

Cognitive Psychology – Notes from 05/03/04

Short Term and Long Term Memory

STM Duration	up to around 30 seconds
STM Encoding	acoustic (the sound of words etc.)
STM Capacity	7 ± 2 (i.e. between 5 and 9 pieces).
LTM Duration	potentially forever
LTM Encoding	semantic
LTM Capacity	potentially unlimited

Long Term Memory

Capacity

The capacity for LTM is unlimited. We are able to remember vast amounts of information such as what we ate for breakfast this morning, what route we took to lower school, the rules of arithmetic etc. The only limitation on capacity would be a physical limit in terms of brain cells available.

Duration

How long a memory lasts is difficult to measure as you may not be able to call to mind something at this moment but may be able to remember later on in the day. Bahrick, Bahrick and Wittinger (1975) demonstrated VLTM by presenting ex-high school students a yearbook with fellow students' pictures. They were asked to recall names, and even after 34 years ex-students could name 90% of their classmates.

Shepard (1967) showed that people have good LTM for pictures. He showed memorable pictures to participants, and when showed another set later with 68 of the original ones, almost 100% recognition was shown. This was after 2 hours, and 50% recognition was shown after 120 hours.

Varieties of LTM

Because of the variety of information remembered, such as words, pictures, events and people, it is unlikely that LTM is stored within one place in the brain.