Expedition: Human-Dog EEG Research, Cambridge, UK



This summer, I participated in a research expedition at Cambridge University, contributing to a pioneering Human-Dog Electroencephalography (EEG) project in collaboration with Queen Mary University. The project aimed to explore the existence of brain synchrony between humans and dogs, making it an exciting venture into cognitive neuroscience, a field I am deeply passionate about.

My primary motivation for joining this project was to enhance my practical research skills. Although I had prior experience working with human EEG systems, this project provided me the opportunity to work with a Bluetooth EEG system designed specifically for dogs. I learned how to apply the system to both dogs and their owners, expanding my technical repertoire. Additionally, I gained firsthand experience with the entire experimental process, from obtaining consent to data collection and troubleshooting EEG systems.

Working with non-human subjects presented unique challenges. The Bluetooth system frequently lost connection, delaying data collection, which made me realize that the planning stage of an experiment and the actual data collection is very different. There will always be difficulties that we were unable to predict when we devise an experiment, which is why being flexible and creative is also an integral skill to have for psychological research. Stabilizing the EEG electrodes onto the dogs also became significant problem, as the electrodes often became dislodged due to the dogs' movements. After multiple attempts, we were able to develop a stabilization system using leashes and pet bandages that was both effective and safe for the dogs. While the original dog EEG system did not include these steps, I was able to learn how to adapt and create unique solutions to problems in our research.

One of the most valuable skills I acquired during this internship was learning how to effectively interact with research participants. My supervisor, a postdoctoral researcher with extensive practical experience, demonstrated the importance of balancing professionalism with empathy. Initially, I was very pre-occupied with giving instructions to the dog owners and explaining the more technical aspects of the experiment, that I ignored the social aspect. I didn't realize that as a researcher, while I was in a position of authority, I still needed to engage with my participants and ensure that I could communicate in a clear and comfortable manner. Therefore, throughout my expedition, I learned how to balance making small talk with my participants and communicating instructions. I was later able to apply this to my own EEG research project over the summer where my participants gave me feedback on how I was amicable research to work with.

I am very grateful to have been able to go on this expedition and deepen my understanding of cognitive neuroscience techniques and enhance my interpersonal skills as a psychologist.