

## Outline and Evaluate the MSM

The Multiple Store Model has three distinct stores; Sensory Memory-SM; this is things that are going on around you that you sense, Short Term Memory - STM; this is a store for items that you remember for a short period of time and finally Long Term Memory - LTM; this stores items for a long period of time. Sensory Memory has a vast capacity of things that it can store; these can be things like noises outside, your temperature or hunger. The duration for this store is 50 milliseconds, this means that each item will only be stored for a very short period of time, but many can be stored. The way in which memory is stored in the SM is by touch, taste, visual, acoustic etc. The way in which the memory transfers from SM → STM are by attention being given to the item. For example you will only realise that there are birds flying outside your window if your attention is being given to the things outside. This allows you to process and store the memory for longer. This leads on to Short Term Memory, which has a duration of 18 seconds in the STM. Encoding for STM is acoustic and visual, which means it is stored by sound and images in the brain. Its capacity is  $7 \pm 2$  items, so either between 5-9 items. The transfer of STM → LTM is via rehearsal. This allows Short Term Memory items to be held for much longer period of time. LTM has an unlimited capacity and an unlimited duration. LTM is stored by semantic encoding.

In 1960 Sperling conducted an experiment and found evidence to indicate the Sensory Memory. Pps saw a table of letters in a blink of an eye (50 milliseconds), and then Sperling asked the Pps to write down the letters where they saw them. This shows that information decays rapidly in the Sensory Store.

Another example to support the separate memory stores is the research carried out by Peterson and Peterson into STM. They got Pps to look at "trigrams" (three letters), then they got them to count down in 3's from a number and then asked them to recall the letters. 2% of Pps could recall after 18 seconds, this supports the STM.

The LTM was tested for by Shepard, he showed Pps 612 memorable pictures, then an hour later they were shown a few of these and some others and showed almost perfect recognition. Four months later they were still able to remember 50% of the pictures.

The primary and recency effects are when you remember the first and the last words of a list when recalled. The Primary effect comes from the LTM and the Recency effect comes from the STM.

Clive Wearing suffered from a bad case of the Herpes virus that damages his hippocampus that transfers memory from the STM to the LTM. His case provides the idea of a separate STM and LTM.