

## Memory and its laws

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**Abstract:** This article describes memory and its laws.

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Memory refers to past experiences related to remembering, remembering, recalling, and recognizing things and events that were previously perceived, experienced, or performed. Memory is a fundamental and complex part of the mental state. It is known that a person is constantly under the influence of the external environment from the moment he is born to his last breath. Information obtained from observations, read and heard, or all kinds of events witnessed by a person are stored in a person's mind as information. All this stored information is called memory.

Memory is conventionally divided into three parts:

- Remembering (fixation).
- The ability to store (retention) them for a long time.
- Recalling, memorizing (reproduction).

The specifics of the process of memorizing impressions, saving them, and reviving them at the right time depend on time, that is, in a certain order, sequentially with respect to time and following the rules of logic. Another quality of memory is that information that is not necessary for human life is forgotten in a short period of time (sometimes quickly, sometimes slowly). But this information remains in the depths of people's minds without being erased from memory.

American cybernetician, neurophysiologist, psychiatrist - Gray Walter in his book "Living Brain" defines memory as follows: "Memory is a candle that burns constantly." In short: "Memory is a lifelong process from birth."

If a person is active and reads a lot, thinks, creatively solves the tasks in front of him, his memory shines like a light and illuminates all areas of his brain, and all the necessary information is firmly established in his brain. If it's the other way around, if a person is lazy, doesn't read, doesn't stimulate his brain to think, his memory fades. The saying "It went in one ear and out the other" is about such people.

Dr. Marion Diamond, a researcher at the University of California, conducted research on brain activity and came to the conclusion that "human aging does not lose

memory cell bonds.” The results of other studies support this idea. There are even views that if the brain is continuously working and focused on education, the density of intercellular bonds will be strengthened. It has been proven that it is possible to achieve noteworthy results in different periods of mental activity in the research conducted with seventy and eighty-year-olds.

Therefore, it is inappropriate to blame old age for the weakening of memory. Then what causes a person’s memory to weaken? Psychologists have shown that one reason for this problem is the change that occurs in testosterone, that is, the male hormone. Studies have revealed a correlation between the concentration of testosterone in the blood and a man’s intelligence. A high concentration of testosterone causes a decrease in memory and creativity in men. The researchers explained this view as follows: “Testosterone drives secondary sex characteristics in humans. As a result, aggressive behavior and sexual feelings increase. And this makes a person’s brain fully focus on this direction.”

Therefore, men who complain of memory loss should organize their personal lives and stay away from various factors that trigger lust. In fact, these conclusions of psychologists have been confirmed in Eastern traditions. It is known that in ancient times, madrasa teachers discouraged their students from looking at a non-mahram in order not to spoil their intelligence. The wise saying of Imam Shafi’i, "Looking at a strange woman leads to the forgetting of what has been memorized", confirms this view.

How is memory formed?

In science, the natural possibilities of memory are studied in three parts. These are impressions, returns and associations.

1. Impressions are shared by sight and hearing. The human sense of sight is stronger than other sensory organs. Because the nerves going from the eyes to the brain are 20 times thicker than the nerves of the ears.

For example, when Mark Twain could not remember well the role he was supposed to play on stage with the help of notes, he worked with pictures and easily overcame these difficulties.

2. Return. In ancient times, most scholars learned to memorize entire chapters of books at a young age.

3. Association - similarity. Remembering a fact by comparing it with something else. For example, you can associate a friend’s phone number with your house number, year of birth, or the number of your daily bus.

Repetition is fine, but...

There is a saying in our people that “a hundred times a memory is a thousand times a seal.” This adage is valid only when it is followed correctly. Because, in order for the brain to seal the information, it should not be temporarily loaded with other

information. Researchers Müller and Piltsecker emphasize that after memorizing a text, the brain needs to rest. In the process of listening, the brain repeats information by itself. This process also breaks down if the information is returned out of place after it has been memorized. As a result, no “sealing” process occurs in the brain. So, how long does the brain need to rest between memorizing and consolidating information? Psychologist Peron answered this question. He conducted an experiment on several people, asking them to memorize and repeat 18 unfamiliar words.

In the experiment, the words were repeated 14 times after 30 seconds. And when the break was 10 minutes, it was enough to repeat 4 times. Information is stored in short-term memory for a period of 10 minutes to 24 hours. The number of repetitions increases with breaks of more than 24 hours, and 8 repetitions are required when 48 hours are reached. Because, during this time, the additional data stored in the memory reduces the memory capacity. Therefore, it is advisable to recall memorized words every 24 hours. The fact that many aspects of the text are similar to each other makes the process of memorization difficult. If the set of words is structured in different ways, it will be easier. For example, what comes to mind when you think of a word written in list order? Naturally, it has a place on the list. This does not indicate the strength of the memory. It just means that there is nothing more important to remember that word. Therefore, each memorized word should stand out from others in its own way. If you avoid monotony when writing them, and use different colors or letter shapes, you can achieve positive results in the process of memorization.

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