

CRAICK AND LOCKHART LEVEL OF PROCESSING THEORY

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- The levels of processing model (Craik & Lockhart, 1972) focuses on the depth of processing involved in memory, and predicts the deeper information is processed, the longer a memory trace will last.
 - Craik defined depth as:"the meaningfulness extracted from the stimulus rather than in terms of the number of analyses performed upon it."
 - Unlike the multi store model it is a non-structured approach. The basic idea is that memory is really just what happens as a result of processing information.

- Memory is just a by-product of the depth of processing of information, and there is no clear distinction between short term and long term memory.
- Therefore, instead of concentrating on the stores/structures involved (i.e Short term memory & long term memory), this theory concentrates on the processes involved in memory.
- **Shallow Processing**
- This takes two forms
- **Structural processing** (appearance) which is when we encode only the physical qualities of something. E.g. The typeface of a word or how the letters look.
- **Phonemic processing** – which is when we encode its sound.

- Shallow processing only involves **maintenance rehearsal** (repetition to help us hold something in the STM) and leads to fairly short-term retention of information.
- This is the only type of rehearsal to take place within the multi-store model.
- **Deep Processing**
- This takes two forms
- **Semantic processing**, which happens when we encode the meaning of a word and relate it to similar words with similar meaning
- Deep processing involves **elaboration rehearsal** which involves a more meaningful analysis (e.g. images, thinking, associations etc.) of information and leads to better recall.

Semantic
(meaning
relationships)

Phonetic
(rhyme relationships)

Orthographic
(letter relationships)

STRENGTH

- The theory is an improvement on Atkinson & Shiffrin's account of transfer from STM to LTM. For example, elaboration rehearsal leads to recall of information than just maintenance rehearsal.
- The levels of processing model changed the direction of memory research. It showed that encoding was not a simple, straightforward process. This widened the focus from seeing long-term memory as a simple storage unit to seeing it as a complex processing system.
- Craik and Lockhart's ideas led to hundreds of experiments, most of which confirmed the superiority of 'deep' semantic processing for remembering information. It explains why we remember some things much better and for much longer than others.

WEAKNESSES

- Despite these strengths, there are a number of criticisms of the levels of processing theory:
- It does not explain how the deeper processing results in better memories.
- Deeper processing takes more effort than shallow processing and it could be this, rather than the depth of processing that makes it more likely people will remember something.
- The concept of depth is vague and cannot be observed. Therefore, it cannot be objectively measured.



Thank you