

Evaluate one model of one cognitive process with reference to research studies

[Experience](#)



Memory is an organism's ability to store, retain, and recall information and experiences. Within the study of the cognitive process, one of the main models of memory is the Multi-Store Model. The Multi-store model was first proposed in 1968 by Atkinson and Shiffrin. This model is based on two assumptions: that memory consists of a number of separate stores, and secondly, that the memory processes are sequential. What the memory stores is seen as components that operate in conjunction with the permanent memory store through processes such as attention, coding, and rehearsal. Today, it is considered one of the most influential models to date. A study which supports the Multi-store model is the 'Case Study of HM'. It is considered one of the most famous case studies of amnesia in the history of psychology, and was studied by Milner and Scoville (1957). It explains the link between brain function and memory, a study that focuses on brain injury inferring normal psychological function. This study was first based on a result of a head injury that HM suffered at the age of 9, causing him to suffer from epileptic seizures. At the time there were no drug treatments available, therefore the doctors acted on the seizures through surgery. After the procedure, HM was able to remember his past, but could no longer form new memories. The main factors of this amnesia are: the absence of recognition when people meet him and the unavailability to remember familiar faces. On the other hand, another study which followed the MSM was followed through by a researcher by the name of Miller (1956). This man did a study on chunking as a method of improving the amount of information that can be stored in the STM. It also included the observation that short term memory seemed to peak around seven pieces of information at once. In conclusion,

his method of ' chunking information' increased and improved the capacity of the STM. Overall, there are a few limitations to studies such as these. For example, the Miller study may not be valid enough to explain memory fully. It also does not include different areas and types of long term memory, such as episodic and procedural memory. And the HM study was not performed with a lot of technological aid, and when repeated with the MRI scanner, results showed that the damage was not as extensive as estimated by Scoville, therefore giving them the availability to speculate beforehand.