

Angelina Sherba

Summer Internship Summary

For my internship I worked at Speed Pursuit in Tulleytown, Pennsylvania. I worked with my personal trainer Tony Incollingo. He is a certified personal trainer and has trained many teams, student-athletes, and professional athletes.

Coach Incollingo helped me conduct an experimental design where I tested how vision training affected student-athlete's reaction time. To start we had eight boys ages 8-11 in front of blinking lights and have to run to which light blinks then quickly find the next one and run to it. For one test six lights were set in a straight line one foot apart. There was 1.5 seconds between one light flashing to another. The boys would run up and put their foot over the light before looking for the next light and running to that one. We counted how many flashes they would get out of 15. For the next test the lights were set up in a circle each six feet away from the center point each three feet away from the next light. This time there was 2.5 seconds between each flash and again we counted how many flashes they got out of 15. I have included a data set from each test at the end of the summary.

After the tests for the next few weeks Coach Incollingo and I put the boys through vision testing. This included having a poster on the wall with numbers in a random order. One of the boys would stand in front and we would drop a ball in front of them and call out a number. They would have to catch the ball, run to the poster, find the number, and touch the ball to it. Another was having flashing lights of different color in

their peripheral vision and they would have to say what color it is. Another was having them focus on something right in front of them for 20 seconds then at something twenty feet away for 20 seconds. This helps train the eyes to focus on multiple things at once while also zoning in on one thing.

After the training we again conducted the two tests to see if the amount of the flashes they got increased. Again I included a data report of the results at the end. The numbers did increase, but I think I would need to do more trials and have a larger amount of participants to see how much the vision training helped.

This internship has taught me so much. How to work with younger children and how to be a mentor. I wanted to do this experiment because I want to go to optometry school and learning how the brain and eyes work was really interesting to me. I think it would be something I would want to continue working with. The past few months I think have made me grow up a lot. My internship gave me a sense of work that I needed. It was a different type of learning that I have never experienced before and I really enjoyed it.

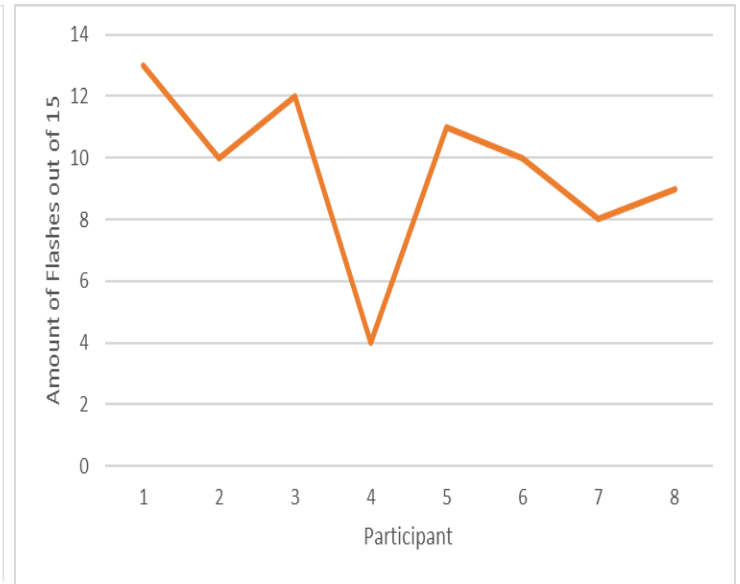
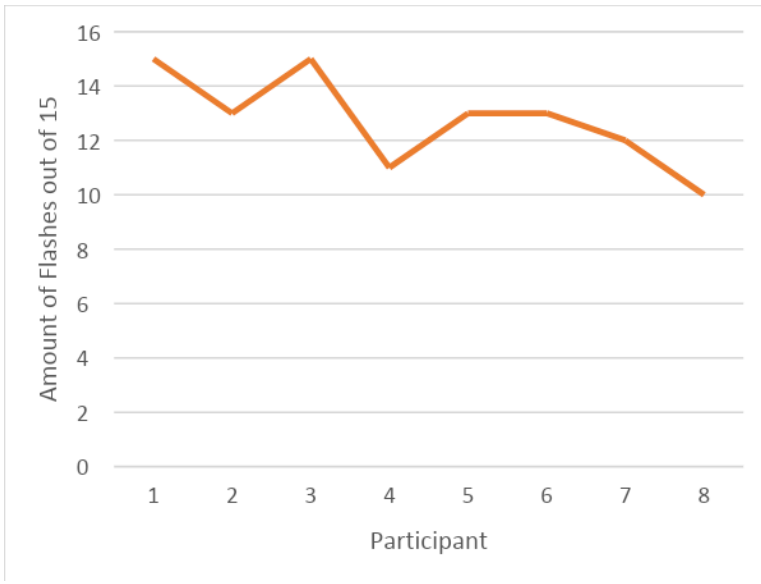


Figure 1. Pre-training tests. The figure on the left shows the data for the straight line testing. The right figure in the testing for the circle testing. Both are before vision training.

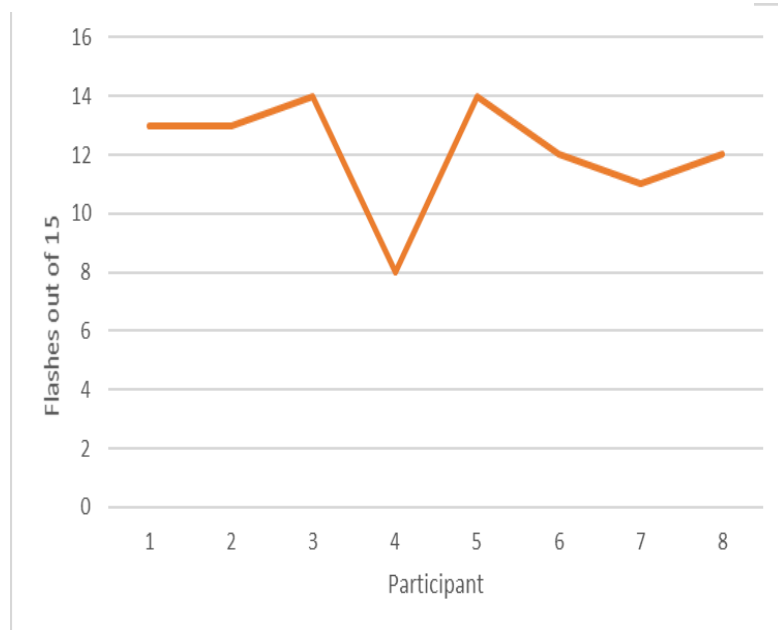
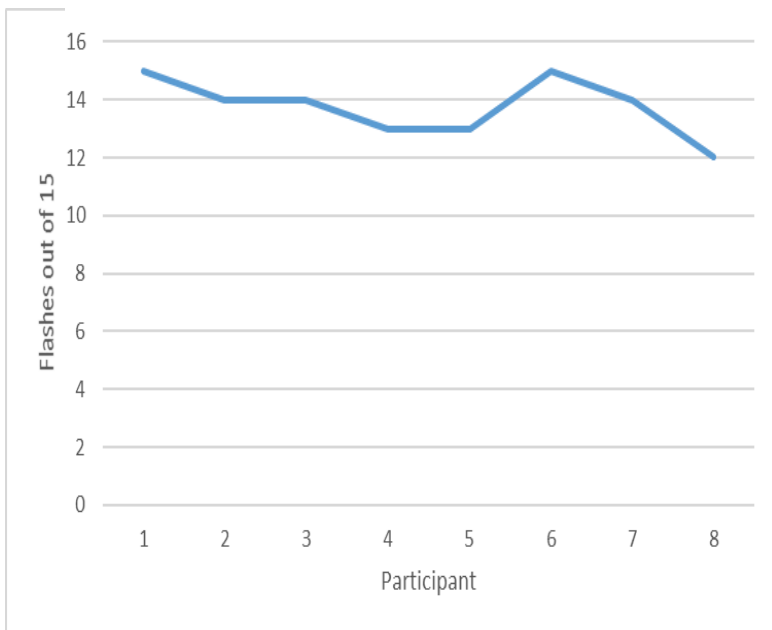


Figure 2. Testing after training. The figure on the left is for the straight line testing and the right was for the circle testing.