

# What is the Definition of Long Term Memory?



What is the definition of Long Term Memory? The term “Memory” is used in casual conversation to generally describe an individual’s capacity to recall, but in psychological communication may have a far more specific meaning. Not only do terms such as “Short Term Verbal Memory,” “Verbal Working Memory,” “Visual Spatial Memory,” “Visual Spatial Working Memory” and “Long Term Memory” all have different (though sometimes overlapping) meanings, they also tend to activate varying locations in our brains. So, a parent who describes their child as having a “great memory” because they can recall every ride they went on at Disney World 2 years ago (Long Term Memory) , but is frustrated by their child’s lack of effort because he cannot seem to remember a 2 step direction (Verbal Working Memory), may be looking at 2 very different types of memory using 2 distinct portions of the brain.

Long Term Memory (LTM) functions and operates differently than Short Term Verbal Memory (STVM) and Working Memory (WM).

Information can be stored intermediately in LTM for 5 to 8 hours (sometimes called Intermediate Memory instead of LTM),

or can be stored in the brain indefinitely (classic LTM). The complexity of how LTM memory works can be simplified into three components: Encoding, Storage, and Retrieval. Encoding refers to learning the information (visually, verbally, or experientially) so that it is stored in the brain. Encoding may occur naturally (e.g., childhood memories) or may occur in a purposeful manner (e.g., studying academics and retaining the material for life). Storage refers to where our LTMs are stored. Not all mental items are stored in our LTM, even if we want them to be (e.g., studying hard but not being able to remember on a test).

Research suggests that our capacity for LTM is seemingly infinite (in contrast to STVM and WM, which has a maximum capacity). Retrieval refers to the cognitive process that occurs when we purposefully or unconsciously retrieve LTMs from their storage. For example, a familiar smell may instinctively trigger a memory of camping from five years ago, or you may specifically retrieve LTMs to remember directions to a friend's house that you have not visited for three years.

Children who have LTM difficulties often struggle in school because it is difficult for them to learn even after many repetitions and substantial practice. These children may also avoid reading, may do worse on essay or open-ended tests than on multiple choice tests, and may have trouble recounting an event or story that occurred more than a week or two ago.

Children who have difficulties with LTM experience this challenge because they struggle with information encoding and preservation. It is important for parents and teachers to remember that LTM difficulties are not directly linked to general intelligence.

Long Term Memory is generally not directly assessed in psychological testing because it requires measuring something in an individual's past. There are many delayed recall tools for both verbal and visual memory that tap into the process of intermediate memory such as the Bender 2 Recall, many of the

delayed recall tests on the Wraml-2 and, the recall/recognition portions of the Rey Osterrieth Complex Figures Test.

## **For More Information on Long Term Memory, Please Visit The Following Articles:**

[National Institutes of Health](#): This online article researches and explains the differences between long-term, short term and working memory in thorough, extensive detail.

[Psychology. About Education](#): This website defines long-term memory, explains the different types of long term memory, and describes how long-term memory changes.

[LiveScience](#): This website explains the process of how humans form memories, describes the different types of memories, and discusses the similarities and differences.