

CALIFORNIA STATE SCIENCE FAIR 2011 PROJECT SUMMARY

Name(s)

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Project Number

S0406

Project Title

The Proficiency of a Left Hander's Right Hand vs. the Proficiency of a Right Hander's Left Hand

Abstract

Objectives/Goals

My objective was to determine if left handed people were more proficient with their right hand than right handed people with their left hand.

Methods/Materials

30 left handed people and 30 right handed people were tested for the experiment.

2 pieces of paper were given to each test subject with 400 circles total. The test subjects wrote down whether they were left or right handed at the top of the paper along with what hand they started with. (half dominant, half recessive). Using a stopwatch, the test subjects were given 30 seconds to cross out as many circles as they could, going row by row with whatever hand they were assigned to start with. After 30 seconds had passed, the stopwatch was stopped, and the subjects then switched to their next hand. They skipped a line from where they had stopped crossing out circles from the first trial, and again, began to cross out as many circles as they could within 30 seconds when the stopwatch had started. The entire process was repeated two more times until the test subjects had their dominant hand tested 3 times and their recessive hand tested 3 times. The average amount of circles crossed were put in a ratio of dominant hand to recessive hand.

Results

Left handed people had a lower dominance ratio(the closer the ratio to 1, the better)and less percent deviation than right handed people.

Conclusions/Discussion

Based on these results, it was suggested that left handed people were more proficient with their right hand than right handed people with their left hand since they had a lower ratio and less precent deviation than right handed people.

Summary Statement

To determine if left handed people are more proficient with their right hand than right handed people with their left hand.

Help Received

Dad helped put board together; Teacher helped with the design of experiment.