



Factors that Influence Memory

Psychology 390

Psychology of Learning

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Psyc 390 – Psychology of Learning

Overlearning

- Continue to study something after you can recall it perfectly.

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Organization

- If you can organize the material, you can recall it better.
- Lots of organization strategies.

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Organization Strategies

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Clustering

- You will recall items better if you can recognize there are two or more types of things in a list.

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Clustering

- | | |
|------------|-------|
| • North | Pig |
| • Cardinal | Cat |
| • South | Horse |
| • Robin | Dog |
| • East | Sheep |
| • Wren | Birds |
| • West | Cow |
| • Sparrow | Fish |

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Verbal Mnemonic Techniques

- Here you make your own organization.
- Many different techniques.

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Acrostics

- Acrostic are phrases in which the first letter of each word functions as a cue to help you recall information.

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Acrostics

On	Olfactory
Old	Optic
Olympus	Oculomotor
Towering	Trochlear
Tops	Trigeminal
A	Abducens
Fin	Facial
And	Auditory (Vestibulocochlear)
German	Glossopharyngeal
Vented	Vagus
Some	Spinal Accessory
Hops	Hypoglossal

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Acronyms

- This is a word formed out of the first letters of a series of words.

ROY G BIV

- Are the colors in the visual spectrum.

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Rhymes

- I before E except after C.

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Visual Imagery

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Method of Loci

- Involves taking an imaginary walk along a familiar path where the images to be recalled are associated with locations along the path.

Walk around the house and associate words with the location in the house.

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Pegword

- Relies on a list of integers
 - 1
 - 2
 - 3
 - 4
- Attach a pegword to each of the numbers with which it rhymes
 - Bun
 - Shoe
 - Tree
 - Door

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Pegword

Then give a list of words to recall
Associate the first word of the list (Bee) with the pegword (Bun).

Try to visualize the bee eating a bun
When recalling the word, make the associations.

The more outrageous the association, the better the recall.

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Third Factor that Influences Memory

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The Order in Which you Learn Things.

- Give a list of words in a free recall task. You will have better recall for words at the beginning and end of the list but not in the middle.
- Called the Serial Position Effect.

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The Order in Which you Learn Things.

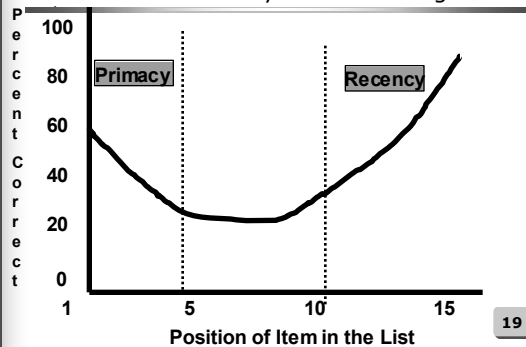
Recall at the beginning is called the Primacy Effect.

Recall at the end called the Recency Effect.

Occurs because you can generally only recall 7 plus or minus 2 items in working (short term) memory.

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The Order in Which you Learn Things.



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Von Resterhoff Effect

- When a word in the middle of a list of words is surprising, funny, or dirty, you will usually recall that word and some around it.

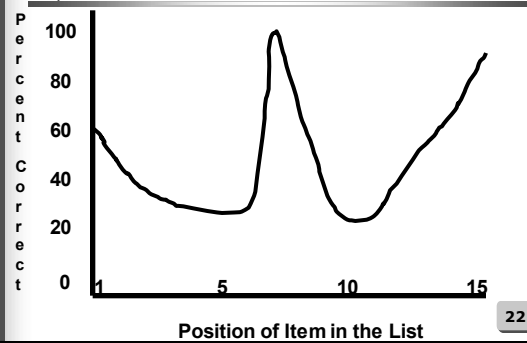
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Von Resterhoff Effect

- Pencil
- Wallet
- Bookcase
- Pen
- Chair
- Automobile
- Hanger
- Elephant
- Intercourse
- Suitcase
- Hat
- Airplane
- Bathroom
- Clouds
- Briefcase
- Stove
- Paper

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Von Resterhoff Effect



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Proactive Interference or Inhibition

- Past learning will interfere with your ability to recall new material.
Learn list a,
Then learn list b,
Finally, recall B,
- A will interfere with your ability to recall B.

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Proactive Interference or Inhibition

- Learn Sociology
Then Learn Psychology
- Sociology will interfere with your recall of Psychology
- PABB

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Proactive Interference or Inhibition

NOTE: Sometimes past learning will help you because you organize it better.

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Retroactive Interference or Inhibition

- Is unlike proactive interference.
- Here, learning new material will interfere with your ability to recall old material.
 - Learn List C
 - Then List D
 - Recall CD will interfere with your ability to recall C.

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Retroactive Interference or Inhibition

Learn Psychology
Learn Sociology

Sociology will interfere with your ability to recall Psychology.

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Retroactive Interference or Inhibition

Learn Psychology
Read the Argonot,

The Argonot will interfere with your ability to recall Psychology.

RCDC

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Retroactive Interference or Inhibition

Do not take similar courses in the same semester.

Take things that are different and don't have a lot of overlap. You will recall them better.

Psychology, Math, Biology, CS

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Active Participation

- You recall more information the more active you are during the Learning.

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Active Participation

- Quizzing yourself while reading.
- Determining how the material relates to other sections.
- Using study guides.
- Outlining book chapters or notes is better than highlighting or Reading.

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Similarity of the Learning and Recall Condition

- The more similar the recall condition is to the learning condition, the better the recall.

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Similarity of the Learning and Recall Condition

- Ideal place to study for an exams.
- The room where you will take the exam.

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Related Concepts

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State Dependent Learning

- It is best to recall information in the same drug state as you do the learning.

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State Dependent Learning

If you smoke, smoke while taking the exam.

If you drink coke or coffee while studying, drink coke or coffee while taking the exam.

Don't study while not drinking coffee but take the exam on coffee.

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Test Anxiety

- While studying, you tend to be relaxed,
- but when taking the exam you tend to get tense due to the stress.
- When you tense, your Blood Pressure increases, different hormones are secreted, etc.
- Result - mind goes blank.

- After the exam, you relax and can recall the information again.

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Advice:

Take a test anxiety workshop.

Learn to stay relaxed when taking the exam.

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Spread Practice and Learning is Better Than Massed Practice. (Cramming)

- It's better to spread out studying over a period of time instead of doing it all at once.

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Spread Practice and Learning is Better Than Massed Practice. (Cramming)

Studying three days for one hour is better than three hours all at once.

That is, Don't Cram

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Why?

- Recall the Serial Position Curve.

- Can generally only recall 7 plus or minus 2 items.

- If you are cramming, recall the Recency effect.

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