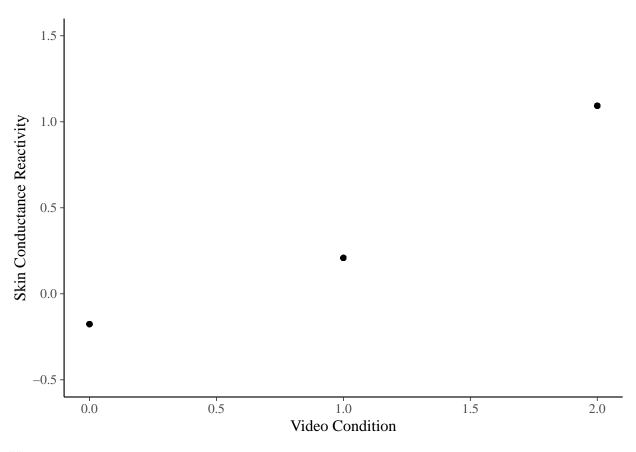
## Midterm 1

Enxhi Buxheli 3/7/2019



```
##
## SAMPLING FOR MODEL 'continuous' NOW (CHAIN 1).
## Chain 1:
## Chain 1: Gradient evaluation took 0.00021 seconds
## Chain 1: 1000 transitions using 10 leapfrog steps per transition would take 2.1 seconds.
## Chain 1: Adjust your expectations accordingly!
## Chain 1:
## Chain 1:
## Chain 1: Iteration:
                           1 / 2000 [ 0%]
                                             (Warmup)
## Chain 1: Iteration:
                        200 / 2000
                                   [ 10%]
                                             (Warmup)
                        400 / 2000
                                             (Warmup)
## Chain 1: Iteration:
                                   [ 20%]
## Chain 1: Iteration:
                         600 / 2000 [ 30%]
                                             (Warmup)
## Chain 1: Iteration:
                        800 / 2000 [ 40%]
                                             (Warmup)
## Chain 1: Iteration: 1000 / 2000
                                            (Warmup)
## Chain 1: Iteration: 1001 / 2000
                                    [ 50%]
                                             (Sampling)
## Chain 1: Iteration: 1200 / 2000 [ 60%]
                                             (Sampling)
## Chain 1: Iteration: 1400 / 2000 [ 70%]
                                             (Sampling)
## Chain 1: Iteration: 1600 / 2000 [ 80%]
                                             (Sampling)
## Chain 1: Iteration: 1800 / 2000 [ 90%]
                                             (Sampling)
## Chain 1: Iteration: 2000 / 2000 [100%]
                                             (Sampling)
```

```
## Chain 1:
## Chain 1: Elapsed Time: 0.067355 seconds (Warm-up)
                           0.062415 seconds (Sampling)
## Chain 1:
## Chain 1:
                           0.12977 seconds (Total)
## Chain 1:
##
## SAMPLING FOR MODEL 'continuous' NOW (CHAIN 2).
## Chain 2:
## Chain 2: Gradient evaluation took 2.3e-05 seconds
## Chain 2: 1000 transitions using 10 leapfrog steps per transition would take 0.23 seconds.
## Chain 2: Adjust your expectations accordingly!
## Chain 2:
## Chain 2:
## Chain 2: Iteration:
                          1 / 2000 [ 0%]
                                            (Warmup)
## Chain 2: Iteration: 200 / 2000 [ 10%]
                                            (Warmup)
                        400 / 2000 [ 20%]
## Chain 2: Iteration:
                                            (Warmup)
## Chain 2: Iteration: 600 / 2000 [ 30%]
                                            (Warmup)
## Chain 2: Iteration: 800 / 2000 [ 40%]
                                            (Warmup)
## Chain 2: Iteration: 1000 / 2000 [ 50%]
                                            (Warmup)
## Chain 2: Iteration: 1001 / 2000 [ 50%]
                                            (Sampling)
## Chain 2: Iteration: 1200 / 2000 [ 60%]
                                            (Sampling)
## Chain 2: Iteration: 1400 / 2000 [ 70%]
                                            (Sampling)
## Chain 2: Iteration: 1600 / 2000 [ 80%]
                                            (Sampling)
## Chain 2: Iteration: 1800 / 2000 [ 90%]
                                            (Sampling)
## Chain 2: Iteration: 2000 / 2000 [100%]
                                            (Sampling)
## Chain 2:
## Chain 2: Elapsed Time: 0.064552 seconds (Warm-up)
## Chain 2:
                           0.064635 seconds (Sampling)
## Chain 2:
                           0.129187 seconds (Total)
## Chain 2:
##
## SAMPLING FOR MODEL 'continuous' NOW (CHAIN 3).
## Chain 3:
## Chain 3: Gradient evaluation took 1.8e-05 seconds
## Chain 3: 1000 transitions using 10 leapfrog steps per transition would take 0.18 seconds.
## Chain 3: Adjust your expectations accordingly!
## Chain 3:
## Chain 3:
## Chain 3: Iteration:
                          1 / 2000 [ 0%]
                                            (Warmup)
## Chain 3: Iteration: 200 / 2000 [ 10%]
                                            (Warmup)
## Chain 3: Iteration: 400 / 2000 [ 20%]
                                            (Warmup)
## Chain 3: Iteration: 600 / 2000 [ 30%]
                                            (Warmup)
## Chain 3: Iteration: 800 / 2000 [ 40%]
                                            (Warmup)
## Chain 3: Iteration: 1000 / 2000 [ 50%]
                                            (Warmup)
## Chain 3: Iteration: 1001 / 2000 [ 50%]
                                            (Sampling)
## Chain 3: Iteration: 1200 / 2000 [ 60%]
                                            (Sampling)
## Chain 3: Iteration: 1400 / 2000 [ 70%]
                                            (Sampling)
## Chain 3: Iteration: 1600 / 2000 [ 80%]
                                            (Sampling)
## Chain 3: Iteration: 1800 / 2000 [ 90%]
                                            (Sampling)
## Chain 3: Iteration: 2000 / 2000 [100%]
                                            (Sampling)
## Chain 3:
## Chain 3: Elapsed Time: 0.066755 seconds (Warm-up)
## Chain 3:
                           0.065921 seconds (Sampling)
## Chain 3:
                           0.132676 seconds (Total)
```

```
## Chain 3:
##
## SAMPLING FOR MODEL 'continuous' NOW (CHAIN 4).
## Chain 4:
## Chain 4: Gradient evaluation took 1.5e-05 seconds
## Chain 4: 1000 transitions using 10 leapfrog steps per transition would take 0.15 seconds.
## Chain 4: Adjust your expectations accordingly!
## Chain 4:
## Chain 4:
## Chain 4: Iteration:
                          1 / 2000 [ 0%]
                                            (Warmup)
## Chain 4: Iteration: 200 / 2000 [ 10%]
                                            (Warmup)
## Chain 4: Iteration: 400 / 2000 [ 20%]
                                            (Warmup)
## Chain 4: Iteration: 600 / 2000 [ 30%]
                                            (Warmup)
## Chain 4: Iteration: 800 / 2000 [ 40%]
                                            (Warmup)
## Chain 4: Iteration: 1000 / 2000 [ 50%]
                                            (Warmup)
## Chain 4: Iteration: 1001 / 2000 [ 50%]
                                            (Sampling)
## Chain 4: Iteration: 1200 / 2000 [ 60%]
                                            (Sampling)
## Chain 4: Iteration: 1400 / 2000 [ 70%]
                                            (Sampling)
## Chain 4: Iteration: 1600 / 2000 [ 80%]
                                            (Sampling)
## Chain 4: Iteration: 1800 / 2000 [ 90%]
                                            (Sampling)
## Chain 4: Iteration: 2000 / 2000 [100%]
                                            (Sampling)
## Chain 4:
## Chain 4: Elapsed Time: 0.063513 seconds (Warm-up)
## Chain 4:
                           0.068992 seconds (Sampling)
## Chain 4:
                           0.132505 seconds (Total)
## Chain 4:
##
## SAMPLING FOR MODEL 'continuous' NOW (CHAIN 1).
## Chain 1:
## Chain 1: Gradient evaluation took 2.7e-05 seconds
## Chain 1: 1000 transitions using 10 leapfrog steps per transition would take 0.27 seconds.
## Chain 1: Adjust your expectations accordingly!
## Chain 1:
## Chain 1:
## Chain 1: Iteration:
                          1 / 2000 [ 0%]
                                            (Warmup)
## Chain 1: Iteration: 200 / 2000 [ 10%]
                                            (Warmup)
## Chain 1: Iteration: 400 / 2000 [ 20%]
                                            (Warmup)
## Chain 1: Iteration: 600 / 2000 [ 30%]
                                            (Warmup)
## Chain 1: Iteration: 800 / 2000 [ 40%]
                                            (Warmup)
## Chain 1: Iteration: 1000 / 2000 [ 50%]
                                            (Warmup)
## Chain 1: Iteration: 1001 / 2000 [ 50%]
                                            (Sampling)
## Chain 1: Iteration: 1200 / 2000 [ 60%]
                                            (Sampling)
                                            (Sampling)
## Chain 1: Iteration: 1400 / 2000 [ 70%]
## Chain 1: Iteration: 1600 / 2000 [ 80%]
                                            (Sampling)
## Chain 1: Iteration: 1800 / 2000 [ 90%]
                                            (Sampling)
## Chain 1: Iteration: 2000 / 2000 [100%]
                                            (Sampling)
## Chain 1:
## Chain 1: Elapsed Time: 0.076132 seconds (Warm-up)
## Chain 1:
                           0.07554 seconds (Sampling)
## Chain 1:
                           0.151672 seconds (Total)
## Chain 1:
## SAMPLING FOR MODEL 'continuous' NOW (CHAIN 2).
```

```
## Chain 2:
## Chain 2: Gradient evaluation took 1.5e-05 seconds
## Chain 2: 1000 transitions using 10 leapfrog steps per transition would take 0.15 seconds.
## Chain 2: Adjust your expectations accordingly!
## Chain 2:
## Chain 2:
## Chain 2: Iteration:
                        1 / 2000 [ 0%]
                                            (Warmup)
## Chain 2: Iteration: 200 / 2000 [ 10%]
                                            (Warmup)
## Chain 2: Iteration: 400 / 2000 [ 20%]
                                            (Warmup)
## Chain 2: Iteration: 600 / 2000 [ 30%]
                                            (Warmup)
## Chain 2: Iteration: 800 / 2000 [ 40%]
                                            (Warmup)
## Chain 2: Iteration: 1000 / 2000 [ 50%]
                                            (Warmup)
## Chain 2: Iteration: 1001 / 2000 [ 50%]
                                            (Sampling)
## Chain 2: Iteration: 1200 / 2000 [ 60%]
                                            (Sampling)
## Chain 2: Iteration: 1400 / 2000 [ 70%]
                                            (Sampling)
## Chain 2: Iteration: 1600 / 2000 [ 80%]
                                            (Sampling)
## Chain 2: Iteration: 1800 / 2000 [ 90%]
                                            (Sampling)
## Chain 2: Iteration: 2000 / 2000 [100%]
                                            (Sampling)
## Chain 2:
## Chain 2: Elapsed Time: 0.0776 seconds (Warm-up)
## Chain 2:
                           0.07168 seconds (Sampling)
## Chain 2:
                           0.14928 seconds (Total)
## Chain 2:
## SAMPLING FOR MODEL 'continuous' NOW (CHAIN 3).
## Chain 3:
## Chain 3: Gradient evaluation took 1.5e-05 seconds
## Chain 3: 1000 transitions using 10 leapfrog steps per transition would take 0.15 seconds.
## Chain 3: Adjust your expectations accordingly!
## Chain 3:
## Chain 3:
## Chain 3: Iteration:
                          1 / 2000 [ 0%]
                                            (Warmup)
## Chain 3: Iteration: 200 / 2000 [ 10%]
                                            (Warmup)
## Chain 3: Iteration: 400 / 2000 [ 20%]
                                            (Warmup)
                        600 / 2000 [ 30%]
## Chain 3: Iteration:
                                            (Warmup)
## Chain 3: Iteration: 800 / 2000 [ 40%]
                                            (Warmup)
## Chain 3: Iteration: 1000 / 2000 [ 50%]
                                            (Warmup)
## Chain 3: Iteration: 1001 / 2000 [ 50%]
                                            (Sampling)
## Chain 3: Iteration: 1200 / 2000 [ 60%]
                                            (Sampling)
## Chain 3: Iteration: 1400 / 2000 [ 70%]
                                            (Sampling)
## Chain 3: Iteration: 1600 / 2000 [ 80%]
                                            (Sampling)
## Chain 3: Iteration: 1800 / 2000 [ 90%]
                                            (Sampling)
## Chain 3: Iteration: 2000 / 2000 [100%]
                                            (Sampling)
## Chain 3:
## Chain 3: Elapsed Time: 0.072518 seconds (Warm-up)
## Chain 3:
                           0.074669 seconds (Sampling)
                           0.147187 seconds (Total)
## Chain 3:
## Chain 3:
## SAMPLING FOR MODEL 'continuous' NOW (CHAIN 4).
## Chain 4:
## Chain 4: Gradient evaluation took 1.8e-05 seconds
## Chain 4: 1000 transitions using 10 leapfrog steps per transition would take 0.18 seconds.
## Chain 4: Adjust your expectations accordingly!
```

```
## Chain 4:
## Chain 4:
## Chain 4: Iteration:
                           1 / 2000 [ 0%]
                                             (Warmup)
                                             (Warmup)
## Chain 4: Iteration:
                         200 / 2000 [ 10%]
## Chain 4: Iteration:
                        400 / 2000 [ 20%]
                                             (Warmup)
## Chain 4: Iteration:
                        600 / 2000 [ 30%]
                                             (Warmup)
                                             (Warmup)
## Chain 4: Iteration:
                         800 / 2000 [ 40%]
## Chain 4: Iteration: 1000 / 2000 [ 50%]
                                             (Warmup)
## Chain 4: Iteration: 1001 / 2000 [ 50%]
                                             (Sampling)
## Chain 4: Iteration: 1200 / 2000 [ 60%]
                                             (Sampling)
## Chain 4: Iteration: 1400 / 2000 [ 70%]
                                             (Sampling)
## Chain 4: Iteration: 1600 / 2000 [ 80%]
                                             (Sampling)
## Chain 4: Iteration: 1800 / 2000 [ 90%]
                                             (Sampling)
## Chain 4: Iteration: 2000 / 2000 [100%]
                                             (Sampling)
## Chain 4:
## Chain 4:
             Elapsed Time: 0.077628 seconds (Warm-up)
## Chain 4:
                            0.071398 seconds (Sampling)
## Chain 4:
                            0.149026 seconds (Total)
## Chain 4:
```

## Not necessary at the moment

\*Label variables so tables look nice label var SCDBradVidManipAll\_mean "SCD (Mean) During Video" label var SCDBradSelfReport1\_mean "SCD (Mean) While Answering Questions" label var emo "Self-Reported Immigration Beliefs" label var CellID "Brader Condition (6 cells)" label var anxcond "Anxiety Manipulation Dummy" label var storycond "Story Condition" label var interaction "Story X Anxiety" label variable age "Age" label variable race "Race" label variable income "Income" label variable education "Education" label variable ideology "Ideology" label variable anxietyvid "Anxiety Manipulation" label variable relaxvid "Relax Manipulation" label variable anxcond "Anxiety Condition" label variable immigration "Immigration DV"

 $\label{eq:Figure 2} Figure \ 2 \quad \text{Means of Skin Conductance Reactivity by Video Condition ciplot SCDBradVidManipAll\_mean,by} \\ (anx cond 3)$ 

- Table 1 in paper
- (1) reg SCDBradSelfReport1 mean anxcond if anxcond3 ~=0
- (2) reg immigration storycond anxcond SCDBradSelfReport1\_mean if anxcond3 ~=0

## Figure 2

Want to obtain a confidence interval. Can do so by running a t.test(), but want to look into more effective ways.

## Figure 3