

Research Title

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Use it or Lose it

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**Introduction:**

Learning new information has been bugging the mankind for ages. Such learning process helped our kind survive over all the difficulties we faced, and the dangers we encountered.

The learnt information was kept and retrieved whenever needed unless it was forgotten. For this, memorizing certain information turned to be essential in our life. Unfortunately, people couldn't keep all the data they got in mind and they had to resort to the data sources to remember the information that they had forgotten. But do all people learn and remember the same? Here our learning and memorizing abilities are going to be questioned.

In this research, I will introduce the key terms of learning, memory and the brain and how can forgetfulness be treated.

1.1 Memory definition:

Some people define memory as the process that saves knowledge over time, and others say that memory is the container that gathers all the information in a vivid vessel, but scientists agreed that memory is the characteristic which allows people to receive outer influence and gain information in addition to make them able to enter, process, code and keep these inputs. They also say that memory is the most important factor in the development and improvement process since a person without memory seems like s/he is born again and memory's role doesn't satisfy oneself with recording and saving events that happened in the past, it also intervenes in every vital action in the present because the action won't happen without saving all the factors that are related to it and link them together like a chain to be able to come true and without these steps learning and growth will be impossible.(1) [[1]](#footnote-2)

1.2 Kinds of memory:

Scientists classified memory into different categories depending on different criteria like strength, kind, length… etc. But the most acceptable one is the one that classifies pure memory into three parts which are:

1.2.1 Sensory memory:

It's the memory which is responsible for the information that is received from senses (sight, hearing, smelling, tasting and touching).It stores the inputs for very short time 1.5s,so if the person doesn't care about the information, he will lose it. For example, closing eyes after having a quick look on something will make it disappear in 2 seconds.(2)[[2]](#footnote-3)

1.2.2 Short term memory:

It is the memory that records events from 30 seconds to few minutes and it becomes clear when you want to memories a phone number to call or when you are solving a mathematical problem.(3)[[3]](#footnote-4)

Some researchers like Shiffrin and Atkinson affirm that repetition is very important in these kinds of memory since information will be saved for longer time and it will be easier to recall later on.(4)[[4]](#footnote-5)

1.2.3 Long term memory*:*

It's the most important and complex part of the memory that saves huge amount of information for unlimited time in addition to be the part that is responsible for bringing back old knowledge and experience easily and this type can resist forgetting and storing information .(5)[[5]](#footnote-6)

Both Beageh and Anhelder made sign in their shared book 'memory and intelligence' that long term memory is submitted to thinking rules and they mentioned that this memory helps thinking due to its information, knowledge, experience and skills.

Information is stored in this memory depending on logical, dictation, grammatical, rhythmic……..rules, and depending on Penfield's opinion, everything is kept in human's long term memory is actually stored for a long time because of the arrangement and the organization of it that allow us to remember information in a faster and easier way.(6)[[6]](#footnote-7)

A lot of scientists believe that long term memory is divided into two sections as follows:

1.2.3.1 Immaterial memory:

It saves all the things that we need to talk, it saves letters, words, structures, chemistry formula, multiplication and division rules,…..etc

In other words, it keeps all the facts that aren't related to a place or a time.

1.2.3.2Event memory:

It contains the events that happened in specific time like (I visited Damascus in 1998,my parents got married in 1994…..etc.(7)[[7]](#footnote-8)

2.1How does memory work?

We can distinguish three basic functions for the memory:

1-receving information

2-saving information

3- Getting back information

And remembrance is considered as the ability to get back the information that you stored before.(8)[[8]](#footnote-9)

Scientists spent centuries trying to discover the parts in human's brain that is responsible for saving information and the method that the nerve cells follow to save them, although the old theories claim that information is stored in a cell-chain forming a loop surrounded by an electromagnetic field that sends out electricity pulse for the desired period, the latest researches said that even one cell can store information and they found that one part of a brain cell activates receiving sign system that is responsible for saving information as soon as it receives an electric pulse.(9)[[9]](#footnote-10)

2.2Forgetfulness and its reasons:

Forgetting is the disability of recalling information in spite of its existence(10)[[10]](#footnote-11) and scientists defined the reasons behind it and they called it "remembering hindrance" :

1- Emotional State:

Passivity is a confused state that affects person's thinking, so when someone is angry or afraid s/he won't be able to remember facts or names or even simple details.

2-Personal Feeling:

When a person feels himself to be threatened all the time, and that happens when the person is afraid of someone in his environment he loses the ability to remember the simplest data he got. Whereas poets are subjected to such personal feelings specially when they start stuttering.

3-Distraction:

When the person isn't focusing on what he wants to remember. It is clear in hesitation while speaking and writing since being distracted makes it difficult to remember things.

4-Age:

Studies proved that human's memory starts to weaken in the middle of their twenties.(11)[[11]](#footnote-12)

3.1 Memory and learning:

Memory indicate to relativity continuance for experience which shows the learning process in addition to be an important condition for its happening, that's why both memory and learning require the existence of each other since without the accumulation of acquired experience and its processing then saving the learned information won't be possible and without learning, the information flow will stop and memory will turn away from being the responsible of saving information and events. So if learning makes a sign to changes that affect behaviors, because of the experience effect, then memory is the process that saves and fixes these changes.

Many studies claimed that factors that affect remembering, saving and getting back information are the same that affect learning and gaining it and depending on that they supposed that learning and memory almost have the same meaning, because they are overlapping expression and both of them express each other.(12)[[12]](#footnote-13)

3.2 Influences that affect memory:

Many things can affect memory and its ability to save and remember what it keeps so if we could exploit in a good way our memory might be better, some of this useful things are the following:

3.2.1 Sleeping:

It is very important for memory since there is a strong relationship between them, so if people are deprived of sleeping after receiving information they won't be able to remember it well.

3.2.1 Effort and Pressure:

Sometimes people can't remember things when they are tired, afraid, nervous and worried, all these situations are factors for the temporarily forgetfulness, because it causes secretion of cortisol which is the Concentration Killer and when the person's state come better s/he will be able to remember the things that s/he wanted.

3.2.3 Food:

Nerves cells like other cells need food, and brain structure is affected by kinds of food that person eats. Alimentary food doesn't intervene in nerves cells directly because brain has the ability to choose what it needs for its health.(13)[[13]](#footnote-14)

3.3 Improving memory:

People can protect their memories and brains by using them, and as a student the most important thing for us is the exam and how can we prepare well, many strategies were made to improve the level of saving and remembering information for example:

3.3.1 Promoting memory:

Which is a high epistemic strategy that students can reach after doing some performance before or during the period of the exam like organize, remember and revise the subject.

3.3.2 Mnemonic:

It is the ways and styles that student use while preparing for an exam like summarizing, taking notices and recitation.

3.3.3 Memory triggers:

It is a way that students use before answering the exam questions by writing sings and observations next to the question to be keys for answering.(14)[[14]](#footnote-15)

3.3.4 Well-organized revision:

Revising before exams will makes students remember the things that they studied at the beginning of the revision period better than the end unless they take regular breaks during the revision period like taking a ten-minute break an hour.(15)[[15]](#footnote-16)

And of course understanding is very important to memories information and remember it easily.

Conclusion:

At the end of this research we can say that memory is the reservoir of the information that we receive, and this reservoir is divided into sections; each one of them has its own function. We also found out that learning and memory almost have the same meaning due to their strong relationship which leads to the fact that if we don't use and repeat the information that we have learned regularly we will forget them quickly and our memory will be less effective in addition to the diminution that will happen in the level of thinking and the retreat of the intelligence level.

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