Forgetting, Memory Construction and Applying Memory Principles to Your Own Education

Module 28

Forgetting, Memory Construction and…

**Forgetting**
- Encoding Failure
- Storage Decay
- Retrieval Failure

**Memory Construction**
- Misinformation and Imagination Effect
Forgetting, Memory Construction and…

Memory Construction…
- Source Amnesia
- Discerning True and False Memories
- Children’s Eyewitness Recall
- Repressed or Constructed Memories of Abuse?

Improving Memory

Forgetting
Inability to retrieve information, due to poor encoding, storage or retrieval.

Encoding Failure
We cannot remember what we did not encode.

OBJECTIVE 28-1 | Explain why we should value our ability to forget, and distinguish three general ways our memory fails us.

OBJECTIVE 28-2 | Discuss the role of encoding failure in forgetting.
Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?

Which penny is real?
Retrieval Failure

Although the information is retained in the memory store it cannot be accessed.

Tip-of-the-tongue (TOT) is a retrieval failure phenomenon. Given a cue (What makes the blood cells red?) the subject says the word begins with an H (hemoglobin).

Interference

Learning some information may disrupt retrieval of other information.

Retroactive Interference

Sleep avoids retroactive interference thus leading to better recall.

OBJECTIVE 28-4 | Contrast proactive and retroactive interference, and explain how they can cause retrieval failure.
Motivated Forgetting

Motivated Forgetting: People unknowingly revise their memories.

Repression: Defense mechanism that banishes anxiety-arousing thoughts, feelings, and memories from consciousness.

Sigmund Freud

OBJECTIVE 28-51 Summarize Freud’s concept of repression, and state whether this view is reflected in current memory research.

Why do we forget?

Forgetting can occur at any memory stage; we filter, alter, or lose much information during these stages.

Memory Construction

While tapping our memories, we filter or fill in missing pieces of information to make our recall more coherent.

Misinformation Effect: Incorporating misleading information into one’s memory of an event.
Misinformation and Imagination Effects
Eyewitnesses reconstruct memories when questioned about the event.

Depiction of the actual accident.

OBJECTIVE 28-6: Explain how misinformation and imagination can distort our memory of an event.

Misinformation

Group A: How fast were the cars going when they hit each other?

Group B: How fast were the cars going when they smashed into each other?

Memory Construction

A week later they were asked; Was there any broken glass? Group B (smashed into) reported more broken glass than Group A (hit).

<table>
<thead>
<tr>
<th>Verb</th>
<th>Broken Glass (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hit</td>
<td>Group A: 14, Group B: 33</td>
</tr>
<tr>
<td>Smashed into</td>
<td>Group A: 20, Group B: 32</td>
</tr>
</tbody>
</table>

32 30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0

Group A (hit)  Group B (Smashed into)

Verb Broken Glass? (%)

___________________________________
___________________________________
___________________________________
___________________________________
___________________________________
___________________________________
___________________________________

Psychology 8 ed., David Myers Module 28 PowerPoint Slides, Aneeq Ahmad
Source Amnesia

Source Amnesia: Attributing an event to the wrong source we have experienced, heard, read, or imagined (misattribution).

Discerning True & False Memories

Just like true perception and illusion, real memories or memories that seem real are difficult to discern.

When students formed happy or angry memory of morphed (computer blended) faces (a), they made the (computer assisted) faces (b) either happier or angrier.

False Memories

Repressed or Constructed?
Some adults do actually forget childhood episodes of abuse.

False Memory Syndrome
A condition in which a person’s identity and relationships center around a false but strongly believed memory of traumatic experience sometimes induced by well-meaning therapists.

OBJECTIVE 28-7| Describe source amnesia’s contributions to false memories.

___________________________________
___________________________________
___________________________________
___________________________________
___________________________________

OBJECTIVE 28-8| List some differences and similarities between true and false memories.

___________________________________
___________________________________
___________________________________
___________________________________
___________________________________

OBJECTIVE 28-8| List some differences and similarities between true and false memories.

___________________________________
___________________________________
___________________________________
___________________________________
___________________________________

© Simon Niedsenthal
Children’s Eyewitness Recall

Children’s eyewitness recall can be unreliable if leading questions are posed, however, if cognitive interviews are neutrally worded accuracy of their recall increases usually suggesting lower percentage of sexual abuse.

Memories of Abuse

Are memories of abuse repressed or constructed?

Many psychotherapists believe that early childhood sexual abuse results in repressed memories.

However other psychologists question such beliefs and think that such memories may be constructed.

Constructed Memories

Loftus’ research has shown that if false memories (lost at the mall, or drowned in a lake) are implanted in individuals, they construct (fabricate) their memories.

OBJECTIVE 28-9 | Give arguments supporting and rejecting the position that very young children’s reports are reliable.

___________________________________

___________________________________

___________________________________

___________________________________

OBJECTIVE 28-10 | Discuss the controversy over reports of repressed and recovered memories of childhood sexual abuse.

___________________________________

___________________________________

___________________________________

___________________________________
Consensus on Childhood Abuse

Leading psychological associations of the world agree on the following about childhood sexual abuse.

1. Injustice happens
2. Incest and other sexual abuse happens
3. Forgetting happens
4. Recovered memories are commonplace
5. Recovered memories under hypnosis or drugs are unreliable.
6. Memories of things happening before 3 years are unreliable
7. Memories whether real or false are emotionally upsetting

Improving Memory

1. Study repeatedly to boost recall long-term recall.
2. Spend more time rehearsing or actively thinking about the material.
3. Make material personally meaningful.
4. Use mnemonic devices:
   - associate with peg words — something already stored
   - make up story
   - chunk — acronyms

5. Activate retrieval cues — mentally recreate situation and mood.
6. Recall events while they are fresh — before you encounter misinformation.
7. Minimize interference:
   1. Test your own knowledge
   2. Rehearse and determine what you do not yet know

OBJECTIVE 28-11 | Explain how an understanding of memory can contribute to effective study techniques.