Isabel Ramos-Cervantes BIOL 125 - 20895 Lab Day: Thurs 09/07/2023

Physiology Lab Report #5-Electroencephalography & Reaction Time

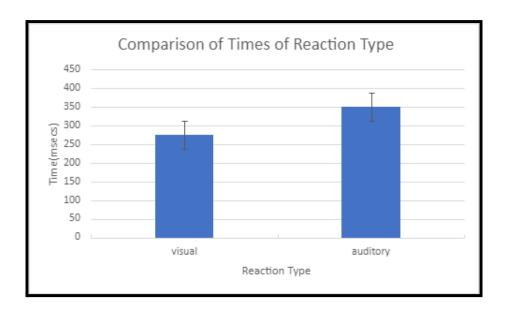
Purpose

In this lab we studied how quickly our own reflexes respond to stimuli. The goal of this
experiment was to compare our reaction times and notice that it varies for everyone. This lab
allows us to understand how the speed of nerve impulses and synapses affect our complex
reflexes

Procedures

- The materials I used in this lab were:
 - Laptop
 - Pencil & Paper (to record the times)
 - Google Sheet (to compare data): https://docs.google.com/spreadsheets/d/1MB1ggbDg-0aUO2owdKYVHuUjEoCAA7ct au0ySVu9h7w/edit#gid=0
 - Visual reaction time website: https://humanbenchmark.com/tests/reactiontime
 - Auditory reaction time website: https://playback.fm/audio-reaction-time
- 1. Gather materials and necessary equipment.
- 2. Access the visual reaction time website and follow the instructions. When the screen goes from red to green Click anywhere on the screen. Record the ms it takes you to react. Continue this process until you have done and recorded 10 reaction times.
- Then, access the auditory reaction website and follow the instructions. Listen carefully, when
 you hear a sound press the spacebar on your keyboard and record your reaction time.
 Continue this process until you have done and recorded 10 reaction times.
- 4. Compare your data to that of your peers in the shared Google Sheet. Using your data and the data of a few other classmates, create a graph to compare the results (be sure to include the error bars).

Results



Discussion

• In this lab we learned how visual and auditory reflexes work and how our bodies responded to the stimuli. For example, in the visual reaction test it was interesting to see how I thought I would respond a lot faster than I did. In the auditory test, I was surprised to see that my reflexes respond and process sound more quickly. This lab was also cool because I was able to find some people with similar times as me and some with opposite times. It is nice to see how it varies for everyone and how we might think we respond faster to one stimulus, but we don't.

Conclusion

• The basis of this experiment was for us to understand how visual and auditory processing works. In the case of the reaction tests, we were able to see and understand how our nerve impulses and synapses play a role in our reactions to the auditory/visual impulses. The lab allows us to compare the diversity of reaction times among other people to better understand the way reflexes work and how different they can be for everyone.