

Memory

Objective's for Today's Class:

- Why do we forget?
- What is amnesia?

1

If you couldn't forget, your mind would be filled with meaningless data.

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Normal Forgetting

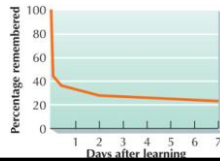
- ☞ _____
- During any delay a memory is subject to the effects of time and interference from other experiences
- ☞ Memories seem to be forgotten because we no longer have _____
- ☞ You are more likely to forget something you did not pay attention to when it originally happened

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Normal Forgetting

- Recall drops from 100% to 50% correct within 20 minutes of list learning
- After the first several hours – forgetting levels off and slows at that point

Decay: loss of information from memory as a result of disuse and passage of time



Reasons for Forgetting

- Information was either encoded improperly or not at all

- Storage failure
 - Through the lack of use and rehearsal information is gone

- Retrieval failure
 - The information is in long-term memory but you are _____

- Interference
 - Proactive interference
 - Retroactive interference

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Proactive Interference

- A decrease in accurate recall of information as a result of the effects of previously learned or presented information

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Example

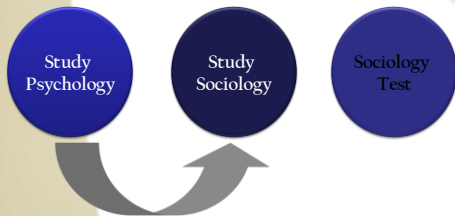
❏ A student studies for a psychology test on Saturday and a sociology test on Sunday. It is Monday and the student is taking the sociology test. He has trouble remembering the sociology information because he confuses it with the psychology information.

- The psychology information was learned first
- The sociology information was learned second

- The first information interfered with remembering the second information

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Psychology, learned beforehand, interferes proactively



Proactive Interference

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Another Example of Proactive Interference

❏ Pretend that you are recently out of a long-term relationship but you have found a new flame. Now you are out on that all-important third date with your new love interest. The lights are low, the champagne and strawberries are served. The music in the restaurant is soft and romantic – you are reaching across the table to take your date's hand. You are looking deeply into his or her eyes, you are about to tell them what a wonderful evening it is and how happy you are to be out with him or her, and then out of your mouth, before you realize it, comes – the name of your ex!!!

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Retroactive Interference

- A decrease in accurate recall of information as a result of the subsequent presentation of different information

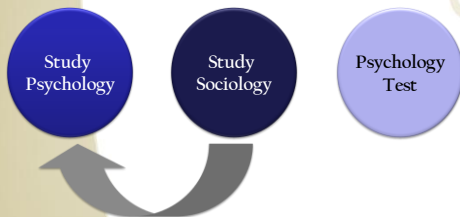
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Example

- ▣ A student studies for a psychology test on Saturday and a sociology test on Sunday. It is Monday and the student is taking the psychology test. He has trouble remembering the psychology information because he confuses it with the sociology information.
- The psychology information was learned first
- The sociology information was learned second
- The second information interfered with remembering the first information

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Sociology, learned afterwards, interferes retroactively



Retroactive Interference

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Another Example of Retroactive Interference

- ❑ Pretend that you've been sneaking around on your long-term girlfriend/boyfriend for a couple of months. One day, while talking to your significant other in some casual context, you address them by the name of your secret lover.
- ❑ New information has interfered with your recall of older information.

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Severe Forms of Memory Loss

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Amnesia

- ❑ People with amnesia tend to have poor factual memories, but intact procedural memories
 - Amnesiacs show preserved performance on tests of implicit memory (which do not require conscious recollection for successful performance)
 - On tests of explicit memory, amnesiacs show much more severely impaired performance (requires that the individual recognize the correct answer and be aware that long-term memory is being tapped)

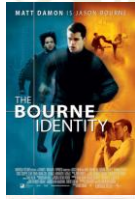
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Two Types of Amnesia

Loss of memory for events that occurred shortly _____

People who find it hard to retrieve memories prior to an incident in which they suffer damage to the head

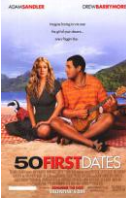
Sometimes people never remember the seconds leading up to the incident



Two Types of Amnesia

The inability to store new long-term memories

People who find it hard to remember ongoing events after suffering damage to the head



Are Memories Accurate?

False Memory Formation

False Childhood Memories



Imagination Inflation



Impossible Memories