# Going Up in Vapor; The Effects of Vaping on Mental Capacity

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This study was conducted to evaluate the effects of vaping in teenagers/adolescents on mental acuity. To test this, a mock Stroop Test was implemented and was used to test three different groups; the test is designed to give the brain a mismatch of information and uses multiple parts of the brain in order to evaluate overall . The Control Group consists of non-vape users; the infrequent group consists of participants who have vaped before, but not frequently; the Frequent Group consisted of participants who did vape on a daily, weekly, or monthly basis for an extended period of time. Another facet of the experiment was a crucial survey that was used to evaluate the data, ensure there was not a significant skew that could influence results, and look for contributing factors. Before experimentation, it was predicted that there would likely be a decline in mental acuity for participants who had vaped previously due to the effects of nicotine as well as other chemicals found in the vapor of electronic cigarettes and/or vapes. The reason this study was conducted was because of the outbreak of the teenage vaping epidemic that reached its peak in 2019, after a large increase of vape use likely due to advertising that inadvertently targeted younger audiences as well as flavors that would appeal to teenagers. The hypothesis was affirmed because of a statistically significant difference between the group of non-vape users and frequent vape users showing a correlation between vape use and a decline in mental capacity.

**Awards Won:**