

## **Describe and evaluate the multi-store model of memory**

In 1968 Atkinson and Shiffrin created a multi-store memory model, which explains how we remember, store and retrieve events which have happened to us.

This model is made up of three parts. The first part seeks to explain how information is taken into our brain via our sensory register. Every day, thousands of bits of information will enter our sensory register, however, if we do not pay attention to this information, it will be lost. For example, whilst in a lesson, we may not be paying attention to one of our senses, e.g. touch and how our arms feel on the table, but we will be concentrating and paying attention to another one of our senses, sound, and what the teacher is saying to us, so this gets transferred into our short term memory store.

The second step in the multi-store model is transferring information from our limited short-term memory store (STM) to our long-term memory store (LTM). If the information in our short-term memory store is important enough to be rehearsed it will be transferred to our long-term memory store. Without rehearsal, the information will be forgotten, and therefore not transferred to our LTM store.

To remember and recall the memory, which has been transferred to our long-term store, all the brain has to do is retrieve it. The act of retrieval is the third part of the model.

There are various positive assessments that can be made of the Atkinson and Shiffrin model. It describes just three distinct memory stores, which is easy to understand and elegant in its simplicity. It also shows the difference between encoding (how it enters each store), duration (how long it can stay in each store), and capacity (how many items each store can hold - it says the short term store is limited whilst the long term store can hold an unlimited amount of items). The idea of STM and LTM continues to provide a framework that psychologists find useful for describing and understanding memory.

However, there are a number of negative criticisms that can be made of the multi-store model. Some critics see this model as limited by the over-simplification of memory processes. The multi-store model identifies only one mechanism for how data is stored in LTM (rehearsal), but there are many situations where we remember things without having rehearsed the information, such as flashbulb memory, which is remembering things such as the September 11<sup>th</sup> and July 7<sup>th</sup> bombings. The model doesn't include the different types of LTM such as episodic and procedural memory, which is another limitation. It also only shows one type of STM when there may be others.

Overall, the multi-store model is a simple and easy way to understand the encoding, duration and capacity of memory in our sensory, short term, and long-term memory stores. However, other models may consider alternative mechanisms as to how data is transferred and stored, and this could therefore offer a richer, if more complex, model to use when explaining the processes of encoding, duration and capacity in the sensory, short term, and long-term memory store.