1. **Challenges & Delays**

In pursuing this project, we have addressed a few materialized challenges. After having recruited about 87.5% of our sample, we exhausted our subject pools and had a brief period without additional recruits while we transitioned to a new strategy. We expanded recruitment efforts through flyering, which revitalized recruitment and allowed us to acquire the last subjects of our sample in late 2023. A second challenge came within our analytic strategy, as we initially failed to find any brain-behavior relationships present in the data – even when using simulated neural data which definitively should have contained some correlations. What we discovered through literature review was that we failed to account for spontaneous neural fluctuations, which disrupt any correlative analysis and which long-form video fMRI is especially susceptible to. There are many analytic techniques that one could use to adjust for this effect, but we settled on the application of dynamic sliding windows due to their popularity (i.e., easy to compare to other studies), flexibility (i.e., meets the assumptions of many types of data), and simplicity (i.e., relatively easy to understand and explain). Dynamic sliding windows effectively analyze correlations in smaller windows of time, rather than the entire timecourse, and these windows iteratively shift until the entire timecourse has been covered and a summary correlative value can be calculated. To apply dynamic sliding windows, I developed a series of functions in R which accept any two numeric arrays and outputs the individual and summary correlative values using a spearman-rank approach. This fixed our issue and the final developed functions have been made publicly available via Github. As we prepare to submit our manuscript first manuscript and our second manuscript is in preparation, future delays and complications may stem from reviewer challenges to our methods or analyses as well as any additional analyses that we may conduct to address reviewer concerns. Another potential challenge may arise in our pursuit of our follow-up study, as we may again encounter difficulties in completing recruitment towards the end of the study. To anticipate delays, we have secured new sizeable lists of potentially eligible and demonstrably reliable subjects who had participated in collaborators’ studies and who consented to contact for future studies. We plan to pull from this source in conjunction with our standard advertisement plans to maximize recruitment.