

# [A research paper on the memory process](https://assignbuster.com/a-research-paper-on-the-memory-process/)

Memory is a process of storing and retrieving information and experiences. Information received makes its way into our memory through our senses. The first step in restoring memory is our senses, if our senses are not working properly then there is no way we can form a memory. The memory is processed by several systems throughout the brain and stored for later use. For our memory to work correctly, the information has to be correctly through the senses. Memory is stored according to many themes. Memory is stored according to time, category, and function. There are several different levels of memory which represents individual systems within the brain (Kohn & Mason, 2001).

Working memory is able to keep the information current in our brain for short periods, and using this information for the task at hand. Working memory is supported by the regions of the brain called frontal and parietal lobes. Working memory has four. The phonological loop is compatible to verbal short-term memory. This represents the brief storage of all verbal material, and is used in language processing, rehearsal, verbal problem-solving, and arithmetic. The visuospatial sketchpad helps us retain visual images and spatial information. The central executive focuses or distributes the attention to all the multiple tasks. When we try to do two things at one time this is because of the ability to focus full attention on each of the tasks. Another role of central executive is to be a manager between the two memory stores. The executive coordinates the information stored in the buffers and helps in problem-solving and planning. The last part of working memory is the episodic buffer, the episodic buffer integrates information through the phonological and visual stores, operations of the central executive and the information that entering and retrieving from long-term memory (Terry, 2009).

Short-term memory sometimes is called working memory, and when we hold new sequences of digits this can be a new telephone number, new phrases, and new names (Thompson, 2000). Short-term is what we are aware of in any given time. Short-term memory holds new information and also information is retrieved from long-term or permanent memory. Short-term memory has several different characteristics which are different from long-term memory. Acoustic encoding defined as words, letters and digits read or shown and the items are recalled aloud. Short-term memory can only hold very little information this is called limited capacity. Limited duration and susceptibility to forgetting are other characteristics (Terry, 2009).

Long-term memory is memory is stored and permanent information that we store in our memory to retrieve later. Long-term memory has unlimited storage capacity. Long-term memory has a few subcategories, memories that we have about life events and information about our environment are stored in declarative memory. Declarative memory is a part of our long-term memory and where the information is stored. Semantic memory is part of declarative memory that helps store general information such as a name and certain facts. Episodic memory is a subcategory of declarative memory which all information regarding our life events are stored (Heffner, 2003).

I took two different kinds of a short-term memory test. The first short-term test was a picture test 20 objects were shown on the computer screen for 30 seconds. After 30 seconds, I was asked to write down all of the items that I remembered. After writing down what I remembered, I was instructed to go to another screen to show the objects again. Out of the 20 objects I only remembered five objects. The second short-term memory test I took consisted of numbers. I was shown a series of numbers and given 10 seconds to study the numbers. Once the 10 seconds are up I am instructed to type in the numbers, I observed. I scored high on this test.

Once I pulled up the short-term memory tests, and looked at the information that needed to be remembered, my brain developed a code that became a record of the experience. Memory functioning has three stages: encoding, once the information is seen our brains record the experience. The memory can be affected and make it harder to recall if the information is not taken in correctly. Storage of memories is the ability to hold and store a memory. An important factor of storing is retaining the information by rehearsing. Lack of rehearsing will give problems in this stage. The last stage of memory is retrieval being able to recall the memory when it is needed. As the information is stored, it must be retrieved to use. Once it is successfully stored, reminders can help us receive the memory.

The short-term memory test with picture objects, I could not encode all of the information that was in front of me. Too many objects for me to remember, I can remember short-term when there are seven or less objects in front of me. Because I could not encode and store the information, it was hard to retrieve all of the objects. The short-term memory test with the numbers I had 10 seconds to rehearse the numbers, repeating the numbers aloud until time ran out. The short-term memory test with the picture objects, I had too much going on around my desk at work, I could not concentrate on the objects, and I did not give this test my full attention. Even though the same was going on around me with the short-term memory test with numbers, I did a better job when I was repeating the numbers aloud.

It is extremely important to pay attention, if we are overwhelmed with information and involved in the anxiety and stress of our daily routines, it will be harder later on to remember information that we need later on. To strengthen my short-term memory I am going to try relaxation techniques and become stress free. I am going to take more of the short-term memory tests to help it become easier to remember short-term. Even before I took the short-term memory tests my short-term memory was not working effectively. Some information I can remember and some I cannot.