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Color Confusions

My project was designed to test if a conflict occurs between the left and right sides of the brain when reading a color-based word test. I created six test group categories: four age-based, foreigners, and mentally disabled. The subjects read two pages of words. On the first test, the word color is the same as the ink color used to write it (“red” written in red ink). This is the “regular test”. On the second test, the word color is different than the ink color used to write it (“red” written in green ink). This is the Stroop Test. I recorded the time for the subjects to read all words on the regular test and then the Stroop test. I calculated the averages of each category of subjects and then compared the regular and Stroop test averages. The times recorded on the Stroop test were greater than the regular test, indicating conflict in the brain between the word itself and the ink color. There might have been a conflict in the brain because reading uses the right side of the brain versus perceiving color which is done on the left side of the brain, making it harder to comprehend a word when both sides of your brain must work together. When this happens, a conflict occurs creating a delayed response. My project was significant with practical applications. For example, a color-coded computer display or an instrument panel (car gauge, etc.) can be designed so people are not confused by words mixed with colors.