

Role that forgetting plays in our everyday lives



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Forgetting is the failure to recall or retain information previously stored in either short-term memory or long-term memory (McLeod, S. A., 2008).

Forgetting plays a substantial part in everyday life as new information can be received at any time. This could be in the form of new facts, faces or events. Due to the volume of new information it is reasonable to state that that the average person forgets something they desire to remember every day. There are two main types of forgetting. The first being incidental forgetting, this is where information is forgotten without intention (Yang, Lei and Anderson, 2016). The second main type of forgetting is motivated forgetting, which is where steps are taken by an individual to purposely make a memory inaccessible (Ramirez, 2017). An example of the impact forgetting has on an individual is in eyewitness testimonies in the criminal justice system these highlight the issues forgetting can cause when it comes to real life situations (Sala, S. D., 2010). Forgetting in this light is shown to be negative and counterproductive due to the loss of information. However, it is also adaptive, it may be better for a person to forget one of two things than forgetting none at all (Nørby, 2015), even when it comes to eyewitness testimonies. An example of the impact of forgetting on an individual in a positive way is when it comes to depression and regulating emotion is a positive, keeping only positive thoughts available for recall. This essay will discuss real life examples of how forgetting effects everyday life.

A genuine example of incidental forgetting occurs within the criminal justice system. For eyewitnesses to an incident, information taken in may become inaccessible to them at time of recall, this is due to the way the information is encoded in to their memory as it relies on what the individual attended to

and not the entire event that occurred (Howe and Knott, 2015), through no fault of their own making their evidence imprecise. Research conducted in this field on eyewitness reports and repeated questioning after incidents have taken place show a curve in the level of forgotten information deteriorating after an event over a number of days (Ebbinghaus, 1913). An experiment carried out to further explore this research for the general consensus of the criminal justice system found that memory loss of eyewitnesses follows the forgetting curve of Ebbinghaus (Yuille and Cutshall, 1986). It was found that eyewitness statements taken in the days after an incident takes place are increasingly more unreliable. Lord Pearce said: "Human evidence... is subject to many cross-currents such as partiality, prejudice, self-interest and, above all, imagination and memory inaccuracy" (Ormerod and Hooper, 2011). This explains that human recall evidence such as eyewitness testimonies have a high tendency for inaccuracy because of many hindrances such as forgetting. However, it is also found that the reliance on eyewitness testimony in cases such as an identification of an offender in a line-up (to prove the person guilty) is reliable evidence. This is evidenced in Simons and Chabris' research in which 37% of Americans believe that the testimony of one confident eyewitness should be enough to convict a criminal (Simons and Chabris, 2011). Conversely in the United States eyewitness misidentifications have contributed to more than 75% of over 200 incorrect condemnations, innocence of these individuals was proven through DNA testing (Reiss, 2008). Forgetting or memory imprecision in this sense is critical because it has negative consequences, a person convicted due to eyewitness misidentification could be imprisoned, fined or even given the death penalty.

The implications of knowing that a memory could, in some cases, literally mean life or death for another individual can cause high levels of stress. Individuals may also feel the need to force themselves to come to a definitive answer (maybe of choosing someone in a line up), even if they are not entirely sure as their memory is failing them (Clark and Godfrey, 2009). The pressures can come from numerous factors, including: the length of line ups, leading questions and biased instruction. Each of these increases the pressure on the individual to make an identification, giving them a false state of confidence about their choice which they then exude in court (Semmler, Brewer and Wells, 2004). The forgetting of information is strenuous for an eyewitness when their account of an incident can decide on another individual's future, but the event itself can also be traumatic causing loss of information and lack of recall almost immediately (Laney and Loftus, 2018). The Yerkes-Dodson law (the inverted-U model) implied that the more stressful the event (e. g. murder) the more anxiety caused and the less accurate recalled information of the event (Teigen, 1994). This could explain the mistaken eyewitness identifications of convicted individuals. Clifford and Scott investigated this showing an experimental group who saw a highly stressful event occur, recalled less accurate information in comparison to a control group who saw a less stressful event (Clifford and Scott, 1978). Loftus et al expanded on this further with the weapon focus effect which states that individuals are so overwhelmed by the presence of a weapon they remember little else (Loftus, Loftus and Messo, 1987). This shows that forgetting can occur when an individual is in a state of high anxiety or stress, or focused on an unfamiliar stimulus thus not taking in their immediate surroundings.

Not only does stress and trauma affect individual's memory within the criminal justice system, it can also affect an individual's mental health. Psychogenic amnesia (or dissociative amnesia) is a condition due to the effects of severe stress or mental trauma but with no neurological basis (that is observable) (Mastin, date unknown). The condition causes an individual to have gaps in their memory where they cannot remember information about themselves or events in the past. It can last anything between minutes and in rarer cases, years (NHS, date unknown). Psychogenic amnesia is not a conscious process, it involves memory loss of even an individual's personal identity, there are not steps taken to purposely forget an event (Harrison et al, 2017). Normally there are two distinguished types of psychogenic amnesia. Firstly, there is situation-specific amnesia, this is memory loss or fragmentation of memories associated with PTSD including those of a specific traumatic event. The second type of amnesia is global amnesia. This is loss of an individual's whole personal identity (Baddeley, Kopelman and Wilson, 2002). The case study of 23-year-old AMN shows an example of a combination of the two types of amnesia (Markowitsch et al, 1998). This was after witnessing a traumatic incident at the age of four (a car crash in which one car set on fire) and then 9 years later, at 23 years of age, he witnessed a fire in his cellar, a mental amnesia block occurred. Due to a significant amount of stress (witnessing the open flames) AMN was unable to recall events of the last six years of his life, and maintain long-term memories he made afterwards (Staniloiu and Markowitsch, 2012; Markowitsch, 2002). This is an example of repressed motivated forgetting where the forgetting is automatic and memories are left out of awareness without conscious thought (Weiner, 1968).

Suppressed motivated forgetting is the opposite of repressed forgetting, here the memories are consciously diminished meaning that an individual is taking steps to purposely discard memories (Anderson and Hanslmayr, 2014). Motivated forgetting in this sense is used to regulate emotion and control unwanted thoughts (Anderson and Levy, 2009). The forgetting takes place through the directed forgetting paradigm which occurs in two ways: either item-method directed forgetting where encoding is limited in order for intentional forgetting; and list-method directed forgetting, retrieval inhibition or a contextual shift happens here (Macleod, 1999). Some thoughts and memories an individual have are ones they do not wish to remember, this goes against the common theory that forgetting is not desired (Bergström, Gagnepain, Anderson, 2017). There has been a lot of research on retrieval suppression using the think/no-think (TNT) paradigm (Anderson and Green, 2001). This paradigm consists of individuals learning pairs of words with either 'think' or 'no-think' cues attached to them. Performing a no-think recall task after learning goes against the cue of a tendency to forget the cue target-pair (Anderson and Green, 2001). The use of this paradigm has been used to research the suppressing of unwanted memories. In this research participants who managed to reduce the number of intrusions of the negative thoughts displayed the largest amount of suppression-induced forgetting on the final assessment (Levy and Anderson, 2012). Another study also showed that participants who suffered from depression successfully forgot negative words, however upon final assessment they also showed worse recall of baseline words in comparison to the non-depressed participant group (Joormann, Hertel, Brozovich and Gotlib, 2005). These

examples come under the retrieval inhibition section of list-method directed forgetting.

Another example of list-method directed forgetting is called motivated contextual shifts this involves an individual moving to a new line of thought by removing existent cues, and/or replacing the cue to induce recall of a different or new memory. There is not a lot of research in this area although essentially all reminders that act as retrieval cues are removed. In a real-life setting this could be in the form of redecorating or moving house after something negative has happened such as separation from a partner or death of a family member (Cooke, 2016). The Godden and Baddeley deep sea-diver study showed that there was a drastic change when recall was in a different environmental context to which it was learnt (land - water) (Godden and Baddeley, 1975). Similarly, memories created with a partner in a house will be remembered due to environmental cues around that house, after a separation however an individual will not wish to remember these memories as they may make them unhappy. Therefore, this is a motivated contextual shift, where the individual actively and consciously tries to suppress memories, by moving house will suppress memories by removing the environmental cues and therefore inducing forgetting.

In conclusion, forgetting does play a large role in everyday life and impacts in a variety of different ways. As discussed, it takes a negative role in the criminal justice system in the form of the reliability of eyewitness testimonies. That if an individual forgets main facts or details through factors such as false memory creation, stress or leading questions it can lead to a wrongful conviction. This can ultimately produce, in some cases, extreme

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negative outcomes such as imprisonment or the death penalty for the wrongly convicted individual (if the eyewitness recall is the sole cause for conviction). However, forgetting does also play a positive role in everyday life. Occasional forgetting can be a burden and a common annoyance however when an incident occurs in an individual's life that is traumatic, forgetting can be an asset. In the aspect of self-regulation and depression unchangeable and negative experiences are better to be forgotten so that the individual remains positive and learns from mistakes but without having to recall and think about unpleasant/traumatic memories. This essay shows that despite the negative stigma attached to the word forgetting as it generally means to be unable to recall previously stored information which is considered a weakness and a liability in some cases. It can also be a positive force as it can in many ways aid an individual with coping with a trauma and their mental health.

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