

Genesis Fotiadis

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PSY 470

Week 8

2.

Anterograde amnesia is caused by trauma to the brain and when this type of amnesia occurs, new information is not able to be processed and stored. Even though someone with anterograde amnesia can't remember new information, they can still remember memories from before the brain trauma. The part of the brain that is usually affected in this form of amnesia is the hippocampus since there is an inability to consolidate memories from the short-term to the long term memory (Spielman et al., 2017). The opposite of anterograde amnesia is retrograde amnesia, which both have to do with the loss of memory due to brain trauma. The main difference between these two forms of amnesia is that retrograde amnesia involves the loss of past memories prior to trauma. They have problems remembering past events and episodic memories.

4.

The seven sins of memory are transience, absentmindedness, blocking, misattribution, suggestibility, bias, and persistence. The first sin of memory is transience which means that memory can fade over time when the information is not constantly used. This usually occurs when trying to recall a memory from years ago and being unable to recollect the information from that memory since you haven't needed to use it in a long time. The next sin is absentmindedness which has to do with forgetting. This forgetfulness is caused by the lapse in attention (Spielman et al., 2017). We often experience this when we are mid-conversation and someone interrupts us or goes off on a tangent so that when the person tries to remember what they were saying in the first place, they often forget because of that break in attention. The next sin is blocking and it is the last sin involved in forgetting. This type of sin occurs when the accessibility of information is blocked (Spielman et al., 2017). The sin of misattribution has to do with distortion of memory as the source of memory is confused (Spielman et al., 2017). The next sin is called suggestibility which are false memories and another sin is bias, which are memories that are altered due to strong beliefs. The last sin of memory is persistence, which is the intrusion of memories. Persistence is due to not being able to forget the undesirable memories in life (Spielman et al., 2017).

16.

The memory sin called blocking is a type of forgetting error that occurs when information is temporarily blocked. Blocking is also known as tip-of-the-tongue phenomenon because the information we need to access is right on the tip of our tongues, but for some reason a blocking occurs that makes us unable to access that information completely (Spielman et al., 2017). An example of the memory sin blocking is when we try to recall information, but can't for whatever reason. I have experienced this when I have been writing an essay and want to use a specific word in my paper rather than writing 4-5 extra words to describe what I want to say but while I am writing I cannot remember what that word is. I have to describe it to friends and try to search it on the internet but have difficulty finding the answer. The word is always on the tip of my tongue, but I just cannot remember. Ironically, when I give up and forget about trying to remember the word, it always pops up in my head after when I don't need the word anymore.

7.

There are three parts of the brain that are involved in memory processing, which are called the amygdala, hippocampus, cerebellum and prefrontal cortex. For centuries, scientists have been trying to understand how we store memory and which part of the brain is responsible for it. Karl Lashley began the exploration when he made lesions on rat and monkey brains in order to search for evidence of engram (Spielman et al., 2017). However, through his research he was not able to find the answers he wanted but it opened the door for several other scientists to discover the parts of the brain involved in memory processing. We are now made aware of the first part of the brain involved called the amygdala. The amygdala is mainly responsible for regulating emotions but it also plays a role in the storage of memory since the storage is influenced by stress hormones (Spielman et al., 2017). The hippocampus is another area of the brain responsible for memory storage and it is involved in normal recognition memory and spatial memory. Another job of the hippocampus is in memory consolidation and projecting information to cortical regions in order to give meaning to memory and connect them with other memories (Spielman et al., 2017). Lastly are the cerebellum and prefrontal cortex, which are so beneficial to memory processing that if an individual were to damage their hippocampus, they would still be able to create implicit memories through the cerebellum and prefrontal cortex (Spielman et al., 2017).

8.

Semantic encoding is part of two other types of encoding, but this type of encoding has to do with the encoding of words and its meanings. This was first presented and discovered by William Bousfield who devised an experiment where people had to memorize 60 words. He realized that people memorized these words by grouping them into different categories, which showed how they paid attention to the meanings of the words (Spielman et al., 2017). A real life example of semantic encoding is remembering the dates that the world wars occurred by grouping them into wars. Another example of semantic encoding is remembering a person's phone number by grouping their name or you can remember a specific individual's names by categorizing them into the place you met them.

11.

The memory sin called bias is something that we have all experienced in life and it involves memory that is tainted because of our strong beliefs in a specific area. There are several types of biases which include stereotypical bias, egocentric bias, and hindsight bias. In stereotypical bias, both racial and gender biases are involved. Egocentric bias involves the memories of the past and enhancing them because we are essentially “hyping ourselves” up in the recollection of the memory. An example of egocentric bias is when we over exaggerate our role in memory because we want to look good to other people. So a person might remember a past event where they were helping a friend move and they might say they were the only one that was putting the most effort in helping but in reality there were other people there as well and they actually came late. Lastly, hindsight bias occurs when we believe that the outcome of an event is inevitable despite knowing the facts (Spielman et al., 2017). A personal example of this bias is when a couple on the missions trip got proposed to and someone else on the trip said that they knew it the whole time, when in fact they did not know. They assumed they knew because they said they saw all the signs that pointed to it, but the groom to be said that those signs never happened or they were not associated with him getting ready to propose.

13.

The memory sin called misattribution is described as confusing where you found the source of information (Spielman et al., 2017). This is part of the error of distortion along with suggestibility and bias. An example of misattribution could be when you think that an event happened with one person but in reality it did not, you just associated that event with them. For example, my best friend shares everything with me and her boyfriend. So when she tells her boyfriend something and has not told me yet, she will have a conversation with me about what she already told her boyfriend. In confusion, I tell her that I do not know what she's talking about and that's when she realizes that she told her boyfriend but not me yet. She assumed that she already told me because we tell each other everything.

15.

Flashbulb memory is a clear recollection of an important event (Spielman et al., 2017). An example of flashbulb memory in my life is when my dad passed away. Even though this occurred 10+ years ago, I can vividly remember where I was the day before he passed and the day of. I remember that the day before I came home from school and he was sleeping on the couch. I tried to put my bags away and sneak back outside before doing my homework so I could play with my friends but I remember him catching me right before I reached the door and told me to finish my work. As for the day of, I remember waking up at 2am in the morning to people talking outside the door of my room. I looked over to see where my brother was, we shared a room, and he wasn't in bed. In confusion, I walked up to my door to see what was happening but someone from the outside was holding the door shut and my brother told me to go back to sleep. That was the moment I pieced everything together and realized my dad passed away. In recalling this event, I just remembered how when everything sort of settled down and we were sent back to bed, my brother got on the phone and called his best friend Mike to vent to him, that was the first time I ever heard my brother cry in front of me.

28.

In the video “Memories in Everyday Life”, residents of an assisted living community would find other residents wandering the halls. These residents are not able to recall how they got there or where they are. In turn, the other residents who are aware of what’s happening just take the situation as just another day. They realize that they have forgotten once again so they just take them by the arm and guide them back to where they need to be. From the way they would make it sound, it was as if this is a daily occurrence. You see someone wandering the halls, you no longer question it and you just jump to help them immediately. I could not hear very well during this part of the video, but there was a woman who suggested playing a game called “bridge” to help keep her mind alert in advancing age. Other ideas that can help exercise the mind is to constantly get a good night's rest, stay healthy, do crossword puzzles or sudoku puzzles, and in general to participate in any activity that will challenge our brains. It could also be beneficial to learn new tasks so that our mind is constantly moving and retaining information.

31.

The research conducted in the video “Creating False Memories: A Laboratory Study” shows us how our memory is not always accurate. Our memory is not stored permanently in filing cabinets. Interestingly, I once heard that whenever we try to retrieve our memories, it’s essentially a memory of the memory. Eventually, we start leaving out facts from that memory so then the next time we remember the memory, we are remembering the version that lacks that one specific detail. This explains why two people in a family could recall a memory totally differently even though they both were present for that memory. The researcher in the video pointed out how our memory is not like a tape recorder, it’s more of a reconstruction of imagination and fantasy. Understanding how memories can be inaccurate leads to the question about whether or not eyewitness testimonies are reliable. This is a difficult conclusion to come to, but regardless, eyewitness testimonies have to be backed by other evidence. Since we know that memories can be associated with fantasies, we have to be aware of its inaccuracies. Ironically, I can’t remember where I heard this story from, but I believe in the textbook there was this news anchor who was reporting a rape that happened and how the suspect was still on the loose. The victim was watching this report and some how associated the news reporter with the rape crime and assumed that he was the one to blame. After extensive evaluation of the crime, they discovered the mistake that happened. This shows how powerful the mind can be when coming up with different situations.