

A brief account of the  
multi-store model of  
memory and its  
strengths and  
weakness...



**ASSIGN  
BUSTER**

A Brief Account of the Multi-Store Model of Memory And its Strengths and Weaknesses Atkinson and Shiffrin (1968) proposed that the memory system could be explained in terms of 3 specific stores. This was the sensory memory that holds information from our 5 senses for a very short period of time unless given attention, short-term memory (STM) which has a limited capacity and short duration unless verbally rehearsed, and the long-term memory (LTM) which has a potentially unlimited capacity and duration.

Atkinson and Shiffrin claimed that if a person's attention is focused on something in the sensory memory then this memory would be moved to the Short-Term Memory, and then through rehearsal the information could be transferred from the Short-Term memory into the Long-Term Memory. They also proposed that there is a direct relationship between the rehearsal of information while it is in the STM and the strength of the information once in the LTM, meaning that the more information is rehearsed then the better it is remembered in the LTM.

One of the strengths of the Multi-Store Model of Memory is that it is supported by new technologies such as PET scans, that concur with the existence of different stores in memory which are the sensory memory, the STM, and the LTM. These scans have shown that the prefrontal cortex is active when people are working on an immediate task which is STM. The scans also show that the hippocampus is active when the LTM is being used, and this was further proved when there was a study of HM (1966), who has both of his hippocampi removed because of a tumour, and after this he was no longer able to form any new Long-term memories, but was still able to perform STM tasks that have been proved to use the prefrontal cortex, a

separate part of the brain. A disadvantage to the Multi-Store Model of Memory is that it may be over simplifying the memory processes. This model of memory doesn't take into consideration that there are different kinds of LTM, episodic, and procedural memory. Instead it proposes the LTM as just one big memory store without separate stores for episodic and procedural memory.

Another disadvantage to this model of memory is that it proposes only one method for how data is stored in LTM - rehearsal, even though there are lots of situations where people remember things without rehearsal of the information, such as flashbulb memories that are very long lasting without any form of rehearsal. This shows that it is unlikely that rehearsal is the only way in which information can be remembered in the LTM.