Effect of Emotions on Memory

3613

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Abstract
The aim of this experiment was to find out whether emotion has an effect on memory. Each participant was put in an environment that would either elicit negative, positive, or neutral emotions. They were then each asked to study some information and were given a test on it later. Each participant went through all three environments and was tested three times. We wanted to see which emotion made a person be able to remember information more successfully.
INTRODUCTION

There have been several studies done in the past years on emotion and what effect it has on memory. Rémy Versace and Marylène Rose (2007, May 21) conducted a study in which they discovered that a person was better able to encode pictures and a sound when in a negative state compared to a neutral state. In Versace and Rose’s experiment they quoted the experiment done by:

Bower (for example 1981, 1994) initially investigated the beneficial effect of an emotional context on memorization and proposed an explanation which linked this effect with the attentional mechanisms: information with a high emotional content captures the attention more and is therefore remembered better than non-emotional information (see also, Christianson & Loftus, 1991; Christianson, Loftus, Hoffman & Loftus, 1991; Hamann, Ely, Grafion & Kilts, 1999).

Otani, Libkuman, Widner Jr. and Graves (2007, January) did a study on emotional memory of young adults versus older adults. They discovered that “…emotional arousal produces a similar effect for younger and older adults; that is, emotional arousal enhanced memory for central detail in younger and older adults.” These experiments created my interest in the topic of what effect emotion has on memory. This is what brought on the idea that maybe environments that created either a negative or a positive feeling would increase a person being able to store information in their memory. I would, of course, have a neutral setting that would be the control to see whether the emotions the participant felt really was the reason they were able to remember more. I predicted that negative emotions would cause a person to remember more, because the negative emotions make the participant want to only focus on what they are studying to get everything else off their mind.
Method

Participants

I tested 30 students from the history department at Evergreen Community college in San Jose. There were 15 female students and 15 male students. Each student had a grade point average of 2.0 to 3.0, which is the average of a normal college student. All were native English speakers.

Material

Participants were tested in 3 different rooms not affected by outside disruptions. The first room was cheerfully decorated and contained snacks, a stereo, walls decorated with paintings, a table with 10 chairs, a couch, and a nice view of a park. The second room was neutral and contained a table with 10 chairs, a plain white wall, and snacks. The third room was negatively decorated and contained dark brown walls, paintings of death and destruction, inedible food, a view of a cemetery, and funeral music playing. Participants studied for 3 tests requiring them to memorize dates and events from 1940 to 1969. Each test had 30 questions, with 10 questions for each decade in random order.

Procedures

The participants were put 10 at a time in each of the rooms for two hours to study. There would be 5 females and 5 males in each group to balance for gender. The experimenters told each of the participants they had 2 hours time to study and then they would take a test. The participants were not allowed to help each other with trying to memorize the information for the tests. After two hours, all the different groups took the first test, and the results were tallied to see how each group scored compared to the other. On the second day, each group was placed into a different setting and once again had two hours time to study for the new test. After the
test, the results were tallied again compared to the score from the previous day. On the third and final day, they went into the last room they hadn’t yet gone into and studied for two hours. Then the tests were again tallied and compared with the results of the first two tests from each group.
References

