False Memories

Erin Martin, PhD Psychology

Sometimes when I think of childhood memories, I wonder "did that really happen? It seems so long ago", and almost feel detached from it. Our memories are what make us who we are, how we think of ourselves, our perception of personal relationships, basis for future behavior, and explanation of past behavior. Whether that memory is a false one, or a real one, it is now part of us. There has been debate over the plausibility of recovering suppressed or forgotten memory. Some researchers believe that forgotten or recovered memories are false memories that have been implanted through poor self-monitoring mechanism, or suggestibility (Braun, Ellis, & Loftus, 2002; Clancy, McNally, Schacter, Lenzenweger, & Pitman, 2002; Johnson, 2006; Loftus and Bernstein, 2005). Other researchers believe that there is the likelihood that forgotten memories are difficult to recall until other physical trace memories of stimulus and environment are in place to retrieve the memory (Steffens, & Mecklenbräuker, 2007).

Some researchers believe that in an effort to explain behavior, therapists may implant false memories and call them recovered memories. This effort has created the controversy over the existence of repressed and recovered memories. Four literature reviews that I have read have done an extensive job in discussing this issue from different aspects. Middleton, Cromer, and Freyd (2005) stated the term false memory was not coined by the psychological society; it was formed by a society with an agenda to discredit recovered childhood abuse memories. They mentioned that this was not a problem when dealing with recovered memories of veterans. It has only become an issue when a person is prosecuted for a recovered memory of abuse. Loftus and Berstein (2005) discussed how false memories can be implanted. First the person needs to be lead to believe the event is plausible, and then they can be lead to believe that it happened. They continued to reference several studies in the literature review in which participants were implant; one of which was a Disney advertisement experiment. Two studies from Mazzoni were referenced; in one of the studies participants were implanted with a false memory of witnessing a demonic possession as a child, in the other participants were implanted with a memory of a nurse removing a skin sample when they were under 6 years old. One experiment that they referenced, which did not successfully implant a false memory, was the study that tried to implant a memory of a rectal exam.

Steffens, and Mecklenbrauker (2007) referenced a few studies in their literature review in which participants were implanted with false memories. One such study in 1995 by Leichtman and Ceci told children in a preschool that they were going to met someone that was really clumsy, and had a tendency to mess things up. Then a person came to the room and walked around talking to the children for only a few minutes and left. After the person had left, students were asked questions about a ripped book and a dirty stuffed bear. Some students were asked

leading questions like – was Sam-Stone upset when he got the bear dirty? Others were asked if Sam-Stone ripped the book and got the bear dirty. After these leading questions, students believed that they saw, and that Sam-Stone was the one in which did these things.

A study conducted by Braun, Ellis, and Loftus (2002) looked into the effects of advertising that played on consumers past and childhood memories, and possibly create false memories. As memories are recalled and encoded again, they have a nature of being reconstructed. Braun, Ellis, and Loftus utilized an event which was not plausible to determine if the suggestion of this false memory could be incorporated into the participant's memory.

The participants did an inventory list of childhood memories, then they were shown a Disney World advertisement in which children were shaking hands and hugging Bugs Bunny or Ariel. Bugs Bunny is a Warner Brothers character who would not have been at Walt Disney World, and Ariel would not have been around at the time the participants were children. After participants viewed the advertisement, seven percent believed they met Ariel, and sixteen percent believed they met Bugs Bunny. More participants may have believed they met Bugs Bunny over Ariel because Bugs Bunny is well known. One participant who stated they believed they met Bugs Bunny at Disney World mentioned they were confused because they thought Bugs Bunny was a Warner Brothers character, yet the advertisement convinced her she had met him at Disney World.

Clancy, McNally, Schacter, Lenzenweger, and Pitman (2002) looked at a scenario that was highly implausible as well. The participants in this study consisted of those who stated they recalled an alien abduction, or believed they had been abducted but could not recall the memory. The authors discussed how the experiences of those that believed they had been abducted could be explained through paralysis during REM sleep; sensory stimulus of tingling, shadows of fingers, levitation, and other sensory stimulus. The results of this study showed that those who recall, or believe, they had been abducted scored higher than the control group on false recall and false recognition of theme words for memory tasks.

How can we determine if false memories have been incorporated into our memory bank, and how can we protect our memories? We can only determine inaccuracy in our memories by the discrepancies in what others have said or documentation (Steffens, & Mecklenbrauker, 2007). Johnson (2006) experienced this distortion of memory herself; only when she shared this memory with family members did they correct her flaw, and understood how the memory got distorted. Johnson had combined an actual event from childhood with an imaginary solution to the problem. Johnson suggested source monitoring framework which determines the source of the mental experience by certain characteristics of perception, context, and emotional detail. Some characteristics she provided was that most of the time perceptual memories are more detailed than imagined events; yet imagination including vivid details and emotions that are repeated are more likely to be thought real. A step that we can take to ensure that are memories stay intact is to only repeat what we know as accurate memories, and to be careful with our imaginations. Another step that Johnson suggested is to systematically determine if the event that is remembered is plausible. In Johnson's experience, she remembers the family car breaking

down and her father going to get gas. She then proceeded to imagine a solution to her thirst and getting rid of her annoying sister. She had imagined her mom sending her 12 year old sister alone to a farm house that was seen down the road to get a drink for them. Johnson remembered vividly the women that answered the door and what the kitchen looked like, even though her sister was supposedly the one who went to the farm house. Once Johnson shared this memory with her family she realized that they had indeed broken down, yet the rest she had imagined. If she had systematically determine the plausibility of her mother sending her 12 year old sister alone to a farm house, and the fact that she can vividly see the women and the kitchen, she would have determined that this part of the memory is not plausible and distorted.

References

- Braun, K., Ellis, R., & Loftus, E. (2002). Make my memory: How advertising can change our memories of the past. *Psychology & Marketing*, 19(1), 1-23. doi:10.1002/mar.1000
- Clancy, S., McNally, R., Schacter, D., Lenzenweger, M., & Pitman, R. (2002). Memory distortion in people reporting abduction by aliens. *Journal of Abnormal Psychology*, 111(3), 455-461. doi:10.1037/0021-843X.111.3.455
- Johnson, M. (2006). Memory and reality. *American Psychologist*, *61*(8), 760-771. doi:10.1037/0003-066X.61.8.760
- Loftus, E., & Bernstein, D. (2005). Rich False Memories: The Royal Road to Success. *Experimental cognitive psychology and its applications* (pp. 101-113). American Psychological Association. doi:10.1037/10895-008
- Middleton, W., Cromer, L., & Freyd, J. (2005). Remembering the past, anticipating a future. Australasian Psychiatry, 13(3), 223-233. doi:10.1111/j.1440-1665.2005.02192.x
- Steffens, M., & Mecklenbräuker, S. (2007). False memories: Phenomena, theories, and implications. *Zeitschrift für Psychologie/Journal of Psychology*, 215(1), 12-24. doi:10.1027/0044-3409.215.1.12