Motion Summary 6/10/22

* 83 children have had an MRI
  + 2 only completed structural scan
  + 3 children need to be processed
* 78 children have fully processed data

Criteria used to censor volumes:

1. First or second volume (“dummy scans”)
2. Framewise displacement of volume > 1
3. Framewise displacement on the next volume > 1
4. Volume was detected by fmriprep as a steady state outlier

Number of subjects (out of 78) with at least 2 or 3 runs, if excluding runs with >20% or 25% of TRs censored across all food blocks\*

|  |  |  |
| --- | --- | --- |
|  | At least 2 runs | At least 3 runs |
| >20% censored | 64 | 55 |
| >25% censored | 70 | 60 |

* \*if any analyses will be done with the office supplies, this would need to be modified to include office supply blocks

Things to look into / next steps:

1. What is the rationale for censoring the previous TR if a TR has too much motion? – this is automatically implemented by AFNI’s AFNIproc. Is it necessary?
2. Do we need to include an exclusion criteria for root‐mean‐square realignment estimates (RMS movement) exceeding 1.5 mm for the entire session? (or run?)
   1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3895106/>
3. Do motion exclusion by BLOCK
   1. Instead of including good runs, include good blocks
      1. Keep a block if no more than 3 TRs are censored within the block (i.e., at least 6/9 good TRs)
      2. First step will be generating a spreadsheet that shows how many good TR’s each child has for each condition per run
   2. In analyses, can control for the # of blocks in each condition
4. How many runs/blocks of conditions do we need? Is 2 okay, or do we need 3?

Meeting 6/10/22

* Kathleen says push through preliminary results with at least 2 runs (20 or 25%) for the first 2 aims of the grant
  + Alaina suggests running the analyses with only the 55 with at least 3 good runs as well, just to be sure its similar
* Once I get the onsets changed, we can share the data with steve – after next week