Study on methods of memorization

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Abstract

Memory is formed in the hippocampus of our brains and is something that has been researched over the last century. Many different encoding and retrieval methods can impact the way our memories are processed and stored in our long-term memory. This study evaluates the effectiveness of several strategies in order to enhance both short-term and long-term memory. We test techniques such as semantic association, mnemonic devices, and the method of loci, using three separate test groups, against a control group which utilizes a shallow processing technique such as re-reading. After gaining informed consent, briefing the participants, and following ethical guidelines, we used a random sample of 70 Manalapan High School seniors, randomly assigned to four equally sized experimental groups, in order to execute our study. Each participant was provided a list of 20 words, given 5 minutes to memorize them, a 5 minute break, and then 2 minutes to recall the 20 terms. Our dependent variable was the number of words recalled immediately after (testing short-term memory) and the number of words recalled after a 48-hour period has elapsed (testing long term memory). Using these experiments, we also observed the mean recall score per group, percentage of information retained after 48 hours, and used analysis of variance (ANOVA) to compare differences across groups. Using this data, we hope to prove our hypothesis that Deep Encoding strategies (the three test groups), specifically method of loci, will outperform shallow-processing strategies (our control group).

Index Terms

psychology, memory, recall, association