The Memory System

Name

Institution Affiliation

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The Atkinson and Shiffrin Model

Sensory Memory

Information approaches the human information processing system through a range of channels linked to different senses. Information that cannot be instantly handled is stored temporarily in the buffer or sensory memory (Atkinson & Shiffrin, 1967). An example is when one views an object before it goes away. Once the object disappears, it is still maintained in the memory for a short period of time.

Short-term Memory (STM) (Working Memory)

Information that is managed enters another momentary store called short-term memory. Information that approaches this stores decays the moment it is no longer handled. Information that is not more consistently saved is lost soon after the management is directed elsewhere (Cherry, 2016). An illustration that could explain this is, for instance, when trying to recall a phone number. When given the number, lack of repetition to commit the information to memory leads to its fading from short-term memory.

Long-term Memory (LTM)

This is the moderately permanent memory store where information is held when it is no longer being attended to (Cherry, 2017). Information storage in long-term memory is similar to a computer recording information onto the hard drive.

Factors that Improve or Obstruct Information Flow

STM can be improved by rehearsal and conscious awareness. Rehearsing information holds it in the STM and assists in shifting it to LTM. The utilization of imagery can help to develop mental pictures to connect to the information being stored. Stress, multi-tasking, and

pain will divert focus from incoming information and could thereby hinder information flow and LTM (Atkinson & Shiffrin, 1967). LTM is enhanced when there are rigorous retention methods in STM. Generally, this relies on the how the information was absorbed and impediments include amnesia and brain damage.

Explanation of proactive and retroactive interference and their counteractions. When prior learning hinders the consolidation of newly acquired information, the scenario is referred to as proactive interference. If continuous learning disrupts the storage of information formerly obtained, the occurrence is called retroactive interference (Atkinson & Shiffrin, 1967). Each form of interference can be counteracted while studying to enhance to maximum retention through LTM. This is possible by replication of information, reciting of study materials, devising questions, and previewing new information (Cherry, 2017).

Other types of forgetting and strategies that can increase memory retrieval and consolidation. Other forms of forgetting include the recollecting of flawed illustrations (distortion) and the incapacity to remember information from memory as a result of neglect (fading) (Cherry, 2017). Strategies that could develop memory retrieval and consolidation include proper organization of thoughts, mnemonics, having confidence in personal abilities, and the repetition of information.

References

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