Forgetting Trauma Stimuli In and Out of the Lab

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Memory Impairment for Trauma

- Laboratory experiments have been increasingly used to argue points about the validity of memory impairment for traumatic experiences.
- While laboratory memory experiments can contribute to models of memory for trauma, the constraints of these paradigms directly affect the external validity and generalizability of laboratory findings.
  - Forgetting inside and outside the lab
    - Mechanisms and Inferences

The Phenomenon: Reports of Forgetting Outside the Lab

- Child Abuse
  - Relationship between memory impairment and abuse by caregivers/close others.
    - Prospective: Williams, 1994, 1995
    - Retrospective: Cameron, 1993; Feldman-Summers & Pope, 1994; Sherman, 1999; Edwards et al., 2001; Freyd, DePrince & Zurbriggen, 2001; Schultz, Passmore & Yoder, 2003; Stoler, 2003
  - Other Traumas
    - Elliott, 1997

Forgetting inside the lab

- Research inside the lab
  - Under what conditions do people forget trauma-related stimuli?
  - Goal: To make inferences about mechanisms underlying forgetting
  - Goal is not: To establish the validity of forgetting outside the lab.

Questions Asked and Inferences: Real World --- Laboratory

Real World: Bumblebees can and do fly

Laboratory: What if they don’t fly in the lab? Bumblebees cannot fly (according to conventional aerodynamics)

“I’m sure no one, including the bees, seriously doubted that insects can fly”
- Dr. Z. Jane Wang.

Questions Asked and Inferences: Real World --- Laboratory

Real World: Forgetting

Laboratory: Conditions under which forgetting occurs
Conditions under which we see impaired recall for trauma-related stimuli in the lab

- **Experimental Demands:** Attention
- **Psychological Factors:** Dissociation
- **Trauma History Type:** Intimate violence

Psychological Factors: Dissociation

- Directed Forgetting, Item Method

- Moulds and Bryant (2002)
  - Participants diagnosed with Acute Stress Disorder (ASD) showed poor recall of to-be-forgotten (TBF) trauma-related words compared to non-traumatized controls
  - ASD participants had all been exposed to some form of physical threat
  - Dissociative symptoms and forgetting

Results: High dissociators remember fewer trauma-related and more neutral words compared to low dissociators.

DePrince & Freyd, 1999

Directed Forgetting - Item Method

Divided Attention: Remember Condition

DePrince & Freyd, 2001

Psychological Factors: Dissociation

Experimental Demands: Attention

- 80 preschool children
- Measured memory for neutral and threat-related stimuli in preschoolers (Berenstain Bear Task).
- Selective attention: Children looked at pictures.
- Divided attention: Children looked at pictures and monitored string of auditory stimuli.

DePrince & Freyd, 2004

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Experimental Demands: Attention
Trauma History: Intimate Violence

Looking Across Studies

- Reconciling Findings Across Studies
- Pattern of findings points to dissociative processes (versus anxiety) and attention (e.g., divided)
  - Need more research disentangling anxiety and dissociation

Limitations of Studying Forgetting in the Lab

- Thinking Critically about Inferences
- Underlying assumptions
  - Memory impairment for a particular autobiographical event vs. memory for trauma-related stimuli in the lab.
- Ecological Validity
  - Are we tapping into the real world?
  - How fragile are these lab effects?
    - Undergraduate (naïve) versus community samples
    - Experimental demands

Benefits of Studying Memory in the Lab

- Experimental control allows us to evaluate conditions under which forgetting of trauma-related stimuli happens.
- In turn, this will help us identify mechanisms of memory impairment.

Conditions under which impaired recall has not been found in the lab

- PTSD
  - Women diagnosed with PTSD who reported a history of childhood abuse did not demonstrate poorer recall for TBF trauma-related stimuli compared to control groups
  - “Recovered Memory”
    - Women who reported “recovered” or “repressed memories” did not differ from controls.
    - McNally et al. (2001)
  - Borderline Personality Disorder (BPD)
    - Women diagnosed with BPD who reported a history of parent abuse did not demonstrate directed forgetting of words compared to control groups.
    - Cloitre, Canicier, Broido, Dutt, and Perry (1996)

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- Please visit us at
  - www.du.edu/~adeprinc/lab.html
  - http://dynamic.uoregon.edu/~jjf/istss04/

Handouts available at: http://dynamic.uoregon.edu/~jjf/istss04/