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The Effects of Perceived Authority on Suggestibility in Interrogation-like Situations: A Pilot Study

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ABSTRACT

The effect of perceived authority on suggestibility was assessed. Two groups of participants were used, one receiving perceived authority and one receiving none. A military student dressed in fatigues administered the procedure to the first group and a civilian student in street clothes administered to the second. The Gudjonsson Suggestibility Scale was used to assess the suggestibility of each group. No significant difference between the groups was found.

STUDY

Memory is studied for many reasons, one being to discover the reliability of human memory. The study of memory reliability is of special interest to the criminal justice system. Findings in this area have a great impact on how eyewitness testimony is collected and interpreted.

In one recent study, participants were "tricked" into believing they had met Bugs Bunny, a Warner Brothers character, during a childhood visit to Disneyland (Loftus, 2004). The experimental group viewed an ad in which Bugs was seen next to the Disney Castle after which 16% of them said they had met Bugs at Disneyland, and later studies showed that with multiple exposures to the misleading ad the percentages of this occurrence rose (Loftus, 2004). This study demonstrates the malleability of memory. Clearly it is impossible to meet a Warner Brothers character at the Disneyland Park, but this impossibility had no effect on those that recalled meeting Bugs at Disneyland. Furthermore, in a follow up study participants were asked to rate the degree to which certain cartoon characters were associated, for example: Mickey and Minnie Mouse or Mickey Mouse and Bugs Bunny. Those who had fell for the fake Disney ad in the earlier study rated Bugs Bunny as more highly associated with various other Disney characters than did those who were not exposed to the misleading ad. These results suggest that the thought process of the people exposed to the fake ad had been affected (Loftus, 2004). It appears that an individual can not tell the difference between a memory that is false and one that is real. Loftus discusses precisely that.

"Psychological studies have shown that it is virtually impossible to tell the difference between a real memory and one that is the product of imagination or some other process" (Loftus, 2002). Loftus says that memories are susceptible to "post-event information" which can alter what individuals believe they experienced. This can happen in everyday situations, but it becomes especially troublesome when it happens with a criminal situation. People who have been witnesses to crime can be affected by many forms of "post-event information." These forms include: talking with others about the crime, being exposed to media coverage about the crime, and being asked leading questions. This "post-event information" can do more than change a detail here and there; it can create an entirely false memory for the event (Loftus, 2002).

Nourkova, Bernstein and Loftus (2004) looked at how effectively traumatic memories from the past could be altered. The study included 80 Russian participants who had memories of two terrorist bombings in Russia. The investigators tried to convince these participants that they had seen wounded animals in the media coverage of the bombings. A minority of the participants were convinced that they had seen a wounded animal in media coverage of one of the bombings. This study shows that even memories which have strong emotion attached to them can be altered (Nourkova, Bernstein & Loftus, 2004). Still some may argue that these results have no significance because the participants are not in a situation where the recollection of their memory is going to have dramatic effects such as in a criminal investigation. These critics argue that in order to create realistic results the participant must believe that their memories are going to be used in a criminal trial and that they are speaking to an actual law enforcement official.

Before the creation of Human Subjects Committees which protect human rights in research settings, Bernheim conducted a study which may be the first instance of implanted memory documented. Rosen, Sageman and Loftus (2004) discuss this study in an article. Bernheim described to one of his patients, Marie, the rape of a female child. He described the rape in great detail and repeatedly told Marie that she had witnessed it. Three days after this Bernheim had a lawyer friend of his come and talk to Marie and she told him the story in detail and said that she would testify to it and "was ready to swear before God and man" (Rosen, Sageman & Loftus, 2004). This case of implanted false memory certainly shows that it is possible for the human memory to be reshaped to the point that the individual would believe false information to be fact, even in court to the detriment of an innocent person's freedom, or even life.

It is estimated that in 1999 about 7,500 people have been wrongfully convicted of serious crimes in the United States due to mistaken memories (Loftus, 2003b). One example of this is the case of Ronald Cotton, who was wrongfully convicted of rape in 1986. The victim identified Cotton as her rapist, but he was later exonerated. In response to cases like this one Loftus (2003a) suggests a new oath: "Do you swear to tell the truth, the whole truth, or whatever it is you think you remember?" Perhaps more precise procedures for collecting eyewitness accounts and identifications would help to cut back on these miscarriages of justice. "Research has revealed the limits of human memory; now the courts need to incorporate these findings into their procedures" (Loftus, 2002).

Eyewitness memory errors account for more wrongful convictions than all the other causes combined (Wells & Loftus, 2003). One step towards proper procedures for collection of memory evidence has been taken. The United States Department of Justice came up with a set of national guidelines for collecting eyewitness evidence which include such recommendations as: asking open-ended questions and avoiding leading questions, and not interrupting the witness during interrogation (Loftus, 2002). These guidelines are a step in the right direction and as long as police officials take these recommendations seriously, there should be some improvement in this area.

The current study takes a look at memory in an interrogation-like situation and measures the suggestibility of participants who are exposed to interviewers with different levels of perceived authority. Suggestibility is defined by Gudjonsson and Sigurdsson (2004) as "the susceptibility of people to give into leading questions and interrogative pressure." Suggestibility was measured using the Gudjonsson Suggestibility Scale (GSS) which measures three things: yield to leading questions in two administrations of twenty questions (yield 1 and yield 2), one before and one after negative feedback; shift in answers from the first administration of the questions to the second; and total suggestibility which is yield 1 and shift added together (Gudjonsson & Sigurdsson, 2004). It is predicted that increased perceived authority will produce increased suggestibility when compared to a situation with little or no perceived authority.

METHOD

Participants

Nineteen female undergraduates participated in the study; ten in the experimental group and nine in the control. Random assignment was used. The participants were recruited from introductory level psychology classes at South Dakota State University. For participating in the study, participants were given extra credit points in their psychology class. Both investigators completed the NIH online training and the American Psychological Association's Ethical Guidelines were followed.

Materials

During the procedure, the investigators used a cassette player and cassette recording of the story to present the story to participants. A mini disk recorder was used to record the sessions so that the participants' answers could later be transcribed verbatim. Pencil, paper, and a clipboard were used by the investigators during the questioning to give the impression that the answers were being recorded as they were given. The Gudjonsson Suggestibility Scale (GSS) was used to measure suggestibility of the participants.

Procedure

Individually, each participant was given an opportunity to read and ask questions about the implied consent form, and was then asked to enter the procedure room where the interviewer was waiting. The interviewer was different depending on the group the participant was assigned to. The control group participants were exposed to a female interviewer in street clothes who demonstrated little authority over the participants, while the experimental participants were exposed to a female interviewer dressed in army fatigues who demonstrated a higher level of authority over the participants. The participant was greeted by the interviewer and then asked to answer some questions to access her memory. After answering the questions the participant was asked to listen to a story on tape and was instructed to pay close attention because she would be asked to recall the information. The story on tape was played, after which the participant was asked to repeat everything she could remember. Twenty questions about the story were then asked and the participant was told to answer to the best of her ability. After all twenty questions were answered the interviewer indicated to the participant that she had made a number of errors and therefore must answer the questions again. The participant was also told to be more accurate the second time and the questions were asked again. After completion of the second round of questions the interviewer left the room and one of the investigators entered to debrief the participant.

Results

The participants in the control group (no perceived authority) showed a moderate level of suggestibility (M= 12.44, SD= 5.83). The experimental group also demonstrated a moderate level of suggestibility (M= 11, SD= 6.18) with the mean slightly lower than that of the control group. This relationship can be seen in Figure 1. A one-tailed t-test showed no significance, t (17) = -0.52, p = .30 (one-tailed).

Discussion

The participants in both groups had similar scores, with the control group scoring slightly higher on the suggestibility scale than the experimental group. There are several variables that could have caused these results. One is the limited number of participants in the study. Another is the difference in interviewers; although they were both female and around the same age, their differing personalities could have affected the results. The participants in the control group could have identified with their interviewer and therefore tried harder to please her by giving "more accurate" answers to the questions during the procedure; whereas the experimental participants may have felt offended by their interviewer's unfriendly demeanor and therefore refused to "be more accurate" for her.

In opposition to this theory, the interviewers could have failed to produce a difference between their demeanors. Bain, Baxter & Fellowes (2004) looked at suggestibility as a function of demeanor of the interviewer, and the interviewers' ability to vary their demeanors. The participants rated their interviewer and these results showed that the "friendly" interviewer was rated as friendly, and respectful, among other traits, and the "abrupt" interviewer was rated as firm, stern, and authoritative, among other traits. In this study, participants in the friendly group scored significantly lower on suggestibility than those in the abrupt group. These results support the current hypothesis and suggest that perhaps there was not sufficient difference between the demeanors of the two interviewers.

An additional variable is if each participant was familiar with the military, since the authoritative interviewer was dressed in military fatigues. If participants were familiar with the military, her attire may not have been affective in giving off the impression of authority. There were three participants in the control group with familiarity with the military and six in the experimental. It is very possible that these six participants did not yield to the interviewer's authority because they did not feel threatened by it. Although in the current study the results do not support the hypothesis, it is possible that if the variables described above were controlled in another study, supportive results could be found.

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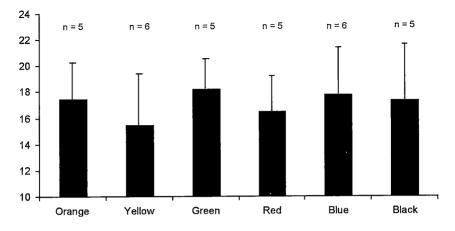


Figure 1. Means and standard deviations of the control and experimental groups.