memory for the event, and if asked would have said no? There are many factors that may contribute to the greater or complete "forgetting" of childhood sexual abuse. According to Ornstein's ( 1995) framework 1) not everything gets into memory 2) what gets into memory may vary in strength 3) the status of information in memory changes and 4 ) retrieval is not perfect.

Ornstein (1995) concludes that older children should understand and store more organized information about abusive experiences than younger children. "An implication of research on children's knowledge is that a child who does not understand what is happening to him or her--as may be the case in certain 'mild' types of abuse that do not involve penetration and physical pain--will have little basis for subsequently remembering what was experienced.... considerable interference would be expected, particularly when the details of an early ( and possibly poorly understood) experience have been lost over a period of months and years." (p. 601).

Many studies report significant memory difficulties in CSA survivors and come up with vary different rates of discontinuous memory ranging from 18% to 59%. However these numbers are based on a variety of surveys and interviews which worded the questions differently. Given the range of reported rates for "severe memory problems," my finding that 48% of the CSA group reported discontinuous memory is not out of line. Previous studies of clinical samples of child abuse survivors report high percentages of those with discontinuous memories. Briere and Conte (1993) found that 59% of 450 women in treatment for sexual abuse reported that at some point prior to their 18 birthday they had forgotten the childhood sexual abuse that they later reported. Herman and Schatzow ( 1987)

reported that 26% of their clinical sample of survivors of childhood sexual abuse who were in group therapy had what they called " severe memory deficits for the abuse." Williams (1994) reports that 38% of adult subjects for which there is a documented history of childhood sexual abuse seventeen years prior to the data collection did not disclose the incident when asked about sexual victimization in their past. Furthermore, Williams (1995) reports 16% of those who did recall the abuse reported that there was sometime in the past when they had forgotten the abuse. Joslyn, Carlin and Loftus (in press) reported that one third ( 109/326) of the subjects who reported incidences of childhood sexual abuse had a period of time in which they did not remember the abuse. Loftus, Polonsky and Fullilove (1994) reported that in their sample of 100 women in treatment for substance abuse, over half recalled sexual abuse in childhood, and of these 19% reported that there was a period of time in which they could not remember the abuse but later regained the memory.

The studies above propose many different factors that might lead to complete forgetting of childhood sexual abuse. Unfortunately, this survey did not include questions that would reveal information about the original abuse, but some patterns do emerge in the four subjects who endorsed the definition of discontinuous memory stating, " If someone had asked me if this event ever occurred, I would have said 'no.'" I will call these four subjects the "recovered memory " subjects. In looking at the demographic data from the four women with "recovered memory" the first point to emphasize is the striking similarity between these women who " would have said 'no'", the CSA survivors with "delayed memory" in general, and the CSA subjects as a whole (Table 29). In considering gender, age, years of education, years of therapy, marital status and ethnicity, the groups are nearly identical. The "recovered memory" subjects were all female, all Caucasian, with a mean age of 41, mean years of education of 17, mean years in therapy of 7, and were all either single or divorced.

Table 29

Mean and Mode Demographics of CSA Subjects With Different Kinds of Memory for the Traumatic Event

| | CSA groups | | |
|---|---|---|---|
| | "no memory for event" | "discontinuous memory" in general | all CSA |
| Variable | n=4 | n=14 | n=31 |
| Gender | female | female | female |
| Age | 41 | 38 | 37 |
| Years of education | 17 | 16 | 15 |
| Years of therapy | 7 | 7 | 7 |
| marital status | divorced, single | divorced, single | single |
| ethnicity | Caucasian | Caucasian | Caucasian |

If we next compare the background information concerning the flashbacks, there are some differences that distinguish the four with "recovered memory " from the CSA group as a whole ( Table 30). Both groups report a mean of about 10 years between the trauma and first flashback and that the flashbacks have changed over time. While both groups report high variability in the number of flashbacks per year, the "recovered memory " subjects report considerably fewer than the CSA group as a whole, ranging from 0 to 26 per year. While two thirds of the CSA group in general report that the flashbacks occur in a pattern, all of the "recovered memory" subjects report a pattern to their flashbacks. They occur after painful topics in counseling, after contact with the abusers, when memories are emerging, or during a particular season of the year. Another common denominator of the "recovered memory subjects" is that three out of the four began having flashbacks between 1987 and 1990, when the awareness of childhood sexual abuse was on the rise.

In looking at the body of the survey, we see quite a few differences in the means and percentages which endorsed the items, some of which may help explain the existence of a once forgotten and now "recovered memory," and others that might be spurious due to the low "n" in the "recovered memory " group (Table 31). It must be noted, however, in addition to having only four subjects in this group, one out of the four subjects described her flashback as merely a very strong emotional sensation which did not contain visual, auditory, or kinesthetic details nor any kind of narrative story. This strongly affected the means for sensory details in the "recovered memory" group.

With this limitation in mind, if one looks at only the items in which the "recovered memory" group had high consensus and at the same time differed visibly from the CSA group as a whole, there are twelve items. Several items cluster around indications of greater dissociation in the "recovered memory " group. At least 3 out of the 4 of them agreed and they were visibly different in saying they were not aware of their surroundings nor other people and that they were unaware that it was "just " a flashback. In addition the "recovered

Table 30

Background Information About the CSA Subjects Who Reported "No Memory for the Event."

| Variable | Subject #1 | #2 | #3 | #4 |
|---|---|---|---|---|
| Number of years since flashbacks began | 19 | 7 | 10 | 10 |
| Number of years between trauma and first flashback | 20 | 13 | 34 | 25-30 |
| Year flashbacks began | 1978 | 1990 | 1987 | 1987 |
| Number of flashbacks per year | 26 | 0 -currently | 4 | "several times" |
| Flashbacks have changed over time | less frequent | in cluster | decreased as memories return | less intense |
| Flashbacks occur in a pattern | painful topics in counseling | depends on memories | after contact with abusers | in the winter |

memory" group were in agreement and endorsed to a higher degree that they felt outside of their body and that their body was changing during the flashback. Thus, I would speculate that the "recovered memory" subjects might have been more dissociated during the original trauma.

The "recovered memory " group were also in agreement and were visibly different from the CSA group as a whole in saying that they were surprised by the flashback and that it provided new information which helped fit together the "puzzle" of their life. These three items may fit together as a cluster which is consistent with the fact that the memories were for a time completely forgotten. Another two items may cluster: the "recovered memory" group differed from the CSA group as a whole in saying that their flashback was not less traumatic than the actual trauma and that the flashbacks were more disruptive in the short term. Perhaps recovering totally new memories is very disruptive, or alternately new memories may emerge when the subjects is already in a period of distress. They were also in agreement and endorsed to a higher degree that they heard clear voices and that they sought out another person as a coping strategy.

From the qualitative data contained in one paragraph in response to "tell me briefly about your most recent flashback," it appears that for each of the four women the alleged index event involved abuse that was inflicted upon them by a parent or step-parent. Three out of four of the flashback scenarios took place in the family bathroom and involved bathing rather than any violence or penetration. It appears from the language of the narrative that the abuse was repeated rather than a one time event. Three of the four women report narratives that would lead me to believe that maternal support was not available after the trauma. Two of the alleged perpetrators were in fact the mothers or stepmothers. Although the information gleaned from the narrative accounts is only speculative and inferential, a pattern seems to emerge where the abuser was someone very familiar to the child, the abuse was not violent,

it was not an isolated incident, it occurred where opportunity for crossing boundaries was present on an ongoing basis, and maternal support was likely not present.

Courtois (1993) offers an interesting interpretation of the timing of the "recovered memory" subjects' first flashbacks that occurred between 1987 and 1990 for three of the four. "The adult survivors of past sexual abuse constitute a special population by virtue of having been abused during the 'age of denial.' Sexual abuse was a taboo subject that was neither acknowledged nor discussed as it is today" (p.436). Courtois speculates that because of denial and lack of validation for the abused child that existed at the societal as well as at the familial level the child needed, especially in past generations, to rely on strong defenses of repression, denial, dissociation, and amnesia. In the late 80's and 90's the topic of sexual abuse is open, constantly in the media and as a result the defenses that kept the trauma away from consciousness are less effective. As result, according to Courtois' theory, adult survivors are retrieving memories of past abuse at a high rate. Additionally, it may be speculated that those with a myriad of psychological or relationship difficulties found in the 80's and 90's a convenient and widely accepted explanation for their difficulties, which placed the blame elsewhere.

This present study is consistent with Courtois' theory, in that the mean number of years that have passed since the flashbacks began for the CSA groups is 10--just about the time that childhood sexual abuse became prevalent in the media. It would be especially interesting to see if cases that could be shown to be "projected outcome " fall into this time frame. It seems possible that those suffering from psychological distress for which they have no ready explanation would be especially prone to jump on the popular bandwagon saying, " ah, now I remember that I was abused. That explains it all.!"

The Significance of Flashbacks: Useful or Disruptive

As I predicted, there were many who found that flashbacks, although disruptive are also useful in their lives. Many subjects endorsed the items in the "usefulness index" to a high degree: They felt that their flashbacks are useful, part of the healing process, reveal new information, help fit together the missing pieces of the "puzzle" of their past, and will eventually stop, presumably when they have performed their healing function. The three variables that most strongly predicted the "usefulness index" were CSA status, discontinuous memory, and finding that movies are a source of information and understanding. Contrary to my prediction, books, although cited as useful by the vast majority of the CSA group, were less predictive of the "usefulness index," likely because subjects across all groups found books useful. Additionally the means for the individual items comprising the "usefulness index" are generally much higher for the CSA group than for the Vets or the Mixed Group.

Why might it be that first CSA status and secondly having discontinuous memories are the strongest predictors of feeling that flashbacks are useful? In spite of the fact that using books as a source of learning was not predictive on the multiple regression, it appears that the books such as the Courage to Heal by Bass and Davis (1988) and TV shows such as Oprah and John Bradshaw that were mentioned several times, have in fact been a source of learning for many of the CSA subjects, and have likely contributed to the social construction of flashbacks.

This literature directed toward CSA survivors emphasizes that flashbacks are part of the healing process, that they are cleansing, that they are helpful to all, but perhaps especially to those with discontinuous memories. The sexual abuse survivor literature emphasizes the positive value of flashbacks especially if one suspects, but cannot remember the past trauma. The Courage to Heal (1988), the most frequently mentioned of the self help books, emphasizes the positive value of flashbacks as a means of piecing together the puzzle of

one's past, but as less useful if one already knows the past. Bass and Davis (1988) recommend that survivors may want to "stay with the flashback and open it up" if it will serve some purpose or "stay with the present" if it will not. Finney (1990) believes that when flashbacks first appear they are extremely informative but later on, once the full memory is retrieved the survivor may react with "oh that again" as there may not be much new information to glean. Other authors echo this view (Ainscough & Toon, 1993; Blume, 1989).

However, even if there is a an association between familiarity with abuse survivor literature and the belief that flashbacks are helpful, it is not clear in which way the causality may go. Are sexual abuse survivors convinced that flashbacks are part of the healing process because they have read books such as the Courage to Heal, or rather, do such books accurately reflect pre-existing perceptions of sexual abuse survivors who contributed to the book? I believe the causality exists in both directions. The books both reflect what some CSA survivors already feel, and help to mold what they and others believe about flashbacks. Sybil and When Rabbit Howls have contributed to the CSA group's understanding of flashbacks.

Many of the self-help books in the review of literature are from the past decade, before the debate about false memories and repressed memories became so intense. What, if any, effect has the false memory research (Loftus and Pickrell, 1995; Hyman, Husband and Billings, 1995) had on the advice offered to therapists and survivors ? Some of the most current literature directed towards therapists treating sexual abuse survivors still carries the flavor of "flashbacks are useful," but there is a more careful endorsement of the veridicality of the flashback content. For example Musicar & Josewitz (1996) write, "The ultimate goal is to help the [PTSD] client retrieve and process unresolved traumatic memory. For this reason flashbacks are welcomed rather than shunned" (p.180). They continue, " In the course of therapy, it is common for clients to question the veracity of their flashback experiences.

While as therapists we cannot reassure the client that her memories are true, we nevertheless can affirm the intensity of the pain that accompanies them. We can also encourage clients to trust that their flashbacks have meaning in some way. " (p 190.) However, after this disclaimer they continue, "Like the majority of the clinicians in the field, we believe it is vital to the healing process that the secret [of incest] be broken and the abuse brought to light ... this means retrieving information about the trauma. Flashbacks provide a way of remembering when conscious memory is inaccessible. It gives the survivor a means of at last resolving and integrating an experience that, as a child, was both intolerable and incomprehensible" (p. 190).

A recent self-help book, Coping with Trauma by Jon Allen (1995) is quite balanced in its advice to trauma victims of all types. Allen deals extensively with the problems of memory retrieval and the possibility of false memories. He concludes, "Like other memories, flashbacks vary in historical accuracy, and may be a blend of memory, emotion, imagery and fantasy.....It may appeal to common sense, but the video recorder model of memory is extremely misleading" (p. 91). Later he states, "The intrusive experiences provide an opportunity for integration and a sense of wholeness that were previously beyond reach...but remembering should not be an end in itself....you may be constructing distorted and inaccurate memories--a glaringly counterproductive prospect....Quit when you are no longer plagued by intrusive memories or repeating the trauma in other ways" (p.123-124).

If these are examples of the late 1990's attitude, the belief in the veracity of flashbacks is toned down, but not much. Distorted memories and accuracy of recall are mentioned and clients and therapists alike are cautioned not to dredge up memories just for the sake of remembering, but flashbacks are still seen as useful and to be welcomed. Thus it should be predicted that survivors and therapists reading the current literature may not believe in the precise veracity of their flashbacks, they not may set out to dredge up

memories as in the past decade, but they may still be expected to believe in their metaphoric truth and in their usefulness.

Why don't the Vets or the Mixed Group find that flashbacks are healing or useful? Why is the only predictor of distress in the multiple regression analysis Veteran status? It would appear that many of the Vets have little faith that their flashbacks will ever end. The flashbacks have been going on now for thirty years, so why should they hope they will ever stop? Furthermore, fewer of the Vets are trying to piece together the puzzle of their past. Apparently they are trying desperately to forget a past that is all too known to them.

Consider the Vets with discontinuous memory to see how it is different from the CSA groups. The vast majority of the Vets with a period of discontinuous memory endorse the options indicating that they may be actively trying to push the memory out of their minds. They endorsed "I did not think about the trauma for a period of time, because it was too painful (or because I was busy or preoccupied), but would have said 'yes' if someone had asked me if this event had ever occurred." Even those few who endorsed multiple answers including "there was time that I would have said 'no'", also indicated that they would have said 'yes.' In some way they knew about the trauma. Thus, a flashback would not have contributed to new knowledge, or to fitting together the puzzle of the Vet's life. They already knew, but wanted to forget. Additionally, as reviewed above, there is very little in the literature aimed at the veterans that elaborates on the concept that flashbacks are healing or useful.

There is also evidence that gender is associated with reframing a traumatic experience in a positive light. It is postulated by Janoff-Bulman (1992), Janoff-Bulman and Frieze (1983), and Taylor (1983) that people have the desire and extraordinary capacity to restore their "assumptive world" or their dearly held beliefs that the world is relatively safe, predictable, benevolent and meaningful when it is violated by traumatic events. We all do this to a certain extent--we try to find meaning and value in otherwise distressful and even

shattering events. It has additionally been found that women do this more than men. In the Tedeschi and Calhoun study (1996) it was reported that many subjects found positive aspects to their traumatic experiences, and that women tended to report more benefits than did men. I suggest that the tendency to see flashbacks as useful is just another way of reframing an otherwise distressing experience. Subjects may mitigate the negative aspects of flashbacks-- the disruption and distress, by focusing on the positive aspects-- flashbacks may bring new information, help fit together the missing pieces of one's forgotten past, and thus, be part of the healing process. I speculate that believing that flashbacks are useful is not only related to type of trauma, or to discontinuous memory, but may also be gender-related.

Veridicality, Confidence in Flashbacks and the "Worst Case Scenario"

How does confidence in the accuracy of a memory relate to the veridicality of that memory? One aim of this study was to see how confidently subjects believe in the accuracy of flashback memories. Another aim was to test the prediction that some, if not many flashbacks are in reality about "projected outcomes", the "what if's" or the " worst case scenario" that we all fear. I based this prediction on anecdotal and clinical evidence as well as the study by Grunert et al. (1988).

When Grunert et al. (1988) studied patients who had flashbacks following traumatic hand injuries, they found that 60% of the subjects had flashbacks that could be defined as "projected flashbacks" that were actually worse than the real trauma. Since in this instance the researchers were able to compare the flashback to the actual hand injury, they could say with conviction that some flashbacks were in fact a "worst case scenario." In the present study very few subjects believed that their flashbacks fit the "projected outcome" or worst case scenario definition. It is of course possible that the wording of the definition in my study got at something entirely different than that in the Grunert et al. study. The "projected

outcome" option in the present study was worded, "the flashback was more severe than the trauma as it actually occurred, either going on longer, having more details, or it included a worse outcome." Nevertheless, only 2 out of 93 subjects selected the flashback definition that was devised to correspond to Grunert et al.'s definition of "projected flashbacks."

In the section of the survey which focuses on the sense of reality, none of the individual variables making up the "projected outcome" index were endorsed at a high rate. Rather, the items indicating the subjects' solid belief that the flashback was based on a real event were highly endorsed. Subjects across all three groups were aware that the flashback was not exactly like the original, but overall they did not frequently endorse the idea that the flashback was more horrifying, more detailed, or worse than the original trauma.

What could account for the rejection of the "worst case scenario" by the subjects in this present study? In reviewing both the Grunert et al. (1988) study and the anecdotal reports, there is the commonalty that the index event was either present for scrutiny or the flashbacks were so implausible that the projected fears were obvious. To review, in the Lipinski and Pope (1994 ) report the flashbacks involved a woman seeing her own death, in the Bryant and Harvey (1996) study a man flashed on his children lying dead in a car accident whereas they had not been present, and in the Grunert et al. study subjects had flashbacks about losing their whole hand whereas the actual injury was more minor. In these three studies, although there was evidence that the precise trauma never occurred, the flashbacks were nevertheless experienced with realistic intensity. It is possible therefore, for subjects to have intense vivid flashback-like experiences that do not correspond to an actual trauma These three authors report that the "worst case scenario" flashbacks were indistinguishable from flashbacks based on real incidents.

In these three studies, the discrepancy is evident. But what about flashbacks that cannot be readily compared to a trauma in the distant past, or a trauma that is only hazily remembered if at all? In the present study, I did not ask for corroboration, and even if it had

been provided there would be little chance to verify whether the entire scenario, and all of the details of the flashback did in fact mirror the original trauma. If they were close enough, the flashback might take on the cloak of veridicality. Without detailed evidence of the original event, the subject may never know, and may therefore just assume that a "flashback" which may seem clear, logical and vivid is also accurate. In fact, we do not know from the Grunert et al. (1988) study and the anecdotal reports whether those subjects were always ready to say, "oh ya, that flashback was about the worst case scenario."

It may be that only when there is concrete evidence to the contrary, is a subject aware of the discrepancy between the trauma and the flashback. For example, one of the two subjects who endorsed a "projected outcome" flashback is a veteran who reported that he has had flashbacks first about his daughters and now about his young grandson being killed in an ambush. He clearly sees their faces superimposed on the bodies of the soldiers, and yet he also knows that his daughters and grandson are alive and well. He knows without a doubt that his flashbacks are in part about a real incident mixed in with his worst imaginings.

In conclusion, although subjects in my study are quite certain that their flashbacks are based on real events, it is possible and even likely that some of them are based on what they feared might have happened. It may be just imagination, or it may be a case of source misattribution where the scenes in the flashback may seem real and familiar but are actually based on a dream, a movie, a book, or another trauma victim's story . However, my data would suggest that the subject may not know this and believes in the veridicality of the flashback.

As the research on flashbulb, hypnotically retrieved, and "near natal" memories has shown us, confidence, no matter how high is not assurance of veridicality. (Lynn and Nash, 1994; Loftus, Garry, Brown and Rader, 1994; Spanos and McClean, 1986; Stevenson, 1994) To review the research on confidence for flashbulb memories,

McCloskey, Wibel and Cohen (1988) found that subjects "were often quite confident about their inconsistent 9 month responses, and the responses were clearly not offered as guesses.... the inconsistencies do not imply that flashbulb memories are often complete confabulations, but instead suggest that the memories are subject to the same sorts of reconstructive errors that seem to occur frequently for ordinary memories. That is for flashbulb memories, as for other memories inaccuracies may be introduced when information that cannot be retrieved from memory is filled in through inference or guesswork Further, the reconstructed information may be stored in memory and recalled (perhaps with high confidence) on subsequent occasions" (p.175) Subjects with very high confidence can also be very confident of a mere illusion. One of the accounts in this study, in which the subject had "flashbacks" about abuse which she was confident actually happened, raised my sense of skepticism. Although it cannot be proven either way, it is my hunch that her flashbacks were of the "worst case scenario" type. However, she is very confident about her recalled abuse and would not endorse the "worst case scenario."

However, confident as subjects were that their flashbacks were about a real event, they did not have more confidence in the flashback memories than in other memories. This may be attributable to the period of discontinuous memory associated with so many of the flashback memories. This association was in fact born out by the third multiple regression analysis. The "veridicality index " was based on factors that would lead a subject to feel that the flashback was real, in order and made sense. It turned out that the only variable that was a predictor for the "veridicality index" was the absence of a discontinuous memory. That is if a subjects had a clear, continuous memory, or even a vague or partial memory for the original traumatic event, it was somewhat predictive of having a sense that the flashback was veridical. Having no memory for the trauma for a while, and perhaps having the memory emerge only through a flashback was not an added "mystique" that was convincing to subjects.

Coping with Flashbacks --Gender or Trauma Status Differences ?

There were clear differences in the ways in which the subjects in the three trauma groups described both their coping strategies and their success at coping with the after-effects of flashbacks. Sadly, the Vets felt that they were not very capable of coping with their flashbacks and also reported that they feared the flashbacks would never end. They were least likely to feel they succeed in coping, yet most likely to say that this was the way they always coped. It was not clear whether they meant they always tried coping the same way, or no matter what they tried, they rarely felt successful. The CSA and Mixed groups felt more capable of coping successfully, but were less likely to report that they always coped in the same way.

Let us consider the ways in which these trauma groups sought to cope with the after effects of a flashback. There are striking differences in the way the groups sought out or avoided other people after a flashback. The Vets reported that they are most likely to isolate themselves after a flashback, with 73% of them endorsing this item as a strategy they typically used. Only 4% of the Vets said that they coped by seeking out another person. This may seem contradictory with the fact that as a group they saw their friends as the greatest source of information and learning to cope with flashbacks. What can we make of this apparent paradox? Perhaps for the Vets there is a great difference between seeing someone as a source of information and going to them in a time of need. I suggest that sharing information can be seen as an exchange between those equal in power, but asking for comfort or help when distressed puts one in a vulnerable position. Or perhaps, they saw their Vietnam buddies on the PTSD ward as a source of information, but these particularly empathic vets were not available when they had their flashbacks out in the community. The CSA group on the other hand, reported that they were most likely to seek out another person after a flashback, with 71% endorsing this. In contrast to the Vets 39% said that they also

isolate sometimes. About half of the Mixed group said they were apt to isolate, while half said they sought out another person.

One may immediately wonder how much of this result is gender related. Many studies and theoretical tracts highlight the difference between boys and girls, men and women in their needs and ability to be connected. (Chodorow, 1974: Gilligan , 1982; Levant & Pollack , 1995; Miller, 1986; Miller & Surrey, 1990; Tannen, 1990). Theoretically, from an early age little girls are socialized to be in relation, connected, sharing their concerns. For boys there is discontinuity in their experience of connection as they disengage from a close relationship with their mother in order to identify with their father. This in theory leaves them with a yearning for, yet a fear of close relationships. Pollack and Levant (1995) call this a " gender-bifurcated socialization." They conclude, "a man who has been so socialized would be obsessively concerned with maintaining an independent self and would have a panoply of intrapsychic defenses, such as unconscious anger or rage toward women, condescension of anyone in a caretaking role, overvaluation of independence, devaluation of the need for connectedness, stoic denial of sadness or pain, with an inability to mourn or grieve loss and a walling off of the core vulnerable self" (p.47). If this is true, there is good reason why vets who may be socialized in such a way, although in deep distress, fail to seek out another for comfort. It would be unmanly to admit the need for help, to admit pain, or to depend on someone in a caretaking role.

Even when men are able to connect, they may resist seeking help. This may explain why the Vets said they depend on friends as a source of information, but they resist seeking them out when in distress. Researchers have found an association between gender role conflict in men and negative help-seeking attitudes. Robertson and Fitzgerald (1992) found that success, power, competition and restricted emotionality were related to negative views of help seeking. They found that men concerned with power and status were more open to non-traditional forms of therapy such as workshops and classes than they were to traditional

one-on-one counseling. Perhaps this can explain the fact that the Vets may value their buddies as sources of learning on the PTSD ward or in groups but they are much less likely to connect in a position of vulnerability when they need comfort after a flashback. These unsuccessful coping strategies used by Vietnam vets are consistent with the findings of Hyer et al. (1996) who found that Vets primarily used Escape-Avoidance, Self Control and Distancing rather than seeking social support as a means of coping with trauma memories.

The fact that the CSA trauma survivors chose to seek out another person rather than isolate, should not be surprising either. The same gender researchers would argue that women begin in infancy to connect to their mothers and that the connectedness is never broken in their development (Chodorow, 1974; Gilligan, 1982; Miller, 1986; Tannen, 1990). As a result Chodorow theorizes, "in any given society, feminine personality comes to define itself in relation and connection to other people more than masculine personality does" (1974, p. 43-44). Research shows that mothers not only talk more about emotions in general with their daughters, but they tend to talk more about sadness with their daughters and anger with their sons ( Fivush, 1989). Tannen (1990 ) shows that even as little girls, females talk about highly personal experiences and share their concerns as a means of establishing relationships. Girls and women are more likely to share their sorrows and fears in an atmosphere of mutuality without feeling the same vulnerability, competition or fear of being one-down as do men. When women are in distress they are more likely to seek comfort in relationship than they are to isolate as shown in this study.

Research supports what some know intuitively. At least for rape victims, talking about the trauma and organizing the trauma memory from fragmented bits into a coherent whole is indeed an effective way of reducing depression and other trauma related symptoms ( Foa et al , 1995). The treatment models directed at sexual abuse survivors and rape victims in the most current literature emphasize the need for processing the flashbacks through talking with a therapist (Foa et al, 1995; Musicar & Josewitz, 1996).

Another striking finding is the degree to which the Vets reported using drugs and alcohol to cope, whereas the CSA and Mixed Group did not. A full half of the Vets reported using substances to cope, whereas only one fifth of the CSA group and less than a tenth of the Mixed group did. This finding is consistent with epidemiological data that shows that men abuse alcohol at four to five times the rate of women, and abuse drugs almost as twice as often ( Levant and Pollack, 1995). Moreover, the shame and guilt frequently felt by Vietnam vets would predict a higher rate of alcohol abuse as it temporarily dissolves shame and softens the harsh superego criticism. Thirty three percent of the Vets in this study endorsed shame and 52% endorsed guilt after the flashback. Interestingly, Blazina and Watkins (1996) found that gender role conflict was significantly related to negative attitudes toward seeking help, trait anger as well as angry reaction subtype, increased report of alcohol usage, and increased similarity in personality type to chemical abusers. This profile might well fit many of the Vets in this study. They tend to drink, isolate and do something active to take their mind off their troubles rather than share their problems with another. The CSA group also endorsed shame at a high rate, but did not report using substances to the same degree, perhaps because they found other ways of dissolving their shame. I suggest that in the process of talking about rape or sexual abuse women find validation that they were not at fault and support in the commonality of their experience.

Many vets apparently use alcohol as a self-soothing strategy, but unfortunately alcohol and drug use also serves the function of keeping the traumatic memories at bay in a way that may prolong the PTSD symptoms. John Briere ( personal communication) believes that as long as a PTSD subject self-medicates with alcohol or drugs they will not deal with the trauma in small, "titrated" bits in a way that eventually integrates it into ones personal history. According to Briere, only when the trauma is integrated into one's personal narrative, by being gradually examined and tolerated, will the flashbacks eventually end. Many Vets indicated that their flashbacks which had stopped for some period of time,

recommenced once they stopped drinking. For them there is always the temptation to drink again as it temporarily suppresses some of the intrusive symptoms of PTSD. Paradoxically, it may be the very use of alcohol as a coping strategy, that leads so many Vets to say that they still cannot cope, and that they have given up hope that the flashbacks will ever end.

One may ask, are these coping strategies due more to gender status or to trauma status? To examine this further the Mixed group with a gender split was invaluable. In the entire study there were 45 males and 48 females who indicated coping strategies. When I examined coping strategies of the entire group by gender the pattern of women seeking out others, using a unique coping strategy, or doing something active rather than isolating or using drugs was still evident, but to a lesser degree than when examining just the CSA group. Men overall still tended to isolate, did something active, or used drugs or alcohol before they sought out another person.

However, when the Mixed group was examined alone, the patterns of seeking out another person or isolating reversed. Although there were only nine males and eighteen females in this Mixed group, limiting the statistical analysis, the results are surprising and need some explanation. Within in the Mixed trauma group 56% of the males sought out another person as compared to 39% of the females, whereas 33% of the females isolated themselves compared to 22% of the males. Within this group the males were most likely to seek out another person, use a unique coping strategy or did something active before they isolated themselves or used alcohol or drugs. In contrast, the females in the Mixed group were most likely to do something active or used a unique coping strategy before they sought out another person or isolated themselves. Perhaps this was a self-selected group of males who not only chose to disclose their experience in a survey, but were willing to talk about their trauma to others, not fitting the rigid gender role patterns described by Levant and Pollack (1995). Perhaps the trauma suffered by these individuals was less shameful than that of the Vets and thus the males in this group were more willing to share and seek help. For

the women in the Mixed group, it might be that they did not find the need to talk about their trauma, to seek validation and universality the way that CSA survivors find helpful. Since the shame, guilt and depression suffered by the Mixed group are so much less than the other two groups, it may be that coping by distracting oneself or doing something unique is the more effective strategy. Consistent with the gender pattern of the entire sample, the males in the Mixed group were more likely to use drugs or alcohol than were females.

In sum, there seems to be a complex interaction between gender and trauma experience, with female sexual abuse survivors seeking help to the highest degree whereas male veterans tend to isolate and use alcohol to the highest degree. It suggests that being a CSA survivor is in fact more predictive of seeking out another person than is being female. It also suggest that being a Vietnam vet , rather than just being a male, has a lot to do with isolation and drinking when in distress as that is how they learned to cope while in Vietnam or upon their return. Alternately, perhaps this particular group of Vets in the study are still on the PTSD inpatient ward precisely because they have pushed away their memories with drugs and alcohol, thus preventing recovery. Unfortunately, in the long run coping with PTSD by isolating, distancing or abusing substances doesn't work. The research on coping strategies of vets with chronic PTSD may show different frequencies of coping strategies, but it is consistent in reporting that many vets have been unable to find a strategy that works for them. In fact, whatever they are doing to cope with war memories may in fact prolong the symptoms of PTSD. (Fairbank et al, 1991; Green et al, 1988; Hyer et al., 1996).

Limitations of the Research and Implications for Future Research

This research project is subject to all of the shortcomings of any survey that relies on a self selected group. There is always the possibility that subjects who volunteered to complete the survey did so in order to please the investigator or the staff at a mental health facility, chose to do so only to earn the $10.00, or volunteered for some other reason that

would systematically skew the results. The issue of "repressed memory" is currently controversial and it is quite possible that subjects feeling strongly about the issue would choose to participate at a high rate in order to share their perceptions, or conversely they might also choose to stay far away from any research project on the topic. However, efforts were made reach a broad segment of society and to eliminate any sort of coercion or pressure that would unduly influence the results.

There are also the limitations inherent to any self-report survey. One can never be sure that items were answered truthfully. No effort was made to corroborate any of the trauma history, and it is possible that some of the specific traumatic events reported never actually happened. However, as the surveys were completely anonymous and confidential, and as there was no differential reinforcement for any particular set of answers, this problem may be minimal. Further research is indicated to test for the existence of "worst case scenario" flashbacks. The Grunert et al. study should be replicated with a subject pool other than hand trauma victims in which there is concrete evidence of the extent of the trauma. A study in which hospital records or police records could be used for corroboration would be appropriate to compare the content of the flashback with the actual details in the report. A prospective study looking at flashbacks for various groups of victims with a documented trauma history would be optimal.

An obvious limitation in this project is the fact that gender status and trauma status were nearly identical for the Veteran and CSA groups. Although I made an effort to gain access to the female PTSD outpatient group at the Veterans Administration Hospital, I was not successful. Ironically, access to this group may still not have solved the problem. Apparently, even in this female veteran PTSD group few of the women suffered combat trauma, but rather experienced rape or assault while on military duty. Although female combat veterans are less prevalent than males in the United States, it will be important in the

future to study their PTSD reactions if we continue to send them into combat as we did in the Gulf War.

Certainly male adult survivors of childhood sexual abuse could have volunteered for the study, but they chose not to. Perhaps this is because male CSA survivors are historically more stigmatized and thus reticent to come forward with their sexual abuse history. Clearly, as the prevalence of males who have been molested is now recognized to be quite high, research on this understudied group is indicated.

Additionally, all of the Veterans in this research project were inpatient, while the other two groups were not. Again, I made an effort to study an inpatient group of sexual abuse survivors, but access was never granted. Arguably, many of the results could have been skewed due to this confound. Ideally, future research would include both inpatient CSA subjects and outpatient combat veterans, with equal representation of both genders.

Another limitation of this research is the unequal representation of ethnic background, especially in the CSA and Mixed Groups. Information about the survey was intentionally distributed in ways that were visible to many ethnic groups: newspapers and flyers in community mental health clinics and in the local trauma center. However, few subjects of ethnic minorities chose to participate. Future research should make every effort to include ethnic and cultural minorities, using interpreters if necessary.

A final limitation of this project is inherent in its exploratory nature. Some a priori assumptions were made that did not hold true. Several of the proposed indexes did not attain a sufficient Alpha level (0.70) to survive, and some of the independent variables in the regressions did not factor into the equations as I had predicted. However, other variables proved to correlate highly with the dependent variable but could not be used. I regretted during the course of the study that I failed to asked some questions that would have been useful but were only suggested to me by analyzing the "fill in the blank" answers. Future

research based upon the findings of this exploratory study may well confirm some of my speculations.

Although this study is only a beginning, it is useful in that it confirms the fact that flashbacks are a highly variable phenomenon even within individual subjects. Yet in spite of the variability, clear differences did emerge in the way that different trauma groups experience, define and cope with their flashbacks. For victims of childhood sexual abuse an association between discontinuous memory for the event and the perception that flashbacks as useful was found. An association between Veteran status and perceiving that flashbacks are distressful was supported. While nearly all subjects believed that their flashbacks were about a real event, there is some evidence that subjects may be unaware of the fantasy material in their flashback content unless there is concrete evidence to highlight the discrepancy between the flashback and the original trauma. This study provides evidence that while victims in all survivor groups reported periods of discontinuous memory, they may actually mean different things. Finally, the ability and means by which trauma survivors cope with their flashbacks are reviewed and associations with gender patterns are discussed. Each of these findings from this exploratory study offers fertile ground for future research.

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# Appendix A:
# Exploring the Flashback Experience Questionnaire

# EXPLORING THE FLASHBACK EXPERIENCE

## QUESTIONNAIRE

### INTRODUCTION

To begin with I'd like to ask a few questions about the history of your flashbacks.

1.When did your flashbacks begin?_____

_____

2. How long after the trauma did they first occur?_____

_____

3. How frequent are your flashbacks?_____

_____

4. Have they changed in frequency over time?_____

If so how? _____

5. Do they seem to occur in any pattern or in any predictable way?___

If so, how?_____

6. When was your most recent flashback?_____

_____

Tell me briefly about your most recent flashback:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

I'd like to ask about the **memory you may have for the event that corresponds to your most recent flashback.** Please choose the **one** that describes your memory the best:

1. I have always remembered the event clearly, throughout my life____

2. I have always had some vague memory of the event, or have always remembered some parts of the event, but not all of it_____

3. There was some period of time in which I had no memory for the event,but only later the memory returned. _____)

(if you chose option #3, please choose the statement below that best describes your experience.)

a.If someone had asked then me if this event ever occurred I would have said "no"._____

b. I did not think about the trauma for a period of time because it was too painful, but would have said yes if someone had asked me if it ever occurred._____

c. I did not think about the trauma for a period of time because I was busy or preoccupied, but if someone had asked me if it ever occurred, I would have said yes___.

d. I had a hunch that something happened, but didn't know and if asked, would have said, I'm not sure_____.

4. Other than the flashback, I still have no memory for any event that corresponds to the flashback._____

Now I would like to ask you think about some statements concerning your most recent flashback. After each statement please circle a number between 1 ( strongly disagree) and 5 (strongly agree) . If you are undecided or if this question is not applicable please circle 3.

After some statements there is room for a comment . Please add a few words to make your answer clearer or more specific.

| | **strongly disagree** | | **undecided** | | **strongly agree** |
|---|---|---|---|---|---|
| **BEFORE THE FLASHBACK** | | | | | |
| **1. I was surprised by the flashback.** | 1 | 2 | 3 | 4 | 5 |
| **2. I had many dreams before the flashback.** | 1 | 2 | 3 | 4 | 5 |
| **3. I was under a lot of stress before the flashback._____.** | 1 | 2 | 3 | 4 | 5 |
| **4.I felt anxious before the flashback. _____.** | 1 | 2 | 3 | 4 | 5 |

| | strongly disagree | | undecided | | strongly agree |
|---|---|---|---|---|---|
| 5.I felt intense emotions before the flashback. | 1 | 2 | 3 | 4 | 5 |
| 6. Something I saw triggered the flashback. | 1 | 2 | 3 | 4 | 5 |
| 7. Something I heard triggered the flashback. | 1 | 2 | 3 | 4 | 5 |
| 8.Something I smelled triggered the flashback. | 1 | 2 | 3 | 4 | 5 |
| 9.A touch or physical sensation triggered the flashback. | 1 | 2 | 3 | 4 | 5 |
| 10. Intense emotion triggered the flashback. | 1 | 2 | 3 | 4 | 5 |

| | strongly disagree | | undecided | | strongly agree |
|---|---|---|---|---|---|
| **VISUAL DETAILS** | | | | | |
| 11.The picture in my flashback was very clear. | 1 | 2 | 3 | 4 | 5 |
| 12. The scene was like a single snapshot. | 1 | 2 | 3 | 4 | 5 |
| 13. The scene was more like a movie. | 1 | 2 | 3 | 4 | 5 |
| 14. The image was in bright colors. | 1 | 2 | 3 | 4 | 5 |
| 15. The scene was in slow motion. | 1 | 2 | 3 | 4 | 5 |
| 16. The scene seemed to be from my own eyes. | 1 | 2 | 3 | 4 | 5 |
| 17. The scene was like from a camera view. | 1 | 2 | 3 | 4 | 5 |
| 18. The scene became very narrow. | 1 | 2 | 3 | 4 | 5 |
| **AUDITORY DETAILS** | | | | | |
| 19. There were sounds in my flashback. | 1 | 2 | 3 | 4 | 5 |
| 20. There were clear voices in my flashback. | 1 | 2 | 3 | 4 | 5 |
| 21. The sounds seemed as if they were inside my head. | 1 | 2 | 3 | 4 | 5 |

| | strongly disagree | | undecided | | strongly agree |
|---|---|---|---|---|---|
| **TACTILE/KINESTHETIC DETAILS** | | | | | |
| 22. I felt like I was being touched or that I touched something in my flashback. | 1 | 2 | 3 | 4 | 5 |
| 23.I felt my body was moving in the flashback. | 1 | 2 | 3 | 4 | 5 |
| 24. Something felt physically painful in the flashback. | 1 | 2 | 3 | 4 | 5 |
| 25. Something felt physically pleasant in the flashback. | 1 | 2 | 3 | 4 | 5 |
| 26. I felt muscle contractions in my flashback. | 1 | 2 | 3 | 4 | 5 |
| 27. I felt a change in temperature in the flashback. | 1 | 2 | 3 | 4 | 5 |
| 28.I physically acted out the scene in my flashback. | 1 | 2 | 3 | 4 | 5 |
| 29.I got other people to act out the flashback scene with me. | 1 | 2 | 3 | 4 | 5 |
| **TASTE/SMELL** | | | | | |
| 30. I tasted something in my flashback. | 1 | 2 | 3 | 4 | 5 |
| 31. I smelled something in my flashback. | 1 | 2 | 3 | 4 | 5 |
| **SENSE OF REALITY** | | | | | |
| 32. The order in which things happened in the flashback made sense. | 1 | 2 | 3 | 4 | 5 |
| 33. Overall, when I put the pictures, sounds, smells, touch and order together, the flashback made sense. | 1 | 2 | 3 | 4 | 5 |
| 34. It seemed that the flashback was something that had really happened to me. | 1 | 2 | 3 | 4 | 5 |

| | strongly disagree | | undecided | | strongly agree |
|---|---|---|---|---|---|
| 35. It seemed that the flashback was something I only imagined happened . | 1 | 2 | 3 | 4 | 5 |
| 36. I have had exactly the same flashback before. | 1 | 2 | 3 | 4 | 5 |
| 37. I was aware during the flashback that it was "just" a flashback, and it wasn't really happening | 1 | 2 | 3 | 4 | 5 |
| 38. During the flashback it seemed as if I were actually reliving the original event. | 1 | 2 | 3 | 4 | 5 |
| 39. The flashback seemed more horrifying than the original event. | 1 | 2 | 3 | 4 | 5 |
| 40. The flashback had many more details than the original event | 1 | 2 | 3 | 4 | 5 |
| 41. The scene in the flashback covered the time period before the actual event. | 1 | 2 | 3 | 4 | 5 |
| 42. The scene in the flashback reflected the moment of the traumatic event. | 1 | 2 | 3 | 4 | 5 |
| 43. The scene in the flashback went on longer than the time period of the actual traumatic event | 1 | 2 | 3 | 4 | 5 |
| 44. The scene in the flashback seemed less traumatic than the actual event. | 1 | 2 | 3 | 4 | 5 |
| 45. The scene in the flashback seemed dreamlike. | 1 | 2 | 3 | 4 | 5 |
| 46. The scene in the flashback was exactly like the original event. | 1 | 2 | 3 | 4 | 5 |

FEELINGS DURING THE FLASHBACK

47 . I felt the following feelings during the flashback? (Check as many as apply)

| | | |
|---|---|---|
| calm__ | aroused__ | aggressive__ |
| scared__ | in control__ | out of control__ |
| anxious__ | in danger__ | safe or secure__ |
| powerful__ | powerless__ | excited or hyped__ |
| pleasant __ | terrified__ | shamed or guilty__ |

| | strongly disagree | | undecided | | strongly agree |
|---|---|---|---|---|---|
| 48. I was aware of other people around me during the flashback. | 1 | 2 | 3 | 4 | 5 |
| 49.I was aware of my physical surroundings during the flashback. | 1 | 2 | 3 | 4 | 5 |

| | strongly disagree | | undecided | | strongly agree |
|---|---|---|---|---|---|
| 50. I felt that I was outside of my body during the flashback. | 1 | 2 | 3 | 4 | 5 |
| 51. I felt that things were unreal during the flashback. | 1 | 2 | 3 | 4 | 5 |
| 52. I felt that my body was changing in shape or size during the flashback. | 1 | 2 | 3 | 4 | 5 |

**FEELINGS AND THOUGHTS AFTER THE FLASHBACK**

| | strongly disagree | | undecided | | strongly agree |
|---|---|---|---|---|---|
| 53. I gained new information from the flashback | 1 | 2 | 3 | 4 | 5 |
| 54.I am confident that my flashback accurately represents a real event in my life. | 1 | 2 | 3 | 4 | 5 |
| 55.I have more confidence in the accuracy of my flashback than in the accuracy of my normal memories. | 1 | 2 | 3 | 4 | 5 |
| 56. I have more confidence in the accuracy of my flashback than in the accuracy of memories recalled through my dreams. | 1 | 2 | 3 | 4 | 5 |
| 57.I have more confidence in the accuracy of my flashback than in the accuracy of memories I might recall while under hypnosis. | 1 | 2 | 3 | 4 | 5 |
| 58.I think that flashbacks are part of the healing process. | 1 | 2 | 3 | 4 | 5 |
| 59.I think the flashbacks will eventually stop | 1 | 2 | 3 | 4 | 5 |
| 60. I anticipate another flashback with dread. | 1 | 2 | 3 | 4 | 5 |
| 61. I look forward to having another flashback. | 1 | 2 | 3 | 4 | 5 |
| 62. I think my flashbacks serve some useful purpose._____. | 1 | 2 | 3 | 4 | 5 |
| 63. My flashbacks are disruptive in my life in the short term._____. | 1 | 2 | 3 | 4 | 5 |
| 64. My flashbacks are disruptive in my life in the long term._____. | 1 | 2 | 3 | 4 | 5 |

| | strongly disagree | | undecided | | strongly agree |
|---|---|---|---|---|---|
| 65. My flashbacks make it difficult to work. | 1 | 2 | 3 | 4 | 5 |
| 66. My flashbacks interfere with my relationships. | 1 | 2 | 3 | 4 | 5 |
| 67. My flashbacks hurt my self esteem. | 1 | 2 | 3 | 4 | 5 |
| 68. Flashbacks help to fit together the missing pieces of the"puzzle of my past". | 1 | 2 | 3 | 4 | 5 |

69. I felt the following emotions after the flashback. (Check as many as apply)

| | | |
|---|---|---|
| relief__ | sadness__ | anger__ |
| guilt__ | pleasure__ | confusion__ |
| numbness__ | depression | heightened sensations ___ |
| exhaustion__ | excitement__ | a "high"___ |
| shame___ | fear__ | other_____ |

| | strongly disagree | | undecided | | strongly agree |
|---|---|---|---|---|---|
| **COPING AFTER THE FLASHBACK** | | | | | |
| 70. I was able to do something to cope with the after effects of the flashback_____. | 1 | 2 | 3 | 4 | 5 |
| 71.This is the same way I always cope. | 1 | 2 | 3 | 4 | 5 |

72. Which of these things, if any did you do to make yourself feel better after the flashback? (Choose as many as apply)

sought out another person__
isolated myself__
took some medication__
took drugs or alcohol__
did something active to distract myself__
did nothing different than before the flashback__

other_____.

_____

_____

_____

**If you had to choose one of the following four descriptions of your most recent flashback, which one most closely fits?**
**(Please check one)**

1. The flashback was a replaying of the events just before the trauma and continuing until the moment of the trauma. ____

2. The flashback was more like a still shot, at the moment the trauma occurred ____

3. The flashback was more severe than the trauma as it actually occurred, either going on longer, having more details, or it included a worse outcome. ____

4. The flashback was a replaying of the whole event, from start to finish, pretty much the same as the event.____

**Which of the following have helped you understand or learn to cope with your flashbacks? Please check as many as apply and any titles or details.**

counseling__ group therapy__ friends__ family__
books:_____
_____
movies:_____
_____
TV or talkshows:_____
_____
lectures or talks:_____
_____
newspapers or magazines:_____
_____

**Overall, which of these best describes what you call a flashback ?**
(Please check one)

1. A strong emotional reaction, having the same quality as the trauma.____

2. An intrusive memory of the past trauma, almost like a day dream.____

3. A quick visual flash or snapshot of the trauma.____

4. Like a video tape replay of the past trauma.____

5. Reliving the past trauma, so that it seemed real and I lost track of where I really was.____

6. Other_____.
Do you experience any of these other categories, and if so how do you label them?_____

**Thank you very much for completing this questionnaire.**
**I appreciate the time and effort you have given to help us understand flashbacks better.**

## Appendix B:
## Consent Form for Veterans

# University of Washington
# Consent Form

Elizabeth Milo, M.C.
Graduate Student
University of Washington
Seattle, Wa. (206) 522-2606

Elizabeth Loftus, Ph.D.
Professor
Dept. of Psychology
University of Washington
Seattle, Wa.(206)543-7184

Miles McFall, Ph.D.
Director, PTSD Program
VA Medical Center
Dept. of Psychiatry & Behav. Sci.
University of Washington
Seattle, Wa. (206) 764-2177

Gerald Rosen, Ph.D.
Clinical Psychologist
1910 Cabrini Tower
901 Boren Ave
Seattle, Wa.(206) 343-9474

**Investigators' Statement**

## Exploring the Flashback Experience

### Purpose and Benefits

We are asking Veterans who have flashbacks to describe their experience in order to find out more about flashbacks and what they feel like to people who have them. It is hoped that the knowledge gained will help us understand more about flashbacks and enable us to better help those who experience them.

### Procedures

In the following survey we will ask about your most recent flashback experience. On most of the items we will ask you a specific question about the flashback and you will select a number on a scale from 1 to 5 that best describes your experience. In some questions we will ask you to select a few words that might describe your flashback or to fill in a few words or phrases to explain your answer.

### Risks, Stress and Discomfort

We will be asking you about a part of your life that may be painful or distressing to recall. You have the choice to answer only the questions you wish to. Your participation in this project is entirely voluntary. If at any time you decide you wish to stop the survey, or withdraw from the project you may do so and you will be excused without penalty.

Other Information

Your answers to the questions will be tallied to find common themes among all those who participate. You will be given a code number and your name and your code number will be kept in separate locked file cabinets, so that your name will not be connected to the data. All of the data will be kept in a locked file and only the investigators and I will have access to them. Your answers will not be shared with the clinic staff. If you have any questions about the project or the survey, please feel free to call.

For veterans eligible for medical care from the Department of Veterans Affairs, medical care and treatment for any injury sustained will be provided by the VA. For non-eligible veterans and non-veterans, care and treatment by the VA is available on a humanitarian emergency basis. For eligible subjects, compensation may be payable under Title 38 USC 351. For eligible and non-eligible subjects, compensation may be payable under the Federal Torts Claim Act.

_____

Signature of Investigator date

**Subject's Statement:**

"The project has been explained to me. I voluntarily consent to participate in this activity. I have had the opportunity to ask questions. I understand that future questions I have about the research or about my rights as a subject will be answered by one of the investigators listed above."

_____ #_____

Signature of Subject date

copies to : Subject, Investigator's file

# Appendix C:
# Letter to Therapists

3018 East Laurelhurst Dr. N.E.
Seattle.Wa. 98105
October 2, 1996
(206) 522-2606

Dear Therapist,

I am a graduate student in Educational Psychology at the University of Washington. For my dissertation I am studying the subjective experience of flashbacks, which are defined as intrusive episodes in which people feel they are experiencing a past traumatic experience in the present. There is current research focusing on therapists' views of intrusive memories from the past, but little as yet is known of the client's perceptions. I wish to focus on subjective perceptions such as whether flashbacks are perceived as helpful, healing or informative in some way or as merely intrusive and distressing. In order to be effective in the therapist's role it would be helpful to understand how flashbacks are expereinced and perceived, whether there is anything as a "typical" flashback, and how clients have learned to cope with the aftermath of flashbacks.

In order to study the phenomenon I have selected two groups which vary on many important dimensions: combat veterans and adult survivors of childhood sexual abuse. The project is already well underway with the combat veteran group. I am asking for your help in referring clients who are adult survivors of sexual abuse whom you feel would be appropriate for my study. In order for a client to be eligible they must have experienced at least one flashback and have current access to a therapist who can assist them if any stress arises. A client whom you consider to be in a fragile psychological state would not be appropriate for the study.

The survey is designed to be as unintrusive as possible and still get a clear detailed picture of the flashback experience. I will ask only about the experience of the flashback, and not the about the original trauma in order to minimize discomfort. Even with these precautions there is some possibility that thinking about a flashback might be distressful to some subjects. Subjects are encouraged to skip any questions or to discontinue the survey if they become distressed.

If you have clients you would like to refer for this study you may pass on this information to them and they may call me and volunteer to be a subject , or you may ask me for a copy of the survey questionnaire and the consent form to give to them directly. It is important that the subjects volunteer freely, without any feeling of wanting to please you as the

therapist. The survey should take around 45 minutes to complete and subjects will mail the survey directly back to me. Any identifying information will be kept completely separate from the questionnaire and strict confidentiality will be maintained at all times. The subject will always have the right to call and ask any questions, to leave any questions unanswered, or decide not to proceed with the study if they so wish. A copy of the questionnaire and the consent form is enclosed for your information.

The feedback I have received from my pilot subjects is that the survey has made them think about flashbacks in ways they had not thought before, and that it conveyed to them a sense that I was truly interested in their unique experience. I hope that the study will be accepted in a journal directed toward counselors and therapists whose clients include those who have suffered from trauma.

I will give you a phone call in a week or two, after you have had a chance to talk to any clients you may want to refer. I thank you in advance for your help in pursuing this study as I expect it will contribute to our knowledge as counselors and our ability to help clients. If you have any questions or concerns at this time or as the study goes along, please feel free to call me at 522-2606.

Thank you,

Zanny Milo, Ph.C.

July 15, 1997

Dear Dr. Londborg,

I am a graduate student in Educational Psychology at the University of Washington. For my dissertation I am studying the subjective experience of flashbacks, which are defined broadly as intrusive episodes in which people feel that they are experiencing a past traumatic experience, or some part of that experience in the present. There is current research focusing on therapists' or doctor's views of intrusive memories from the past, but little is yet known of the clients' perceptions. I wish to focus on subjective perceptions such as whether flashbacks are perceived as helpful, healing or informative in some way or as merely intrusive and distressing. In order to be effective in the therapists' role it would be helpful to understand how flashbacks are experienced and perceived, and whether there is any such thing as a "typical" flashback. I wish to assess how subjects cope with their flashbacks in order to share this with other victims of trauma and their therapists.

In order to study the phenomenon of flashbacks, I have selected three groups which vary on many important dimensions: combat veterans, adult survivors of childhood sexual abuse, and those who have suffered from natural or human disasters such as assault, medical trauma, or witnessing a traumatic experience. I am asking for your help in passing information about this project on to subjects whom you feel would be appropriate. In order for a subject to be eligible they must have experienced at least one flashback, and have current access to a support network which can support them should any stress arise. A subject whom you consider to be in a very fragile psychological state would not be appropriate for the study.

The survey is designed to be as unintrusive as possible and still get a clear, detailed picture of the flashback experience. The participant is generally asked to circle a number representing their level of agreement with a statement or to fill in a word or phrase. It does not ask about the original trauma in order to minimize any discomfort. Subjects are encouraged to skip any questions or to discontinue the survey if they become distressed. The survey should take about 30 minutes to complete. Any identifying information will be kept completely separate from the questionnaire and strict confidentiality will be maintained at all times. The subject is told that they have the right to call and ask me any questions, to leave any questions unanswered or to decide not to proceed with the study if they so wish. Each participant will be paid $10.00 for their contribution.

The feedback I have received so far from the veterans who have completed the study, is that the survey has made them think about flashbacks in ways that they had not thought before and that it conveyed to them a sense that I, as a researcher, was truly interested in their unique experience. They felt very positive about contributing to research that would benefit survivors of trauma in the future. Several have asked to get some feedback on the final results of the study, so that they can see the benefits of their personal contribution, which I have gladly agreed to do. I hope that my study will be accepted in a journal directed toward therapists whose clients include those who have suffered from trauma.

I would like to thank you in advance for your help in pursuing this study as I expect that it will contribute to our knowledge as counselors and our ability to help clients. If you have any questions or concerns please call me at (206) 522-2602.

Thank you,

Elizabeth Milo, Ph.C.

# Appendix D:
# Newspaper Ad for Recruiting Subjects

April 2, 1997 • SEATTLE WEEKLY • [redacted]

**DO YOU HAVE FLASHBACKS?**
Trauma survivors wanted to fill out survey on flashbacks.
Should be in stable condition & have access to a therapist.
Dept Ed Psych UW. Pays $10. Confidential. Call 522-2606.

## Appendix E:
## Mental Health Center Flyer for Recruiting Subjects

# Do You Have Flashbacks ?



*I am looking for people who have experienced at least one flashback to fill out a brief survey on your perceptions of flashbacks and your ways of coping. The time commitment is about a half hour and the survey can be filled out in the privacy of your home. Strict confidentiality is guaranteed.*

*If you have experienced flashbacks at any time, feel you are in a stable place emotionally, and have a present or past therapist you can call on for support, you would be appropriate for this study.*

*If you are interested in participating in the study, please discuss this with your therapist and call me for more information.*

*Participants will be paid $10.00*

*Thank you,*

*Zanny Milo*
*Graduate Student*
*Department of Educational Psychology*
*University of Washington*
(206) 522-2606

# Appendix F:
# Letter to Subjects

July 22, 1997

Dear Participant,

Thanks so much for your willingness to participate in my research project on flashbacks. I am a doctoral student in the Department of Educational Psychology at the University of Washington and this research will become my doctoral thesis. Dr. Lee Nelson, from the same department is collaborating on the project. I hope that my findings will contribute to our knowledge of how survivors of trauma experience their flashbacks and have learned to cope. It is my hope that through this research survivors of all types of trauma and those working with them will benefit in the future.

The survey is quite easy to fill out and takes somewhere around one half hour to complete. This is the only survey you will be asked to complete. For most of the questions simply circle a number from 1 to 5 which corresponds to whether you agree or disagree with the statement. For other questions please fill in a few words, or check off the appropriate answer. Sometimes answering questions such as these produce some anxiety or distress. You may leave any questions blank if you choose to do so. If at any time you become distressed, you may stop, and hopefully you will contact your therapist if you feel it is necessary.

Complete confidentiality is guaranteed at all times. Only I will see the surveys which will be kept separately from any of your identifying information, and the surveys will be destroyed after the project is completed. The data will be analyzed to determine a picture for the whole group.

Please return the survey along with the demographic information sheet and your mailing address in the enclosed stamped, addressed envelope. Your check for $10.00 will be sent to you immediately upon receipt of the completed survey. If you should have any questions or concerns, please feel free to call me at 522-2606.

Thank you for participating! It is only through the generous participation of subjects like yourself that research is furthered and our body of knowledge expands.

Sincerely,

Elizabeth Milo MC, M.Ed

December 31, 1996

Dear Participant,

Thanks so much for your willingness to participate in my survey project on flashbacks. I hope that my findings will contribute to our knowledge of how survivors of trauma experience their flashbacks and have learned to cope. It is my hope that through this research survivors of all types of trauma will be helped in the future.

The survey is quite easy to fill out and takes somewhere around one half hour to complete. If at any time you become distressed, you may stop, and hopefully you will contact your present or past therapist if you feel it is necessary. You may also call me with any questions. I would appreciate any referrals of friends or acquaintances you might have who would be appropriate for this survey.

Please sign both consent forms, keep one for your records, and return the other along with the survey and demographic information sheet to me in the enclosed stamped envelope. If you should have any questions or concerns, please feel free to call me at 522-2606.

Thank you for participating!

Sincerely,

Zanny Milo

Zanny Milo

# Appendix G:
# Consent Form for CSA Group

# University of Washington
# Consent Form

Elizabeth Milo, M.C.
Graduate Student
University of Washington
Seattle, Wa. (206) 522-2606

Lee Nelson
Professor
Dept. of Ed.Psychology
University of Washington
Seattle, Wa.(206)543-4970

**Investigators' Statement**

## Exploring the Flashback Experience

### Purpose and Benefits

We are asking subjects who have flashbacks to describe their experience in order to find out more about flashbacks and what they feel like to people who have them. It is hoped that the knowledge gained will help us understand more about flashbacks and enable us to better help those who experience them.

### Procedures

In the following survey we will ask about your most recent flashback experience. On most of the items we will ask you a specific question about the flashback and you will select a number on a scale from 1 to 5 that best describes your experience. On some questions we will ask you to select a few words that might describe your flashback or to fill in a few words or phrases to explain your answer.

### Risks, Stress and Discomfort

We will be asking you about a part of your life that may be painful or distressing to recall. You have the choice to answer only the questions you wish to. Your participation in this project is entirely voluntary. If at any time you decide you wish to stop the survey, or withdraw from the project you may do so and you will be excused without penalty.

Other Information

Your answers to the questions will be tallied to find common themes among all those who participate. You will be given a code number and your name and your code number will be kept in separate locked file cabinets, so that your name will not be connected to the data. All of the data will be kept in a locked file and only the investigators and I will have access to them. Your answers will not be shared with anyone else. If you have any questions about the project or the survey, please feel free to call.

Elizabeth Mills 4/15/97

Signature of Investigator date

**Subject's Statement:**

"The project has been explained to me. I voluntarily consent to participate in this activity. I have had the opportunity to ask questions. I understand that future questions I have about the research or about my rights as a subject will be answered by one of the investigators listed above."

_____

Signature of Subject date

copies to : Subject, Investigator's file

# Appendix H: Original Indexes and Multiple Regressions

**Disruption/Distress Index**

39. The flashback seemed more horrifying than original event.
60. I anticipate another flashback with dread.
63. My flashbacks are disruptive in my life in the short term.
64. My flashbacks are disruptive in my life in the long term.
65 My flashbacks make it difficult to work.
66. My flashbacks interfere with my relationships.
67. My flashbacks hurt my self esteem.
69. Some total from this multiple choice list .

**Usefulness Index**

53. I gained new information from the flashback.
58 I think that flashbacks are part of the healing process.
61. I look forward to having another flashback.
62. I think my flashbacks serve some useful purpose.
68. Flashbacks help to fit together the missing pieces of the "puzzle of my past".
I think I need to remember the original trauma in order to heal.
69. Some total from this multiple choice list.

**Veridicality Index**

11. The picture in my flashback was very clear.
32. The order in which things happened in the flashback made sense.
33. Overall, when I put the pictures, sounds, smells, touch and order together, the flashback made sense
34. It seemed that the flashback was about something that really happened to me.
35. It seemed that the flashback was about something I only imagined happened (flip).
36. I have had exactly the same flashback before.
42. The scene in the flashback reflected the moment of the trauma.
45. The scene in the flashback seemed dreamlike.(flip)
46 The scene in the flashback was exactly like the original event.

**Confidence Index**

54. I am confident that my flashbacks accurately represents a real event in my life.
55. I have more confidence in the accuracy of my flashback than in the accuracy of my normal memories.
56. I have more confidence in the accuracy of my flashback than in the accuracy of memories recalled through my dreams.
57. I have more confidence in the accuracy of my flashback than in the accuracy of memories I might recall through hypnosis.
68. Flashbacks help to fit together the missing pieces of the "puzzle of my past."

**Projected Outcome Index**

34. It seemed that the flashback was about something that really happened to me. (flip)
35. It seemed that the flashback was about something I only imagined happened.
39. The flashback seemed more horrifying than the original event.
40. The flashback had many more details than the original event.
43. The scene in the flashback went on longer than the time period of the actual traumatic event.
44. The scene in the flashback seemed less traumatic than the actual event.(flip)
54. I am confident that my flashback accurately represents real event in my life.( flip)

**Perceptual Clarity Index**

11. The picture in my flashback was very clear.
19. There were sounds in my flashback.
22. I felt like I was being touched or that I touched something in my flashback.
30. I tasted something in my flashback.
31. I smelled something in my flashback.

**Type of Memory**
1. Continuous Memory " I have always remembered the event clearly throughout my life."

2. Vague Memory "I have always had some vague memory of the event, or have always remembered some parts of the event, but only later the memory returned."

3. Recovered Memory "There was some period of time in which I had no memory for the event, but only later the memory returned."

4. No Memory "Other than the flashback, I still have no memory for any event that corresponds to the flashback."

**Type of Trauma**
1. Combat Vet

2. Adult Survivor of Childhood Sexual Abuse

**Type of Flashback (from Grunert et al, 1988)**
1. Replay: Events leading up until the moment of the trauma

2. Appraisal: The moment of the trauma.

3. Projective: More details, more horrific, longer time frame than the original trauma.

**Multiple regressions:**

dependent: disruption/distress index
predictors: type of trauma
type of memory
type of flashback
gender?
coping strategies? (what did they read??)

dependent: usefulness index
predictors: type of trauma
type of memory
type of flashback
gender
coping strategies?

dependent: projected outcome index
predictors: type of trauma
type of memory
type of flashback
gender
coping strategies??

dependent: veridicality
predictors: type of trauma
type of memory
type of flashback
gender
perceptual clarity index

dependent: confidence in accuracy of memory
predictors: type of trauma
type of memory
type of flashback
gender
perceptual clarity index
coping strategies?

# Appendix I:
# The "Recovered Memory" Subjects

Mean and Percent Agreement of Variables for CSA Subjects With "No Memory for the Event" and All CSA Subjects

| | CSA groups | | | |
|---|---|---|---|---|
| | "recovered memory" n=4 | | All CSA n=31 | |
| Variable | M | % yes | M | %yes |
| Surprise | 4.2 | 75 | 3.3 | 52 |
| Dreams before | 3.2 | 50 | 2.8 | 39 |
| Stress before | 4.2 | 75 | 3.8 | 61 |
| Anxious before | 4.2 | 75 | 4.3 | 74 |
| Intense emotions | 4.0 | 75 | 4.1 | 67 |
| Visual trigger | 2.7 | 50 | 3.2 | 48 |
| Auditory trigger | 2.5 | 50 | 2.7 | 36 |
| Olfactory trigger | 1.7 | 0 | 1.8 | 6 |
| Tactile trigger | 2.0 | 25 | 2.9 | 39 |
| Emotional trigger | 4.2 | 75 | 4.2 | 74 |
| Picture clear | 3.0 | 50 | 4.2 | 77 |
| Like snapshot | 3.0 | 50 | 1.9 | 20 |
| Like movie | 3.2 | 50 | 3.8 | 68 |
| Bright colors | 3.5 | 50 | 3.2 | 48 |
| Slow motion | 2.5 | 25 | 2.6 | 33 |
| View from eyes | 2,0 | 25 | 3.3 | 55 |
| Camera view | 3.2 | 50 | 2.9 | 45 |
| Narrow scene | 3.0 | 50 | 2.5 | 29 |

| | CSA groups | | | |
|---|---|---|---|---|
| | "recovered memory" n=4 | | All CSA n=31 | |
| Variable | M | % yes | M | %yes |
| Sounds | 3.5 | 75 | 3.8 | 68 |
| Clear voices | 4.5 | 100 | 3.6 | 61 |
| Inside head | 3.0 | 50 | 2.8 | 40 |
| Touched | 2.5 | 25 | 3.8 | 68 |
| Body moving | 2.7 | 50 | 3.1 | 48 |
| Felt painful | 2.5 | 25 | 3.5 | 61 |
| Felt pleasant | 1.0 | 0 | 1.5 | 10 |
| Muscles contract | 1.7 | 25 | 3.3 | 52 |
| Temperature change | 3.5 | 75 | 3.6 | 65 |
| Acted out | 1.7 | 25 | 2.4 | 29 |
| Other people | 1.5 | 0 | 2.4 | 29 |
| Tasted | 1.0 | 0 | 2.1 | 26 |
| Smelled | 2.5 | 25 | 2.1 | 26 |
| Order sense | 2.7 | 50 | 4.5 | 84 |
| Overall sense | 3.2 | 50 | 4.4 | 74 |
| Really happened | 4.2 | 75 | 4.8 | 85 |
| Only imagined | 2.0 | 25 | 1.3 | 7 |
| Exactly same | 2.7 | 25 | 3.5 | 58 |
| Just flashback | 2.0 | 0 | 3.1 | 45 |
| Reliving event | 4.0 | 75 | 4.5 | 84 |
| More horrifying | 3.0 | 25 | 2.8 | 24 |

| | CSA groups | | | |
|---|---|---|---|---|
| | "recovered memory" n=4 | | All CSA n=31 | |
| Variable | M | % yes | M | %yes |
| More details | 2.5 | 25 | 2.5 | 19 |
| Moment of trauma | 4.0 | 75 | 4.4 | 84 |
| Went on longer | 1.7 | 0 | 2.3 | 19 |
| Less traumatic | 1.0 | 0 | 2.4 | 23 |
| Dreamlike | 2.7 | 25 | 3.1 | 48 |
| Like original | 3.5 | 75 | 3.6 | 53 |
| Aware of people | 2.2 | 25 | 3.1 | 42 |
| Aware surroundings | 1.7 | 0 | 3.4 | 58 |
| Outside body | 4.2 | 75 | 3.4 | 58 |
| Unreal | 2.2 | 25 | 2.9 | 39 |
| Body changing | 4.8 | 100 | 3.3 | 55 |
| New information | 4.0 | 75 | 3.5 | 58 |
| Real event | 4.5 | 75 | 4.9 | 94 |
| Conf. normal | 3.5 | 25 | 2.9 | 29 |
| Conf. dreams | 4.2 | 75 | 4.3 | 68 |
| Conf. hypnosis | 2.5 | 0 | 3.1 | 13 |
| Healing process | 4.0 | 75 | 4.1 | 65 |
| Will stop | 3.2 | 50 | 3.2 | 36 |
| Dread next | 4.0 | 75 | 3.6 | 61 |
| Look forward | 1.0 | 0 | 1.6 | 13 |
| Useful purpose | 3.7 | 75 | 4.1 | 68 |

| | CSA groups | | | |
|---|---|---|---|---|
| | "recovered memory" n=4 | | All CSA n=31 | |
| Variable | M | % yes | M | %yes |
| Disruptive short | 4.8 | 100 | 4.2 | 78 |
| Disruptive long | 3.7 | 50 | 3.0 | 42 |
| Hurt work | 3.2 | 50 | 3.4 | 52 |
| Hurt relationships | 3.7 | 75 | 3.7 | 65 |
| Hurt esteem | 3.5 | 50 | 3.5 | 53 |
| Fit together "puzzle" | 4.5 | 100 | 4.2 | 71 |
| Able to cope | 3.5 | 75 | 4.0 | 71 |
| Always same | 2.5 | 25 | 3.3 | 50 |
| Sought out person | | 100 | | 71 |
| Isolated myself | | 75 | | 39 |
| Did something active | | 75 | | 47 |
| Medication | | 25 | | 23 |
| Drugs or alcohol | | 25 | | 19 |
| Nothing different | | 0 | | 16 |
| Other | | 75 | | 48 |

**Elizabeth (Zanny) Milo**
3018 East Laurelhurst Drive N.E.
Seattle, WA. 98105
(206) 522-2606

## EDUCATION

**University of Washington,**
Ph.D in Educational Psychology (expected 1997);
M.Ed. in Special Education (1978)

**Seattle University**, Masters in Counseling, Agency Focus (1993)

**College of Notre Dame,** Teacher Preparation Program (1975)

**Stanford University,** B.A. in Psychology (1973)

## WORK EXPERIENCE

### Psychotherapy

Private psychotherapy practice serving adults and children in individual, couples and family therapy (1993-current)

Seattle Mental Health, intern in Outpatient Services, therapy with children, adults and families (1995-1996) and volunteer in Emerald House Day Treatment Program for chronically mentally ill (1991-1992)

Park Shore Retirement Home, group leader for staff, focusing on conflict resolution, communication skills and multicultural issues (1993)

Luther Child Center, group co-leader for victims of sexual abuse (1993)

Eastside Mental Health, intern, counseling individuals and couples (1992-1993)

Associazione Italiana per L'Assistenza ai Bambini Autistici (AIABA), psychodynamic therapy-activity program for autistic children (1975-1977)

### Psychological Evaluations

Private practice including parenting evaluations, observations of child and parent-child interactions, formal psychological testing (1996-present)

Parent Evaluation Training Program, University of Washington, in parenting, custody and visitation evaluations (1996-1997)

Internship in Forensic Psychology, training in psychological and parenting evaluations, interviewing, testing and forensic reports (1995-1997)

Children's Hospital and Medical Center, administering the Adult Attachment Interview for the Preschool Families Project (1992-1995)

Children's Health Council, Practicum in Infant Stimulation Class, assessment and remediation of infants (1973)

### Teaching

Teaching Assistant, Educational Psychology and Psychology Departments, University of Washington (1994-1997)

Seattle School District, teacher for learning disabled children (1982-1986)

Park Century School, educational therapist, learning disabled (1979-1982)

Experimental Education Unit, University of Washington, teacher in Developmental Preschool; intern in Behavior Disorders Class (1978-1979)

Children's Health Home, Head teacher in program for severely emotionally disturbed preschoolers (1974-1975)

Hansel and Gretel Private School, teacher, first-second grade (1973-1974)

## RESEARCH AND CONFERENCE PRESENTATIONS

"Exploring the Flashback Experience," principal investigator (current)

"Maternal Responses to the Life and Death of a Child with Developmental Disabilities," principal investigator. Presented at APA, New York, 1995.

"Women's Voices: Advocating for the Rights of Society's Most Marginal Citizens," principal investigator. Presented at APA, Toronto, 1996

"Experiencing Loss Without Losing It," Presented at the International SOFT Conference, Bellevue, 1995

Preschool Families Project, relationship between attachment and oppositional behavior in preschool boys, interviewer (1992-1995)

Child Clinical Psychology, relationship between brain activity and mastery motivation in infants of mothers with depression, collaborator (1991-1992)

## PUBLICATIONS

Loftus, E.F., Milo, E.M., Patton, J. (1995). The Accidental Executioner: Why Psychotherapy Must be Informed by Science. The Counseling Psychologist, 23, 2, 300-309

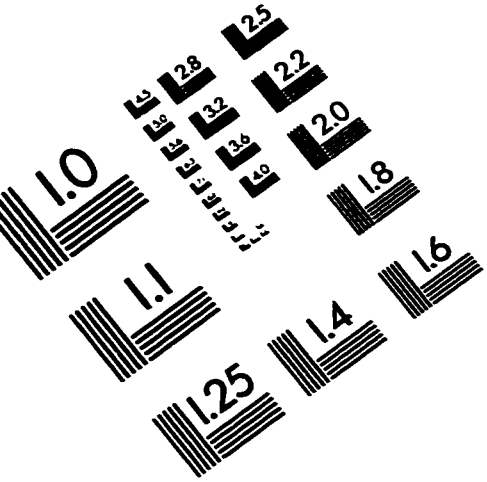
Milo, E.M. (1997). Maternal Responses to the Life and Death of a Child with a Developmental Disability, Death Studies, 21, 443-447

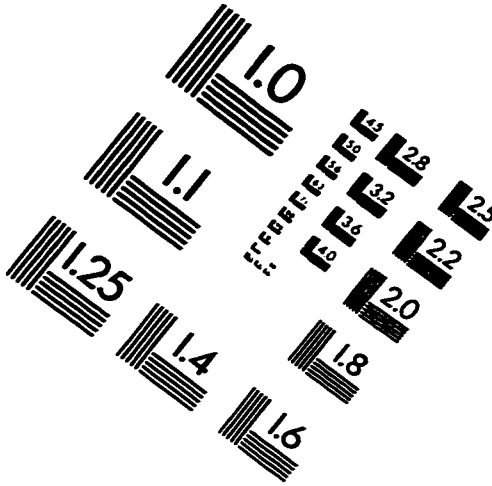
## BOARD POSITONS

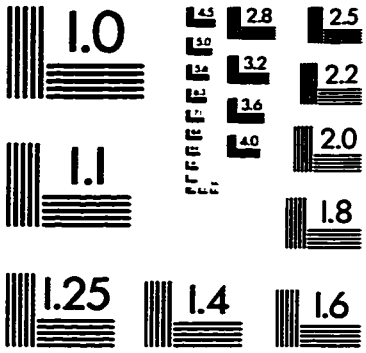
Council for Prevention of Child Abuse and Neglect -CPCAN (1996-1997)

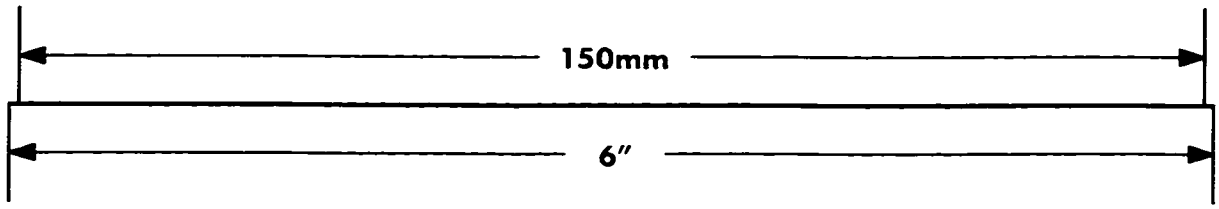
Western Washington Stanford Alumni Association (1994-1997)
President (1997)

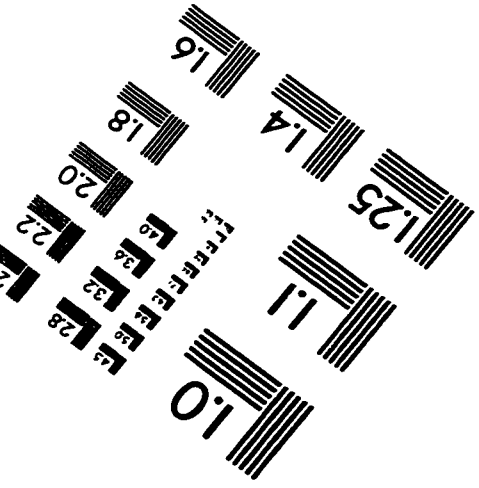
# IMAGE EVALUATION TEST TARGET (QA-3)

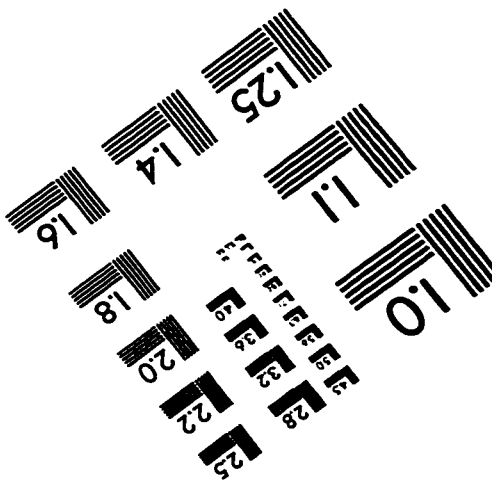



APPLIED IMAGE, Inc
1653 East Main Street
Rochester, NY 14609 USA
Phone: 716/482-0300
Fax: 716/288-5989