Process pre-election data

Read in data

Demographics and participant exclusion

Combine demographic info from Prolific and collected via survey

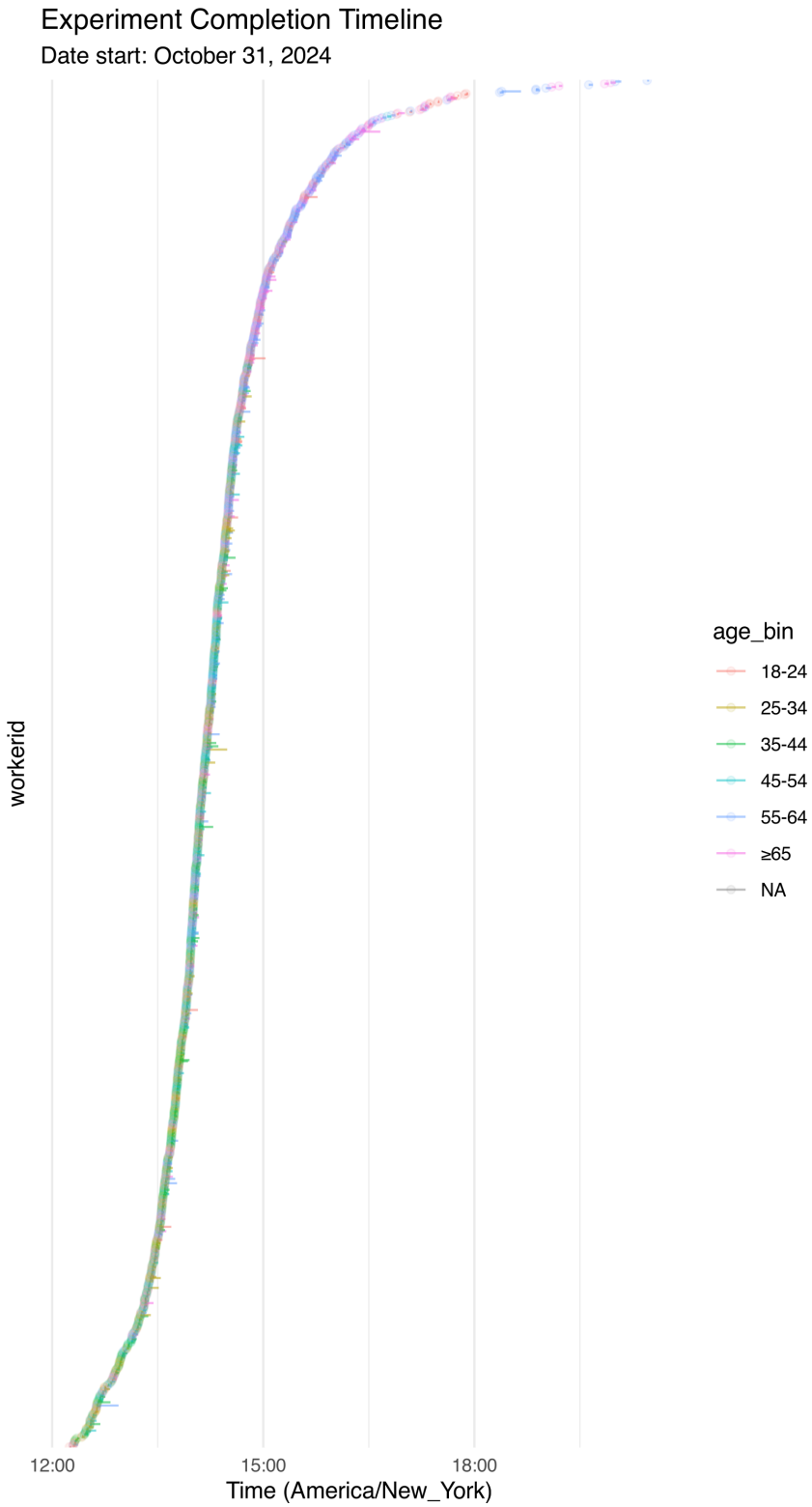
```
comp_q proportion correct: 0.9278481
```

```
`summarise()` has grouped output by 'item', 'q'. You can override using the
`.groups` argument.
```

```
# A tibble: 10 x 4
# Groups:   item, q [10]
    item q                                                  a     prop_correct
   <dbl> <chr>                                              <chr>        <dbl>
 1     1 Is holding a staff meeting the first thing the pres~ yes          0.965
 2     2 Does the president hope that outstanding issues wil~ yes          0.905
 3     3 Does the secret service only protect the president,~ no           0.963
 4     4 Does the president take the Oath of Office in priva~ no           0.914
 5     5 Did the president make any promises on the campaign~ yes          0.831
 6     8 Will the president have access to the nuclear launc~ yes          0.96
 7     9 Will the president be accountable for defending the~ yes          0.987
 8    10 Will the president make use of the presidential mot~ no           0.766
 9    11 Will the newly elected president receive a lot of a~ yes          0.988
10    12 Will the president be well-protected when traveling~ yes          1
```

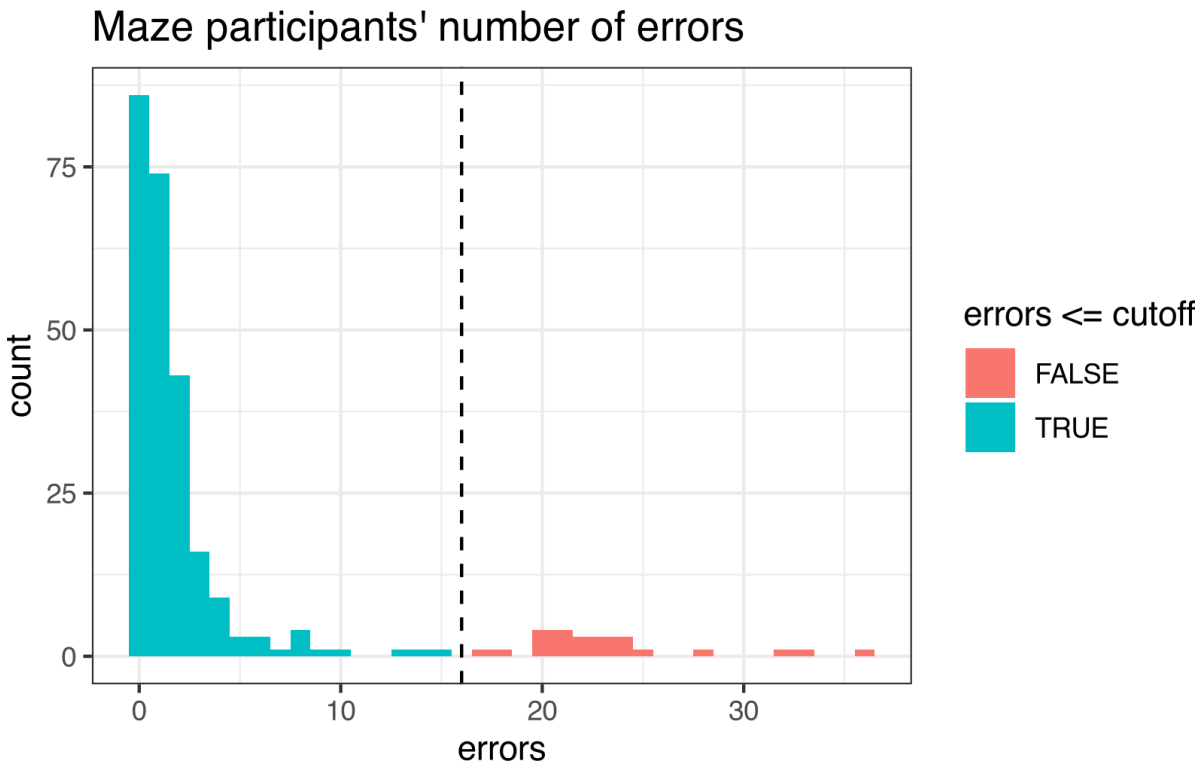
```
Joining with `by = join_by(prolific_id)`
```

```
# A tibble: 3 x 2
  workerid `paste(str_tail(prolific_id), collapse = ", ")`
     <dbl> <chr>
1     1736 ...eba783d1368047f3, ...c85dc40001621bc6
2     2483 ...9a13f898ae374552, ...1e21c10001e9e8ee
3     2155 ...79eda70001d5ae29, ...b16eb5011ccb2025

# A tibble: 3 x 2
  prolific_id         `paste(workerid, collapse = ", ")`
  <chr>               <chr>
1 ...bb9e0f0001acb414 2737, 2745
2 ...769a6ccb16f4a04d 1916, 1838
3 ...6cee07457d9c13dc 2362, 2371

Participant exclusion. Initial: 1279

After screening criteria: 1255

After removing duplicates: 1255
```


Experiment Completion Timeline
Date start: October 31, 2024
workerid
12:00
15:00
18:00
Time (America/New_York)
age_bin
18-24
25-34
35-44
45-54
55-64
≥65
NA

```
SPR: Proportion RTs excluded for being unreasonably fast or slow:  12%.

Joining with `by = join_by(workerid)`
fixed-effect model matrix is rank deficient so dropping 2 columns /
coefficients

Linear mixed model fit by REML ['lmerMod']
Formula:
log(rt) ~ 1 + (scale(log(gmean_rt)) + scale(word_number) + scale(nchar) +
    is_first_in_sent + comma + period)^2 + (1 | item)
   Data: spr

REML criterion at convergence: 16634.3

Scaled residuals:
    Min      1Q  Median      3Q     Max
-9.5047 -0.4883 -0.0583  0.4012 14.8527

Random effects:
 Groups   Name        Variance Std.Dev.
 item     (Intercept) 0.005776 0.076
 Residual             0.119709 0.346
Number of obs: 22756, groups:  item, 90

Fixed effects:
                                          Estimate Std. Error t value
(Intercept)                               6.140438   0.008487 723.508
scale(log(gmean_rt))                      0.379915   0.002725 139.415
scale(word_number)                       -0.045897   0.002570 -17.857
scale(nchar)                              0.032697   0.002514  13.005
is_first_in_sentTRUE                      0.141114   0.017827   7.916
commaTRUE                                 0.057630   0.013693   4.209
periodTRUE                                0.200650   0.010115  19.837
scale(log(gmean_rt)):scale(word_number)  -0.037679   0.002324 -16.210
scale(log(gmean_rt)):scale(nchar)         0.020776   0.002319   8.960
scale(log(gmean_rt)):is_first_in_sentTRUE 0.016791   0.010009   1.678
scale(log(gmean_rt)):commaTRUE            0.046594   0.012530   3.719
scale(log(gmean_rt)):periodTRUE           0.091295   0.009520   9.590
scale(word_number):scale(nchar)           0.002627   0.002527   1.039
scale(word_number):is_first_in_sentTRUE  -0.034335   0.011923  -2.880
scale(word_number):commaTRUE              0.017820   0.018656   0.955
scale(word_number):periodTRUE             0.076169   0.009231   8.251
```

```
scale(nchar):is_first_in_sentTRUE          -0.018889   0.028368  -0.666
scale(nchar):commaTRUE                     -0.042921   0.014225  -3.017
scale(nchar):periodTRUE                    -0.014353   0.011198  -1.282
is_first_in_sentTRUE:commaTRUE              0.170454   0.114571   1.488


Correlation matrix not shown by default, as p = 20 > 12.
Use print(x, correlation=TRUE)  or
    vcov(x)        if you need it


fit warnings:
fixed-effect model matrix is rank deficient so dropping 2 columns / coefficients


Removed 9% of participants who had number of errors larger than cutoff value.
```




```
Joining with `by = join_by(workerid)`
fixed-effect model matrix is rank deficient so dropping 2 columns /
coefficients
```

```
Linear mixed model fit by REML ['lmerMod']
Formula:
log(rt) ~ 1 + (scale(log(gmean_rt)) + scale(word_number) + scale(nchar) +
    prev_incorrect + is_first_in_sent + comma + period)^2 + (1 |      item)
   Data: maze

REML criterion at convergence: 8434.7

Scaled residuals:
    Min      1Q  Median      3Q     Max
-7.6516 -0.6528 -0.1474  0.4896 11.8679

Random effects:
 Groups   Name        Variance Std.Dev.
 item     (Intercept) 0.00804  0.08966
 Residual             0.11546  0.33980
Number of obs: 11915, groups:  item, 86

Fixed effects:
                                          Estimate Std. Error t value
(Intercept)                                6.877046   0.010414 660.392
scale(log(gmean_rt))                       0.183225   0.004145  44.202
scale(word_number)                        -0.044429   0.003570 -12.445
scale(nchar)                               0.057471   0.003507  16.389
prev_incorrectTRUE                         0.187331   0.023796   7.872
is_first_in_sentTRUE                      -0.006526   0.024257  -0.269
commaTRUE                                 -0.063380   0.018339  -3.456
periodTRUE                                -0.024431   0.013659  -1.789
scale(log(gmean_rt)):scale(word_number)   -0.012901   0.003155  -4.089
scale(log(gmean_rt)):scale(nchar)         -0.007757   0.003227  -2.404
scale(log(gmean_rt)):prev_incorrectTRUE    0.039494   0.016118   2.450
scale(log(gmean_rt)):is_first_in_sentTRUE  0.036152   0.013781   2.623
scale(log(gmean_rt)):commaTRUE            -0.008215   0.016627  -0.494
scale(log(gmean_rt)):periodTRUE           -0.004128   0.012958  -0.319
scale(word_number):scale(nchar)            0.020428   0.003509   5.821
scale(word_number):prev_incorrectTRUE     -0.031094   0.020369  -1.527
scale(word_number):is_first_in_sentTRUE    0.031381   0.015876   1.977
scale(word_number):commaTRUE              -0.022324   0.024553  -0.909
scale(word_number):periodTRUE             -0.037158   0.012493  -2.974
scale(nchar):prev_incorrectTRUE            0.082767   0.020492   4.039
scale(nchar):is_first_in_sentTRUE         -0.079030   0.036270  -2.179
scale(nchar):commaTRUE                    -0.082237   0.019475  -4.223
scale(nchar):periodTRUE                    0.007462   0.015662   0.476
```

```
prev_incorrectTRUE:is_first_in_sentTRUE   -0.485031   0.134447  -3.608
prev_incorrectTRUE:commaTRUE               0.117644   0.103639   1.135
prev_incorrectTRUE:periodTRUE              0.005412   0.093174   0.058
is_first_in_sentTRUE:commaTRUE             0.487831   0.146380   3.333


Correlation matrix not shown by default, as p = 27 > 12.
Use print(x, correlation=TRUE)  or
    vcov(x)        if you need it

fit warnings:
fixed-effect model matrix is rank deficient so dropping 2 columns / coefficients
```

Export