

### **Lab Report #5- Visual and Auditory Response Times**

#### **Purpose**

The purpose of this lab is to be able to test and see reaction times for both visual and auditory stimuli and record the time in milliseconds, repeating 10 times for each will give an average reaction time that will show how long it takes for you to react to visual and auditory stimuli individually. This will also show if you learn more efficiently through audio or visual. And finally, how to put error bars onto a graph.

#### **Procedure**

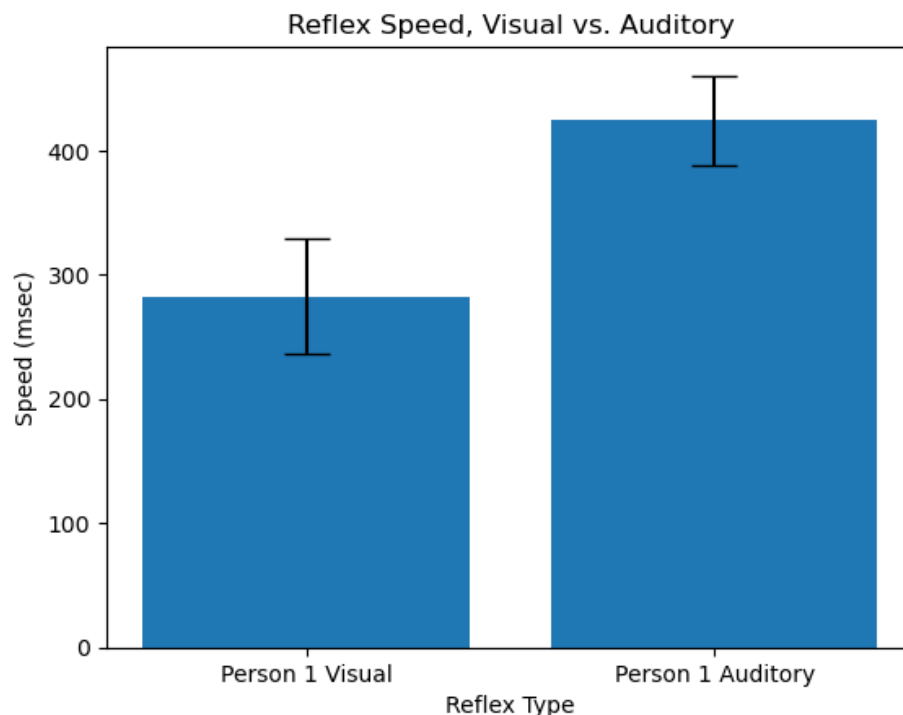
##### **Auditory Reaction time-**

- 1) Follow the link to the audio reaction testing website
- 2) Prepare to start the test
- 3) When the audio prompt is heard, quickly press the spacebar/click the screen to get reaction time (in milliseconds)
- 4) Record the given time and repeat 10 times to get auditory reaction time

##### **Visual Reaction time-**

- 1) Follow the link to the visual reaction testing website
- 2) Prepare to start the test
- 3) When the visual prompt is observed, quickly press the spacebar/click the screen to get reaction time (in milliseconds)
- 4) Record the given time and repeat 10 times to get visual reaction time

#### **Results**



<u>Visual Response time(personal)(ms)</u>	<u>Auditory Response time(personal)(ms)</u>
208	426
196	398
203	373
275	421
215	411
177	416
259	488
184	397
225	434
205	480
Average: 214.7	424.4

**Visual(V) and Auditory Response time averages for the entire group (ms)**

<u>Visual</u>	300.6	214.7	292.2	265.1	293.2	386.3	244.5	263.7	331.3	315.4
<u>Audio</u>	574.7	424.4	378.5	235.9	290.4	235.3	186	232.8	185.6	259.9

**Discussion**

From the data I can see that I had a slower reaction time in auditory, with an average of 424.4 milliseconds, compared to the response time for visual which was at 214.7 seconds, almost half of the response time when compared to auditory, I find those results interesting because usually auditory response is faster due to it being closer to the brain. According to Professor Okerbloom, having a shorter response time for visuals would imply that I'm more effective at learning using visual or auditory.

**Conclusion**

In conclusion, although I have a faster average visual response time, audio should be faster in normal circumstances. Looking at the group data shows that on average most people's auditory response time is faster than their visual, this trend clearly displays that auditory stimuli reach the cortex in the brain faster than visual stimuli.