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The "Levels Of Processing Model" Focuses On The Inter Related Processes Needed For Memory. Discuss

The Levels OF Processing (LOP) Model is an alternative to the Multi Store (MS) Model. It does appreciate the idea that both STM and LTM do exist however it does focus on the inter- related processes needed for memory. It looks at the way information is coded and how likely it is to be remembered depending on the type of coding.
The LOP model was based on a study by Craik & Tulving (1875) who tested participants on remembering 4 different types of information. These were called "Levels of Processing. They claimed that the level information is processed at, accounts for how likely it is to be remembered. The 4 levels are as followed:

- Shallowest e.g. Distinguishing between TABLE and table - which is written in Capital letters? This requires very little declarative memory. This type of information is only consciously recalled at a very young age and once the procedure is learnt, we do not have to think about the question being asked. Therefore this is known as the shallowest level of processing.

- Phonemic e.g. which word sounds like wait? – Hate or Chicken. Here we are using our echoic sense to understand what the question is asking, once again a very logical question.

- Semantic e.g. which out of the following is a food – Cheese or steel? This requires slight more intelligence as your mind has to understand which one of the words is a food. Once your mind has established the difference between the two items, it understands that cheese is the food.

- Deeper Semantic e.g. "He kicked the _ _ _ _ into the tree" – fill in the missing word. This is the hardest level of processing. The person taking the test has to understand what kicked and tree means and put an appropriate word into the sentence. This uses deep semantic memory.

According to Craik and Lockhart rehearsal was not as essential as LOP. They distinguished between two types of LOP – Simple Maintenance Rehearsal which simply holds information but does not necessarily lead to the transfer into LTM as information is just memorised, and Elaborative Rehearsal which involves some kind of analysis or evaluation of information. This type of rehearsal leads to LTM. This is why it was found that the more complex the stage of processing was (Semantic) the easier the sentence was to remember. E.g. the Deeper semantic test was remembered better than the Shallow because it required more analysis and they were placed in an order in which the words linked together and made sense.

Bransford et al also found that a more distinct sentence would be remembered more because it stands out. This was tested using " a mosquito is like a racoon because

they both have haired jaws and legs" and " a mosquito is like a doctor because they both draw blood". Participants remembered the second sentence better because it was humorous and this made it distinct.

Both types of studies show that LOP model does in fact focus on the inter – related processes needed for memory and does not show memory as a simple 3 part store like the MS model/" it shows that different parts of memory are needed for different procedures. It also shows that encoding is not as simple a process as was once thought and requires a complex processing system. There are in fact more than 2 types of encoding and although the theory emphasises active aspects of it, it provides no real evidence of specific levels. We can never be sure what type of memory participants are using to perform tasks because they are that of orientation.

However the theory is not explanative of why deep inter related processing is effective and suggests that semantic processing is the only thing that affects LTM. This is very unlikely. Eyzenck criticised the theory for having a narrow view of encoding and proposed 4 general factors as an alternative, which affect learning. These were the nature of the task, the type of material to be remembered, and the knowledge of the subject and the nature of the test.

It is also very difficult to measure the accuracy of this experiment because "depth" and elaboration" are such vague terms. It was said that deeply processed information would be remembered better but the depth of processing was how well it was remembered. This once again depends on the inter- related processes used.