Conclusion:

My data and statistical analysis offer significant proof that there is a connection between color and short term memory. Through the t-testing, I was able to offer a significant amount of proof that there is a connection between colors and the mean score that was caused by each. For example, I was able to prove that there is a significant difference between the colors blue and orange and that the scores for each color were caused by chance, only by the color. The same results can be seen between yellow and orange, and between orange and green. This proves that color does impact the short term memories of humans. Going back to my prediction, I was proved mostly right, with the actual order being orange, which had the highest results, followed by blue, then yellow and lastly green, which had the worst results. Although many biases could have slipped into my experimentation, I did my best to eliminate as many biases as possible. In my testing, I was unable to reject all of my null hypothesizes, and if I was given the chance to repeat my experimentation I would have done things differently (see recommendations for details). Contributing factors such as time, place, and the number of volunteers can drastically alter experimentation. I would have liked to have a larger sample size in order to make the experiment increasingly reliable. The setting of the experiment was also hard to keep neutral, as different people get distracted by different things. The room that I chose to do my experimentation was perhaps not the best of places as people were constantly entering and leaving the room or talking in the background. I would have conducted the experiment in a totally quiet room with no surrounding noise whatsoever. “Time is of the essence” and for my experiment it certainly was! I would have liked to have allowed for more time between showing the flashcards and having the volunteers write down the words. This would have made my experiment even more reliable. I hope that someday, my experiment will motivate further discoveries concerning the affects that colors have on our learning abilities.

Recommendations:

No experiment is perfect, not even mine. That is why, if someone wishes to repeat or perhaps improve my experiment, I would recommend that that person should take the following advice;

1. Test a larger sample size. Remember…the bigger the better. The more data that you have, the more reliable your analysis will be.
2. Test students of all grade levels. This will offer a better understanding of how color truly does affect short term memory.
3. Allow more time to pass between the showing of the cards and telling the volunteers that they can start writing the words down. This will give the students more time to either lose or retain words.
4. Find a quiet room to conduct the experiment. Silence is key!
5. If you choose to work with a partner, make sure that it is someone that you can trust and that you are compatible with. Take my advice seriously. I know what I am talking about !
6. Do not procrastinate. Time is a non-renewable source…don’t waste it!