

*Class Notes Prepared by Lisa Cromer, Anne Mannering, & George Hanawahine  
For Psychology 607, 21 April 2003. Comments based on class discussion in italics.*

## **BETRAYAL TRAUMA**

Freyd, J.J. (2003). *What is a betrayal trauma? What is betrayal trauma theory?* Retrieved April 2, 2003 from <http://dynamic.uoregon.edu/~jjf/defineBT.html>.

- betrayal trauma is a kind of trauma
- betrayal trauma occurs when the people or institutions we depend on for survival violate us in some way
- examples of betrayal trauma include childhood physical, emotional, or sexual abuse
- betrayal trauma theory is often utilized to explain the cause of unawareness and amnesia of traumatic events; posits that there is a social utility in remaining unaware of abuse when the perpetrator is a caregiver; for a child who has been sexually abused their survival may be better ensured by being blind to the betrayal and isolating the knowledge of the event; this helps the child to remain engaged with the caregiver/perpetrator
- betrayal trauma and betrayal trauma theory were introduced in 1991 by Jennifer Freyd at a presentation at the Langley Porter Psychiatric Institute
- traditional assumption in trauma research has been that fear is at the core of responses to trauma
- the distinction between fear and betrayal may be important to posttraumatic outcomes
- betrayal trauma may be more associated with dissociative symptoms and other trauma more fear and anxiety symptoms
- victims don't need to be conscious of the betrayal in order for it to be called betrayal trauma
- it appears that men experience more non-betrayal traumas than do women, while women experience more betrayal traumas than do men

Freyd, J.J., DePrince, A.P., & Zurbriggen, E.L. (2001). *Self-reported memory for abuse depends upon victim- perpetrator relationship*. *Journal of Trauma and Dissociation* 2(3), 5-17.

- study using the Betrayal Trauma Inventory (BTI) to test predictions from betrayal trauma theory about the relationship between amnesia and betrayal by a caregiver
- this instrument uses behaviorally defined events in the domains of sexual, physical, and emotional childhood abuse to assess trauma history
- when participants endorsed an abuse experience, follow-up questions assess a variety of factors including memory impairment and perpetrator relationship
- results supported the prediction that the greater the victim's dependence on the perpetrator the more likely that memory for the abuse would be impaired or disrupted
- age was found not to be a significant factor in predicting memory loss
- duration of the abuse was also found not to be significant

### Discussion Questions

**1. Studies have shown that the greater the victim's dependence on the perpetrator the more likely that memory for the abuse will be impaired or disrupted. What are some specific aspects of the victim/perpetrator relationship that you think would increase or decrease memory retrieval? What other factor could affect memory impairment?**

- things about the victim/perpetrator relationship that may increase memory retrieval were difficult to identify; some hypothesized that the older the victim the more chance of memory retrieval
- things about the victim/perpetrator relationship that may decrease memory retrieval are the following: 1) the perpetrator is a single parent, 2) the perpetrator repeatedly threatened harm on the victim if they chose to disclose the abuse, 3) outside of the abuse the victim and perpetrator had a warm and very loving relationship
- other factors that could affect memory impairment were the level of awareness of the victims other primary caregiver, level of support or denial of other adults around the victim, the level of support or non-support given by a victim's sibling, whether or not the victim had a sibling who suffered the same type of abuse by the same perpetrator

**2. In many cases where a child is abuse by a caregiver, there is another caregiver that may be unaware of the abuse. In essence the child victim may not be totally dependent on the perpetrator. How do you think this affects the drive for a child victim to dissociate him or herself of these traumatic memories?**

- if a second caregiver had no idea about the trauma being inflicted on their child by their partner their may be mixed effects; the child may feel greater resentment towards that caregiver and have a greater level of anger towards that caregiver for not know what they are going through; the child may also feel the need to keep this information from that other caregiver to avoid more issues in the family
- the level of confidence that the victim has in the other caregiver believing their story may impact their decision to disclose or not; often caregivers will dismiss such reports by children therefore victims don't feel confident in disclosing such information; experiences with another child in the family sharing such information and being called a liar may cause one to dissociate more
- in situations where the perpetrator is a step father there may be certain dynamics at play; especially if the mother and the children are all dependent upon this individual; betrayal theory may go into effect not only for the victim but also the other caregiver who is just as reliant upon the perpetrator as the victim

#### **Additional Discussion Questions:**

**In order to further the research by Freyd, DePrince, & Zurbriggen, designed a study that would clearly classify categories of closeness between victims and perpetrators. And explain WHY you made those decisions. Hints: consider amount of time spent with person; types of dependence; is it closeness between perpetrator and child or perpetrator and child's family? What is the role of attachment?**

- Using Maslow's hierarchy of needs may be useful in designing a classification system; physical needs, love and safety, etc.
- there are emotional and physical components that need to be taken into consideration
- may be useful to develop a questionnaire type measure to establish level of dependence
- main effects for actual person vs. interaction; mediation through relationship with other care givers
- need to assess if relationship between victim and perpetrator has effects on other relationships
- Check out level of deception and fear (if you tell then this will happen...)

### **Treatment Question of Betrayal Trauma case vs. Non-betrayal trauma case**

- need to evaluate the extent of betrayal trauma
- single incident vs. longer period of time
- need to identify the specific symptoms; more dissociation or more anxiety type symptoms
- for BT cases focusing on rebuilding trust within the victim may be important; decisions of when to involve parents in treatment can be tricky especially if one of the parents is the perpetrator
- age of child may determine what treatment will look like
- timing between traumatic event and treatment may determine treatment implemented
- drug treatment is something that needs to be taken into consideration
- gaining an understanding of the victim's support system is important; this is an important aspect of ways to increase the trust within a child who has experienced BT
- gain an understanding of accompanying emotions
- Treatment gets tricky depending on the context you are working in; our current mental health system may force you to focus on symptoms and not allow you to focus on things such as relationship building, etc...

### **RECOVERED MEMORIES**

**Sivers, H., Schooler, J., Freyd, J. J. (2002) Recovered memories. In V.S. Ramachandran (Ed.) *Encyclopedia of the Human Brain*, Volume 4. (pp 169-184). San Diego, California and London: Academic Press.**

#### **What about Recovered Memories? (website)**

**<http://dynamic.uoregon.edu/~jjf/whatabout.html>**

Questions to ponder:

1. What is the difference between Memory *Accuracy* and Memory *Persistence*?
  - a. Memory persistence is the degree to which a memory has remained available over time. Memory accuracy is the degree to which the memory is historically true. The distinction is important because they are orthogonal. One dimension is sometimes used to infer the other and this is incorrect.
  - b. Are they correlated? No!

- c. What kind of memory is more likely to be false? Neither! Trick question☺ No research to date has been able to accurately answer this question.
2. Why do people forget and then remember?
  - a. Several reasons here. Memories sometimes are state dependent, so one sometimes needs to be in the same state (emotional, cognitive, environmental) in order for a memory to be recalled. Also there can be other processes at work such as normal forgetting, and then recall with words, stimuli or experiences that trigger the memory. Also noted that events that are talked about are more likely to be remembered.
3. What is shareability? (see page 5 of website for this one).
  - a. Refers to the extent to which information is shareable. Internal information is often qualitatively different than external (shared, spoken, written) information. Internal information is not shareable (often). The theory states that communication effects the representation of information in that in order to share it, it becomes more language-based and therefore more categorical, explicit, declarative in nature.
4. What memory encoding mechanisms are probably at work with recovered memories?
  - a. There is some laboratory evidence for repression being at work in forgetting negative material.
  - b. Acute dissociated state could be at work in leading to poor encoding of the traumatic event
  - c. Dissociated state could lead to state-dependent effects (e.g. a woman may not remember the details of being raped until she is intimate with a partner and the memory could come flooding back).
  - d. Fear can interfere with memory pathways evoked through the hippocampus
  - e. Betrayal trauma postulates that information can be blocked from mental mechanisms that control attachment; therefore information can be encoded but retrieval is blocked in order to maintain the attachment relationship.
5. What are the well-established memory mechanisms? (Trauma and non-trauma specific).
  - a. Simple forgetting. Forgetting childhood experiences (even negative ones) can just reflect the passage of time.
  - b. Direct/intentional forgetting. As demonstrated by the Anderson lab here at the UO, individuals can intentionally forget information when they try. This is a logical route for forgetting trauma—why not try to forget that which is painful?
  - c. Interference theories of memory. When two related pieces of information are learned, practicing one piece can interfere with the other piece. Therefore in the case of abuse, this can be demonstrated in the case of the perpetrator, either before, during or after (or some combination there of) telling the victim contradictory information. If the victim is told by someone in a threatening or powerful position that what happened is not abuse, or that they wanted it, or some other confabulation, then this memory/information could compete with the unshared internal experience of abuse.

- d. Change in understanding/reinterpretation. Individuals have very poor memory for which they do not have a schema. Therefore, particularly in cases of child abuse or bizarre/unusual forms of trauma, a person can have no way to label, understand, or describe an experience—this could impair memory. However, if a schema framework is later presented, then the abuse can be remembered. This is sometimes seen in cases, for example, of date rape or domestic violence, where, as the woman receives an education about consensual sex, she can realize and understand post-hoc that she was raped and make more sense of her experience as having been negative.
- e. Encoding specificity/state dependency. Research with mood and with alcohol have clearly demonstrated state-dependent memory mechanisms. This theory related to trauma in that fragmented memories can be more dependent on highly specific cues.
- f. Forgot-it-all-along effect. Just as sometimes we rationalize that we “knew it all along,” this theory postulates that people can have memories for a while, but then forget the memory. At the time of forgetting they may underestimate any prior knowledge of the event.
- g. Precipitous forgetting of nocturnal experiences. We often forget dreams—even traumatic, bizarre and disturbing ones. This parallels what could happen in sexual abuse particular abuse that happens at night.
- h. Metaconsciousness. This theory assumes that the experiential awareness can be distinct from the metaconsciousness. It postulates that as the metaconsciousness gains a different meaning of an experience, that it can be as if the memory (experience) is being remembered for the first time—even though it is only being newly perceived by the meta-consciousness.

## NEURO-BIOLOGY OF TRAUMA

### **How child abuse and neglect damage the brain (Kendall, 2002) & Scars that won't heal: The neurobiology of child abuse (Teicher, 2002)**

The content of these two articles overlapped considerably, so the following summary points are taken from both:

#### **Summary points:**

Evidence from neuroscience shows that physical abuse, sexual abuse and neglect affect brain structure and chemistry.

- Trauma is linked with brain wave abnormalities (in one study, 54% of abused child and adolescent psychiatric patients showed abnormalities compared to 27% of non-abused controls.)
- Severity of abuse is positively correlated with the impact of trauma on brain function
- The left cortex, hippocampus, and amygdala show reduced volume in abused individuals

- Trauma alters the production of stress hormones (e.g., cortisol) and neurotransmitters (epinephrine, dopamine, serotonin). Low levels of serotonin in particular have been associated with depression and impulsive aggression.
- Drug therapy and psychotherapy can change neurobiology
- Although neuro-biological consequences of trauma are easier to change in childhood, the brain is capable of change in adulthood (although Teicher (2002) suggests the effects are irreversible).

#### Discussion Questions:

- 1.) How extensive are the effects of trauma on the brain? Which structures and systems are affected?

In assessing the extent of neuro-biological effects of trauma, temporal considerations are important, as chronic abuse may have a greater impact. Currently, the full extent of the effects of trauma on the brain is not known, but it appears that the entire limbic system (i.e., hippocampus, amygdala) is affected.

- 2.) How permanent are the neuro-biological effects of child abuse? What do developmental differences in brain plasticity suggest for intervention efforts?

The “permanence” of the neuro-biological effects of child abuse is an empirical question. These effects may be time-sensitive and vary depending on when in development the abuse occurred. Additionally, new evidence suggests that neurogenesis is possible postnatally in the human brain. This evidence in turn suggests the effects of abuse are (at least partially) reversible.

- 3.) Several studies have found differences in the hippocampi of psychiatric patients compared to control groups. What patient groups have been studied? How might this evidence support Ross’s trauma model as a potential answer to the problem of comorbidity?

Many studies showing reduced hippocampal volume are based on Vietnam veterans and sexual abuse survivors, and thus may have some limitations. However, hippocampal and amygdalar reductions have been found in people with different psychopathologies (e.g., PTSD, DID, borderline personality disorder, and depression), suggesting that trauma may be a common underlying factor in these disorders despite the differences in symptomatology.

- 4.) Could the diminished integration of the left and right hemispheres in abused individuals be related to dissociation?

Diminished integration between the left and right hemispheres might plausibly be related to dissociation. Specifically, if verbal/semantic memories are stored primarily in the left hemisphere and sensory/emotional memories in the right hemisphere, it is possible for a person to have emotional memories of trauma, but not be able to put these memories into words. The disconnect between the left and right hemispheres also seems related to alexithymia.

- 5.) How might the neuro-biological effects of abuse be related to intergenerational transmission of abuse? (We didn't get to this one in class)

**The body keeps the score: approaches to the psychobiology of post-traumatic stress disorder (Van der Kolk, 1996)**

**Summary Points:**

- Individuals with post-traumatic stress disorder (PTSD) show hyper-arousal/hyper-reactivity to stimuli, persistent intrusive memories of the trauma, and emotional numbing. These symptoms have been observed in combat veterans and survivors of sexual and physical abuse (both adults and children).
- Hyper-reactivity occurs both in response to specific reminders of the trauma and to intense but neutral stimuli (loss of stimulus discrimination)
- Chronic stress reactions are related to reduced hippocampal volume and alterations in stress hormones and neurotransmitters in patients with PTSD.
- During flashbacks, patients show activation of the amygdala and sensory areas in conjunction with decreased activation of Broca's area (speech production area)
- High level activation of the amygdala interferes with hippocampal functioning and prevents categorization of experience.

- 1.) How does the neuro-hormonal response at the time of trauma produce both over-consolidation of traumatic memories and inhibition of memory consolidation?

Stress triggers a pattern of events that disallows cohesive memory. Two simultaneous appraisal systems are activated, one for verbal/semantic information/memory and the other for sensory/emotional information/memory. The verbal memories are consolidated in the hippocampus, which is shut down by over-stimulation of the amygdala (sensory/emotional system). Thus, emotional memory becomes over-consolidated (excess of norepinephrine) and is not linked to verbal memory. Oxytocin and endogenous opioids are also released in response to stress and have been related to amnesia (affects the hippocampus).

- 2.) If "emotional memory may be forever", what are the implications for treating patients with PTSD? Could the hyper-reactivity to trauma-related stimuli/memories be attenuated by increasing the integration of the right (processing of negative emotion) and left (semantic processing) hemispheres? (We didn't really get to this one in class).

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**Discussion Questions**  
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Given that dissociation is a cognitive mechanism sometimes used as a coping strategy for dealing with abuse, how would you design a study that would answer these questions:

1. Is a dissociation a copying style developed in childhood adaptive or maladaptive in adulthood?
  - a. *How would you measure adaptive/maladaptive? Operationalize/access with things like: job performance, interpersonal relationship success, risky behavior, attention, healthy behaviors*

2. Are there neurobiological differences between people who do and do not dissociate?
  - a. *Create/obtain a transcript of traumatic event. Conduct an fMRI study. Provide the transcript as stimulus and measure the brain activity. Compare with a control group. OR.... Get a group of people (e.g. veterans) who have experienced similar trauma. Match groups of high and low dissociators.*
3. Are there neurobiological differences between people who have been abused by a caregiver vs. non-caregiver?
  - a. *fMRI study of those abused by caregiver and noncaregiver. Can also use other physiological measures such as blood tests, hormonal/chemical tests to get at between group differences.*

What are some obstacles to the study? Ethical issues?

*Ethical issues: not an intervention study, so what benefits to the participants? At what risk?*

*Difficulty in finding survivors who do not remember abuse.*

*Dissociation=not remembering=hard to recruit participants.*

*How to differentiate/categorize abuse severity, duration, age of onset and type?*

*Human subjects committee challenges. Are we pushing people to remember things they are not ready to remember?*

Your firm is hired to prepare expert witness testimony for a child abuse recovered memory case. The plaintiff is a 42-year-old woman who is experiencing post traumatic symptoms from abuse she claims to have experienced between ages 5 and 12 from her father. She recovered her memories of abuse when watching Montel one afternoon. She saw an episode about a woman whose abuse was just like her own and it triggered her memories back. There is no corroborating evidence for her case.

Create a list of important points that you would use to support the validity of the plaintiff's claim. Be sure to include hypothesized memory retrieval mechanisms that might be involved and issues related to memory persistence and memory accuracy.

*Important points to support the validity of the woman's claim:*

- *Betrayal trauma theory (Freyd, 1994, 1996) provides a mechanism to explain why she would forget the abuse (abuse perpetrated by a caregiver is more likely to be forgotten).*
- *She is experiencing symptoms of PTSD, which suggests that the trauma did occur. Additionally, the physical effects of trauma on the brain have been related to the inhibition of verbal memory in patients with PTSD.*
- *Memory persistence versus memory accuracy: Although often misconstrued to be the same, memory persistence and memory accuracy are orthogonal. Thus, a memory that is not continuously held is no more or less accurate than one that is continuous.*
- *Memory retrieval mechanisms: Many of the processes involved in normal forgetting can also be involved in forgetting and later recalling traumatic memories. State dependent memory and reinterpretation of the memory seem especially relevant. The*



*memory was not necessarily lost completely, but not having the vocabulary to express it could have prevented earlier retrieval of the memory.*