Experiment 5: some with time pressure

Before Exclusions

Number of participants tested:

```
## [1] 1200
```

Participants in each condition:

```
##
## all_QUD any_QUD  no_QUD
##     400     400     400
```

Exclusions

Non-unique participants (remove all attempts):

```
## [1] 1124
```

Participants whose native language is not english:

```
##     workerid      language
## 1         51         Dutch
## 2         53       Spanish
## 3         72
## 4         81     malayalam
## 5        118
## 6        122
## 7        123       Spanish
## 8        127
## 9        178    Vietnamese
## 10       214        Polish
## 11       231
## 12       273      Gujarati
## 13       348       chinese
## 14       440
## 15       462        Arabic
## 16       525       Spanish
## 17       594       Russain
## 18       615       Chinese
## 19       672       Italian
## 20       700       Turkish
## 21       732       russian
## 22       824         Bemba
## 23       912
## 24       917
## 25       918        Persian
## 26       942       Russian
## 27       956        Korean
## 28       996        nepali
## 29      1018         TAMIL
## 30      1029         Tamil
## 31      1103      Japanese
```

```
## 32    1110
## 33    1141
## 34    1168        Spanish
## 35    1178      Sinhalese
## 36    1185 United Kingdom
```

Participants who got at least three practice trials wrong:

```
##
##  3  4
## 59 17
```

Participants who got the audio check wrong more than one once:

```
##
##    6  175  255  300  380  386  478  572  600  632 1033 1075 1101 1123 1130
##    1    1    1    1    1    1    1    1    1    1    1    1    1    1    1
## 1136 1151 1162 1188
##    1    1    1    1
```

Participants who got the second comprehension question wrong more than twice:

```
## # A tibble: 11 x 2
## # Groups:   workerid [11]
##    workerid     n
##       <int> <int>
##  1       16     3
##  2      298     8
##  3      317     3
##  4      446     4
##  5      516     3
##  6      603     5
##  7      652     3
##  8      688     3
##  9      752     3
## 10      757     3
## 11      761     4
```

Participants with accuracy of lower than 85% on non-critical trials with "some","none","all" and numbers below 6:

```
##    workerid gaveRightAnswer  n answerNm   accuracy
## 1         1               1 22       43 51.162791
## 2        10               1 22       47 46.808511
## 3        13               1 28       48 58.333333
## 4        31               1 24       40 60.000000
## 5        32               1 16       39 41.025641
## 6        44               1 20       44 45.454545
## 7        49               1 39       48 81.250000
## 8        55               1 26       45 57.777778
## 9        60               1 17       34 50.000000
## 10       62               1 38       46 82.608696
## 11       63               1 27       38 71.052632
## 12       65               1 27       44 61.363636
## 13       76               1 21       46 45.652174
## 14       83               1 15       22 68.181818
## 15       99               1 24       48 50.000000
## 16      104               1 39       46 84.782609
```

```
## 17    105        1 22    48 45.833333
## 18    109        1 38    47 80.851064
## 19    119        1 24    42 57.142857
## 20    124        1 20    37 54.054054
## 21    125        1 25    41 60.975610
## 22    129        1 23    45 51.111111
## 23    135        1 20    42 47.619048
## 24    139        1 24    48 50.000000
## 25    149        1 20    40 50.000000
## 26    152        1 27    48 56.250000
## 27    158        1 25    44 56.818182
## 28    159        1 19    45 42.222222
## 29    171        1 22    42 52.380952
## 30    173        1 34    42 80.952381
## 31    180        1 21    46 45.652174
## 32    188        1 27    47 57.446809
## 33    189        1 24    48 50.000000
## 34    192        1 23    47 48.936170
## 35    195        1  3    47  6.382979
## 36    203        1 26    45 57.777778
## 37    219        1 28    48 58.333333
## 38    226        1 20    35 57.142857
## 39    228        1 30    48 62.500000
## 40    229        1 20    48 41.666667
## 41    230        1 25    42 59.523810
## 42    232        1 18    43 41.860465
## 43    236        1 19    34 55.882353
## 44    237        1 21    38 55.263158
## 45    245        1 29    47 61.702128
## 46    259        1 23    46 50.000000
## 47    263        1 23    46 50.000000
## 48    268        1 24    48 50.000000
## 49    284        1  9    34 26.470588
## 50    286        1 23    42 54.761905
## 51    287        1 27    47 57.446809
## 52    293        1 22    45 48.888889
## 53    297        1 20    43 46.511628
## 54    311        1 25    47 53.191489
## 55    315        1 23    42 54.761905
## 56    321        1 15    41 36.585366
## 57    327        1 22    44 50.000000
## 58    344        1 26    48 54.166667
## 59    349        1 27    46 58.695652
## 60    350        1 27    45 60.000000
## 61    352        1 24    45 53.333333
## 62    367        1 17    36 47.222222
## 63    369        1 28    48 58.333333
## 64    372        1 21    42 50.000000
## 65    388        1  7    18 38.888889
## 66    391        1 26    48 54.166667
## 67    396        1 25    45 55.555556
## 68    397        1 28    48 58.333333
## 69    398        1 19    46 41.304348
## 70    401        1 28    40 70.000000
```

```
## 71    411          1 21     40 52.500000
## 72    413          1 20     45 44.444444
## 73    415          1  1     48  2.083333
## 74    419          1 23     45 51.111111
## 75    425          1 24     48 50.000000
## 76    429          1 39     46 84.782609
## 77    431          1 24     42 57.142857
## 78    435          1 23     41 56.097561
## 79    444          1 26     45 57.777778
## 80    447          1 21     40 52.500000
## 81    450          1 36     45 80.000000
## 82    455          1 23     45 51.111111
## 83    457          1 18     36 50.000000
## 84    464          1 16     35 45.714286
## 85    465          1 22     44 50.000000
## 86    466          1  6     48 12.500000
## 87    469          1 17     33 51.515152
## 88    476          1 23     44 52.272727
## 89    485          1 28     47 59.574468
## 90    486          1 21     45 46.666667
## 91    490          1 23     42 54.761905
## 92    491          1 19     46 41.304348
## 93    501          1 38     46 82.608696
## 94    507          1 17     47 36.170213
## 95    511          1 19     47 40.425532
## 96    521          1 35     46 76.086957
## 97    524          1 38     48 79.166667
## 98    528          1 17     41 41.463415
## 99    529          1 35     46 76.086957
## 100   533          1 22     45 48.888889
## 101   534          1 34     47 72.340426
## 102   537          1  5      9 55.555556
## 103   551          1 20     36 55.555556
## 104   552          1 13     47 27.659574
## 105   558          1 20     38 52.631579
## 106   564          1 16     35 45.714286
## 107   568          1 26     47 55.319149
## 108   571          1 17     36 47.222222
## 109   574          1 25     46 54.347826
## 110   578          1 18     47 38.297872
## 111   581          1 29     46 63.043478
## 112   582          1  4     48  8.333333
## 113   583          1 26     43 60.465116
## 114   585          1 25     48 52.083333
## 115   586          1 17     36 47.222222
## 116   587          1 30     47 63.829787
## 117   589          1 21     38 55.263158
## 118   604          1 20     42 47.619048
## 119   618          1 21     38 55.263158
## 120   619          1 25     46 54.347826
## 121   620          1 36     46 78.260870
## 122   621          1 30     36 83.333333
## 123   625          1 18     39 46.153846
## 124   631          1 27     46 58.695652
```

```
## 125    641         1 19     43 44.186047
## 126    646         1 22     40 55.000000
## 127    653         1 39     48 81.250000
## 128    663         1 29     48 60.416667
## 129    665         1 20     39 51.282051
## 130    666         1 26     43 60.465116
## 131    669         1 23     45 51.111111
## 132    671         1 38     48 79.166667
## 133    692         1 22     47 46.808511
## 134    696         1 28     45 62.222222
## 135    699         1 20     43 46.511628
## 136    708         1 19     48 39.583333
## 137    709         1 22     40 55.000000
## 138    710         1 37     45 82.222222
## 139    713         1 20     48 41.666667
## 140    715         1 19     41 46.341463
## 141    722         1 18     42 42.857143
## 142    726         1 34     47 72.340426
## 143    734         1 22     43 51.162791
## 144    742         1 21     43 48.837209
## 145    744         1 26     46 56.521739
## 146    754         1 25     44 56.818182
## 147    772         1 25     47 53.191489
## 148    779         1 19     47 40.425532
## 149    790         1 22     42 52.380952
## 150    796         1 31     46 67.391304
## 151    808         1 25     48 52.083333
## 152    825         1 25     43 58.139535
## 153    839         1 22     42 52.380952
## 154    840         1 24     48 50.000000
## 155    849         1 22     42 52.380952
## 156    853         1 20     42 47.619048
## 157    860         1  1     48  2.083333
## 158    862         1 27     45 60.000000
## 159    866         1 25     43 58.139535
## 160    867         1 25     43 58.139535
## 161    887         1 37     48 77.083333
## 162    888         1 18     39 46.153846
## 163    893         1 21     41 51.219512
## 164    894         1 22     40 55.000000
## 165    903         1 18     36 50.000000
## 166    914         1 13     32 40.625000
## 167    916         1  1     48  2.083333
## 168    921         1 17     36 47.222222
## 169    926         1 22     45 48.888889
## 170    929         1 39     46 84.782609
## 171    932         1 26     45 57.777778
## 172    955         1 21     41 51.219512
## 173    962         1 17     33 51.515152
## 174    963         1 18     38 47.368421
## 175    970         1 29     48 60.416667
## 176    975         1 38     48 79.166667
## 177    991         1 20     44 45.454545
## 178    998         1 32     43 74.418605
```

```
## 179       1002            1 22      39 56.410256
## 180       1012            1 15      41 36.585366
## 181       1030            1 37      47 78.723404
## 182       1039            1  9      46 19.565217
## 183       1041            1 20      41 48.780488
## 184       1046            1 27      47 57.446809
## 185       1053            1 21      41 51.219512
## 186       1083            1 19      47 40.425532
## 187       1090            1 25      41 60.975610
## 188       1092            1 22      47 46.808511
## 189       1094            1 23      37 62.162162
## 190       1099            1 23      43 53.488372
## 191       1120            1 26      46 56.521739
## 192       1121            1 16      39 41.025641
## 193       1126            1 34      43 79.069767
## 194       1128            1 25      44 56.818182
## 195       1137            1 24      46 52.173913
## 196       1140            1 38      48 79.166667
## 197       1145            1 26      45 57.777778
## 198       1146            1  1      48  2.083333
## 199       1150            1 23      45 51.111111
## 200       1152            1 25      44 56.818182
## 201       1157            1 22      48 45.833333
## 202       1161            1 13      28 46.428571
## 203       1172            1 18      44 40.909091
## 204       1174            1 21      48 43.750000
## 205       1181            1 28      48 58.333333
## 206       1182            1 21      42 50.000000
## 207       1191            1 22      40 55.000000
## 208       1198            1 27      46 58.695652
```

Additional Exclusions

Participants who gave more than 5 very slow (logRT>20) responses:

```
## # A tibble: 0 x 3
## # Groups:   workerid [0]
## # ... with 3 variables: workerid <int>, slowResponse <lgl>, n <int>
```

Responses that are faster than the onset of the quantifier (rawRT<600):

```
## [1] 558
```

Responses that are very slow (logRT>20):

```
## [1] 39
```

After Exclusions

Number of participants:

```
## [1] 848
```

Participants left in each condition:

```
##
## all_QUD any_QUD  no_QUD
```
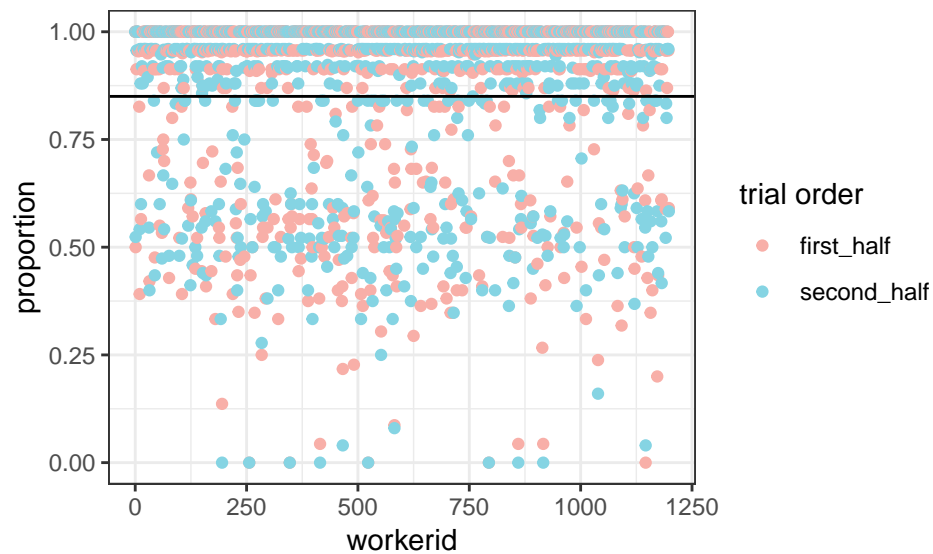
```
##      284     269     295
```

General

Expected number of yes and no answers:

```
##
##     No   Yes
## 22471 26567
```
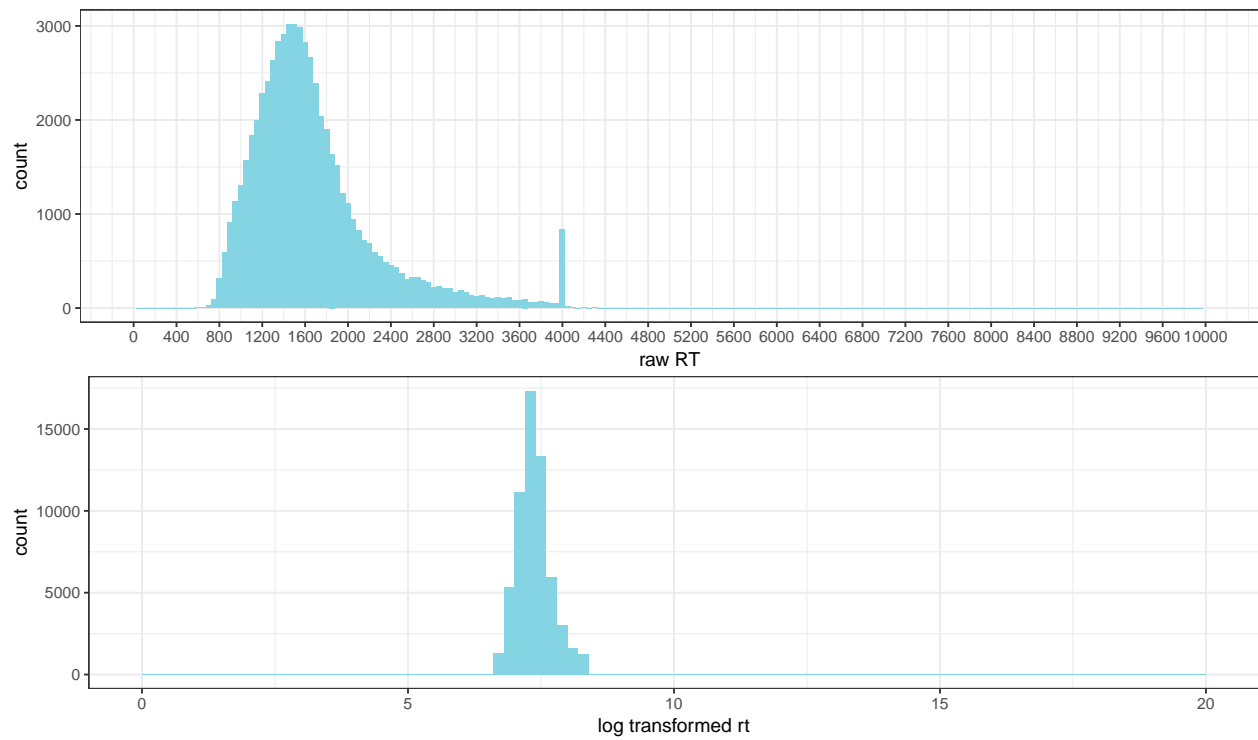
Accuracy
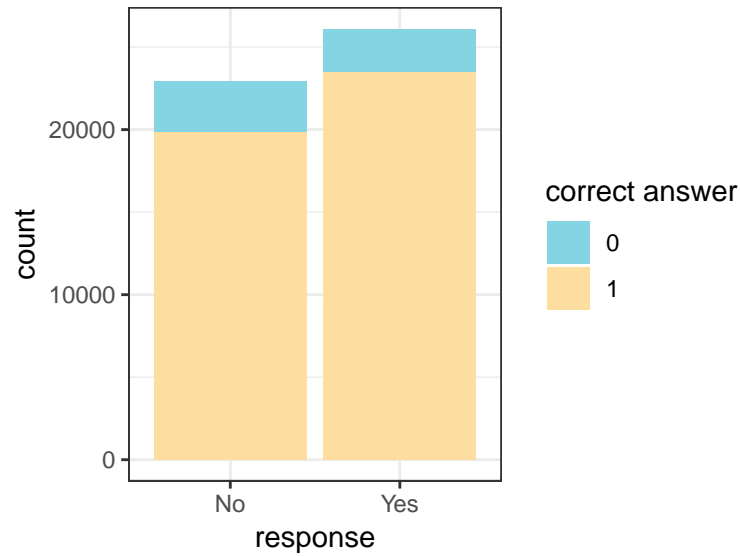
Accuracy and trial order

Distribution of RT and logRT

```
## Warning: Removed 2 rows containing missing values (geom_bar).
```

15 fastest responses (raw RT)

```
##  [1]  609  626  633  654  664  664  667  672  676  682  682  683  683  688  694
```
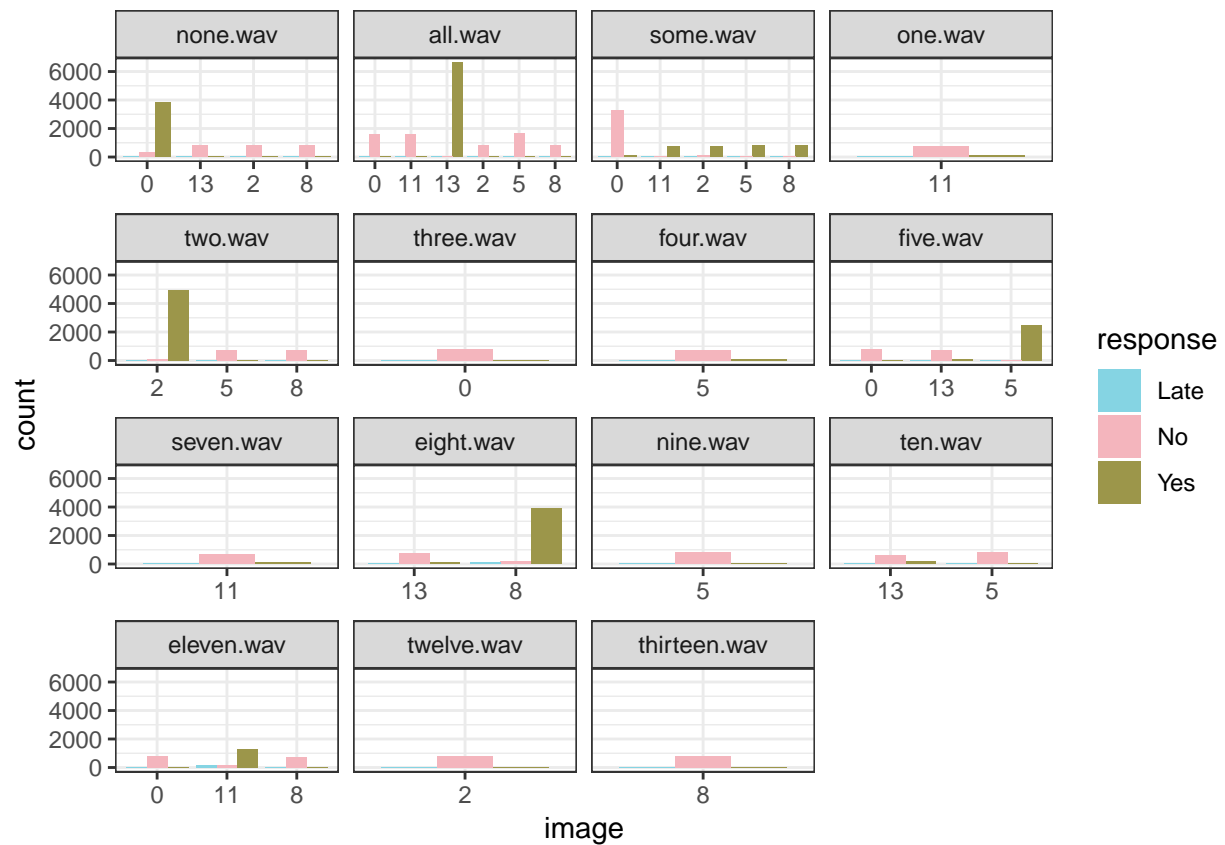
15 slowest responses (raw RT)

```
##  [1] 4028 4028 4028 4029 4030 4038 4041 4042 4044 4062 4071 4096 4117 4210
## [15] 4324
```

Non-critical Trials

Response type:

Response time:
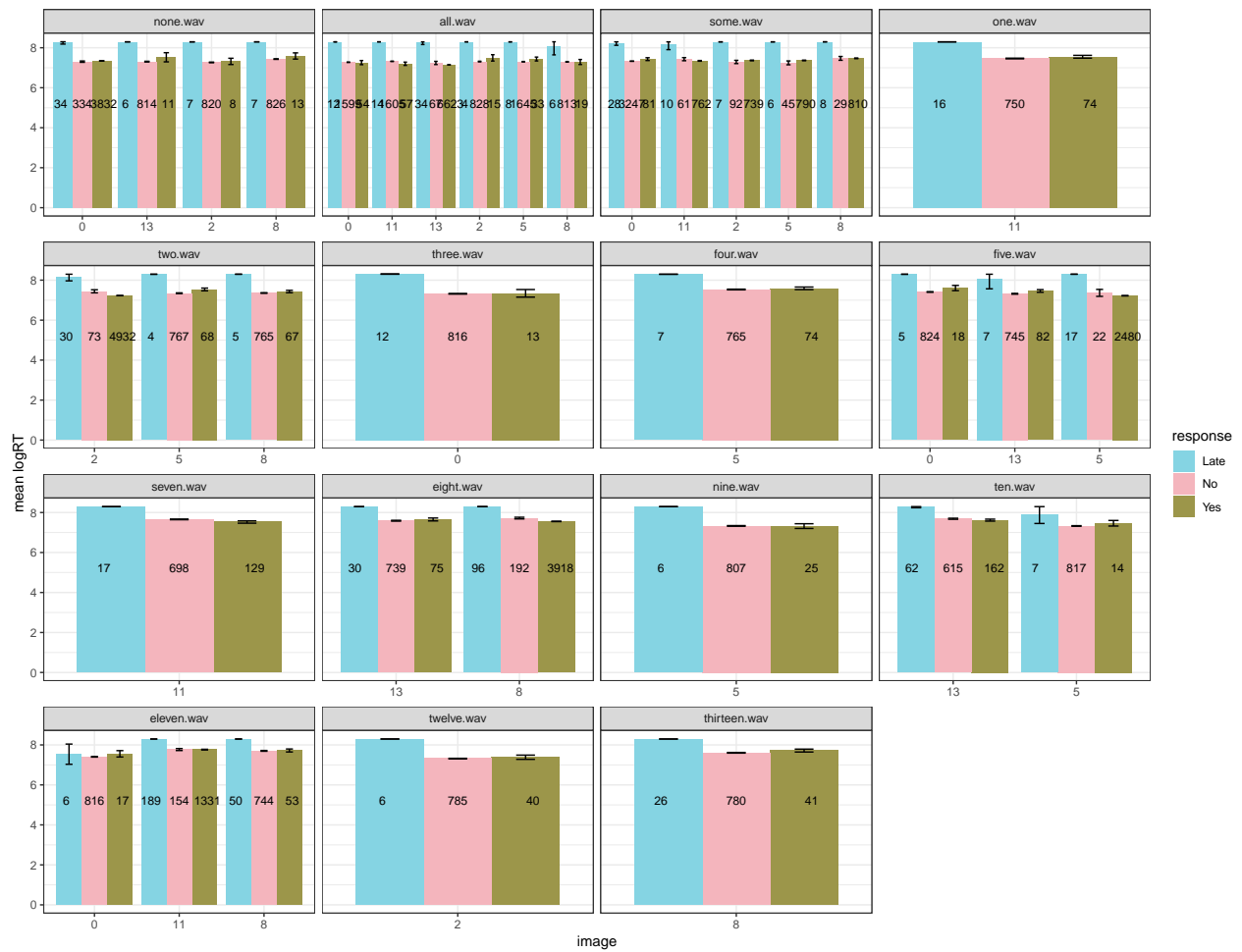
Critical Trials

Total number of critical trials (8 per participant):

[1] 6711

Total number of critical trials with late responses removed:

[1] 6642

Response Type
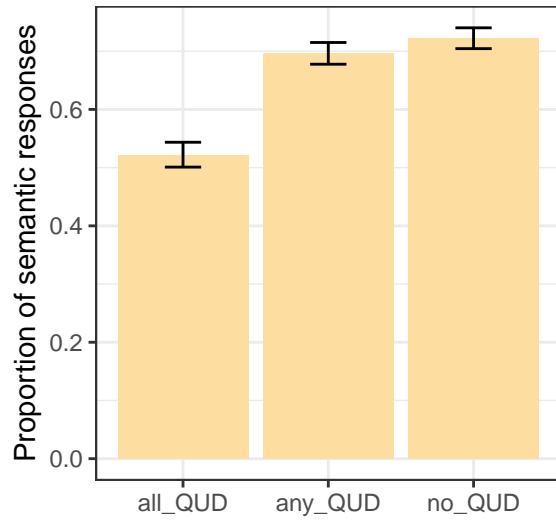
Distribution of participants over number of semantic responses
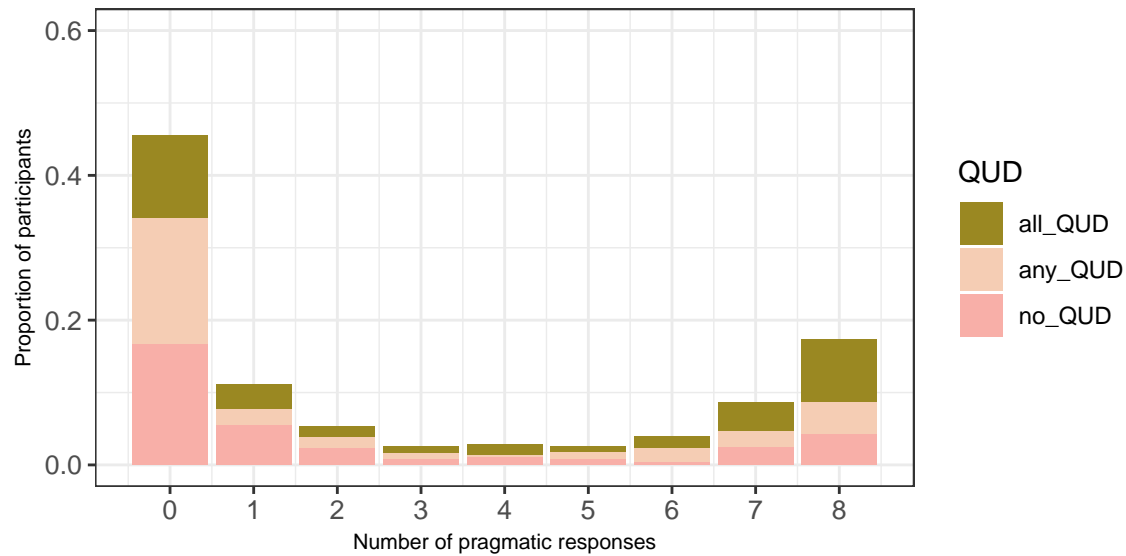
Response type and trial order
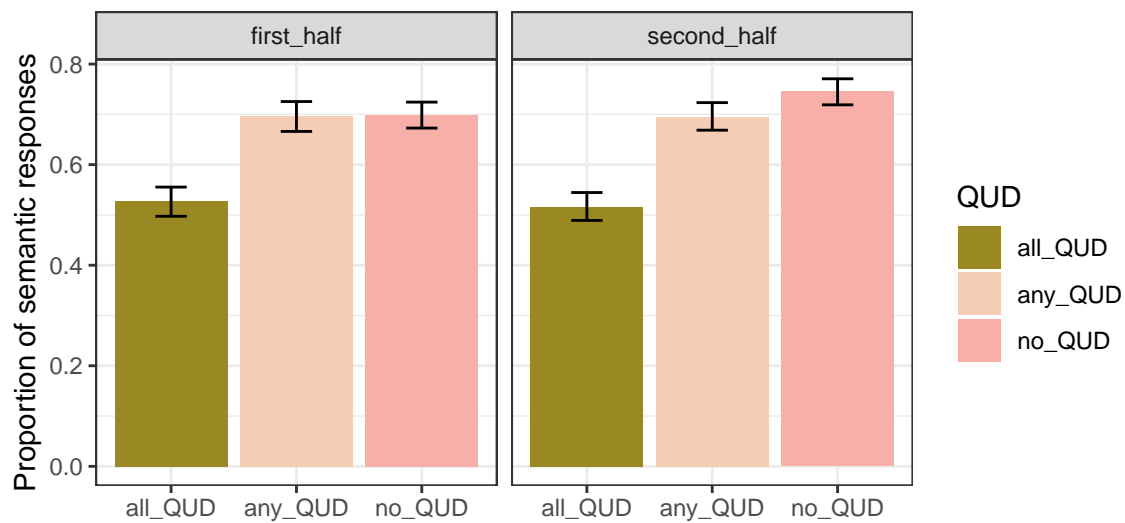
Age distribution of participants

```
## Warning: Factor `age` contains implicit NA, consider using
## `forcats::fct_explicit_na`

## Warning: Factor `age` contains implicit NA, consider using
## `forcats::fct_explicit_na`
```
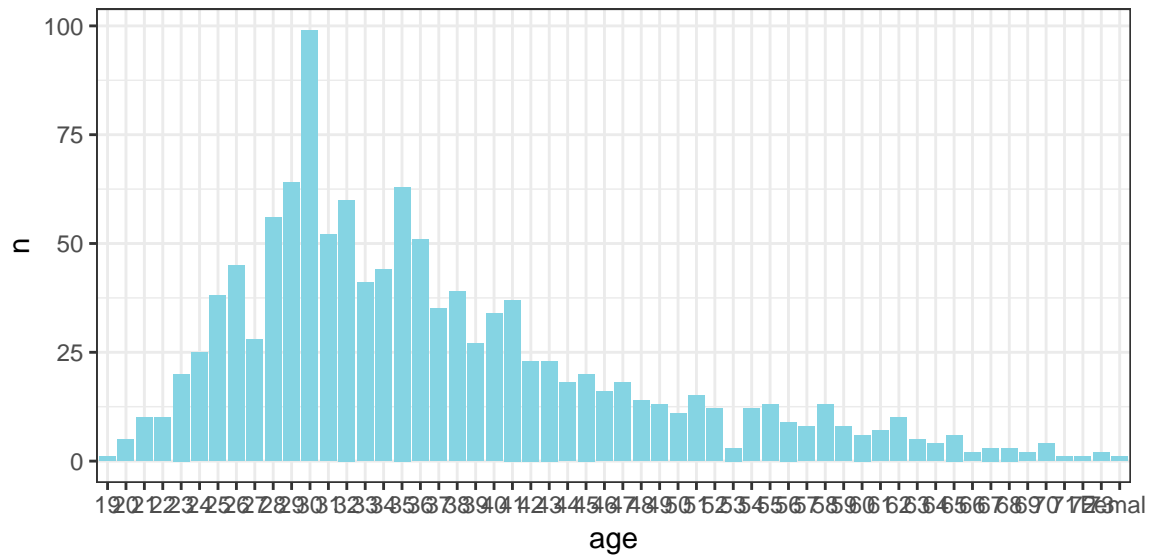

Response type and age

```
## Warning: NAs introduced by coercion
```
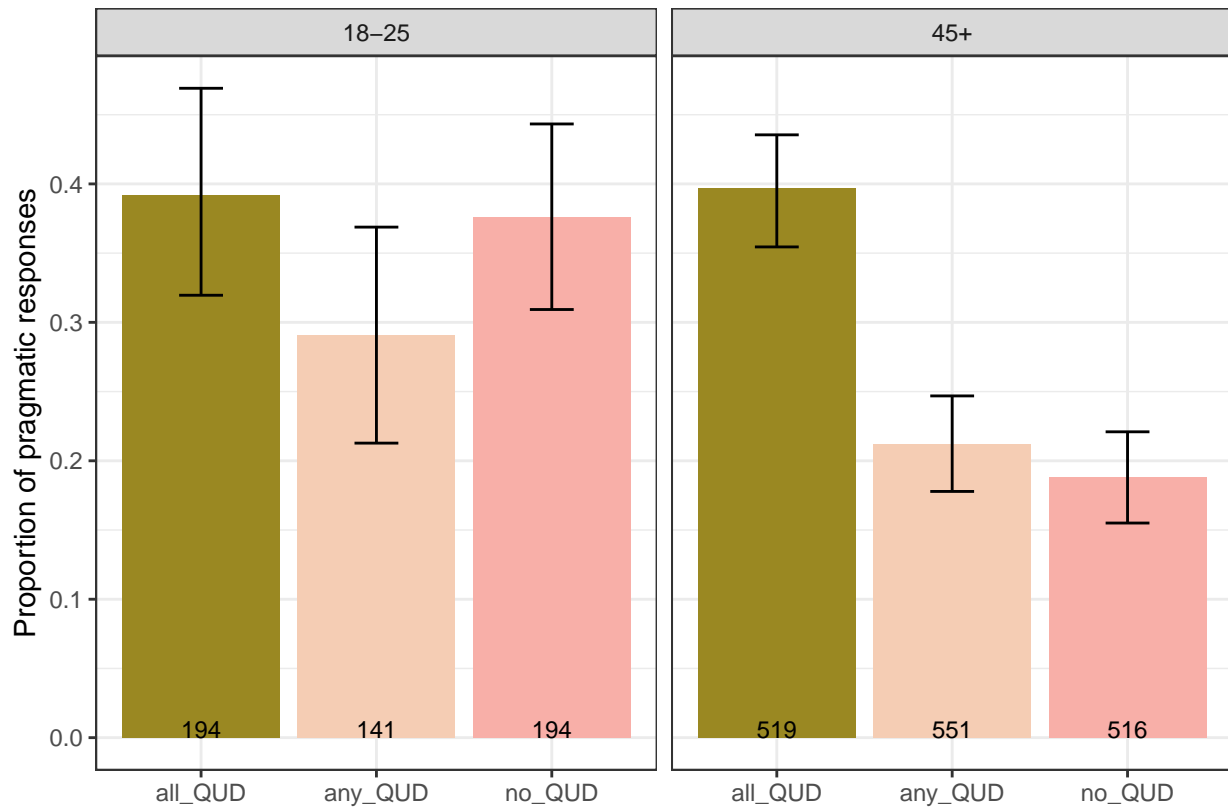
Response Time
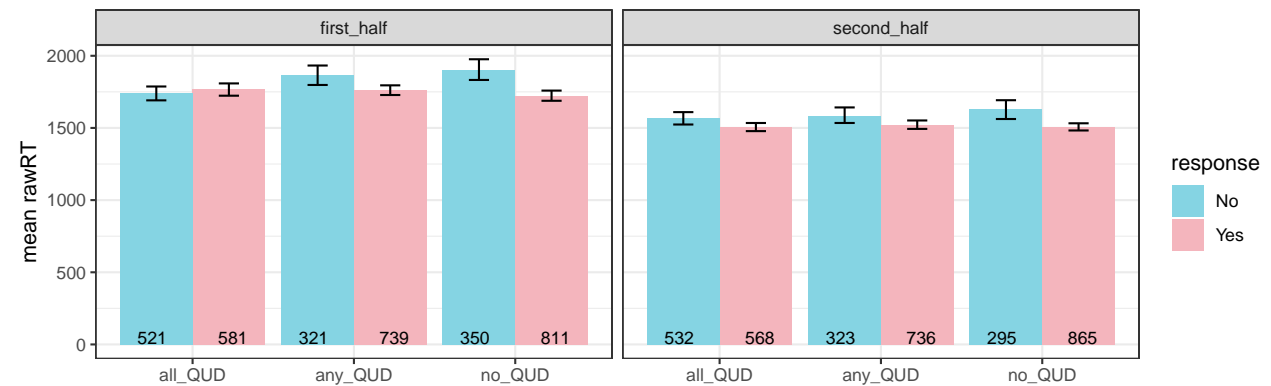
Distribution of response times in critical trials

```
## Warning: Removed 2 rows containing missing values (geom_bar).
```
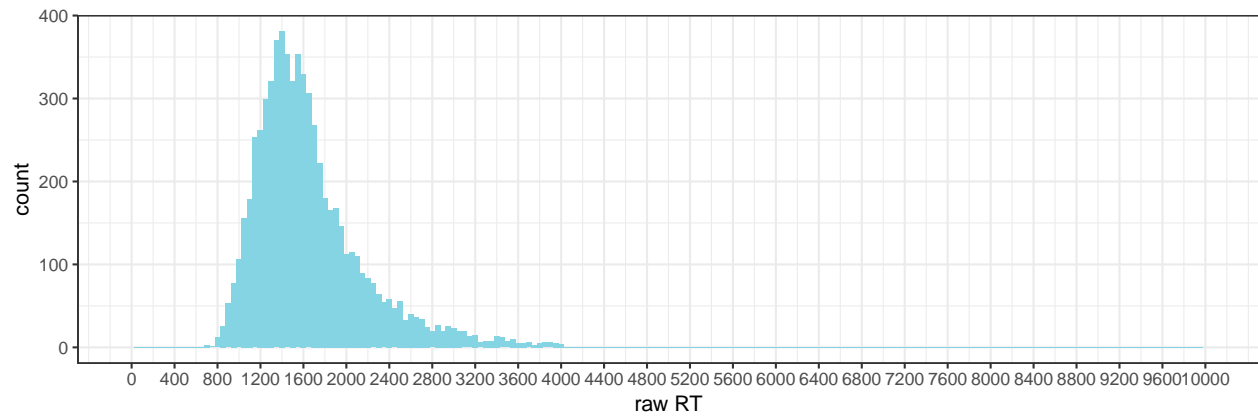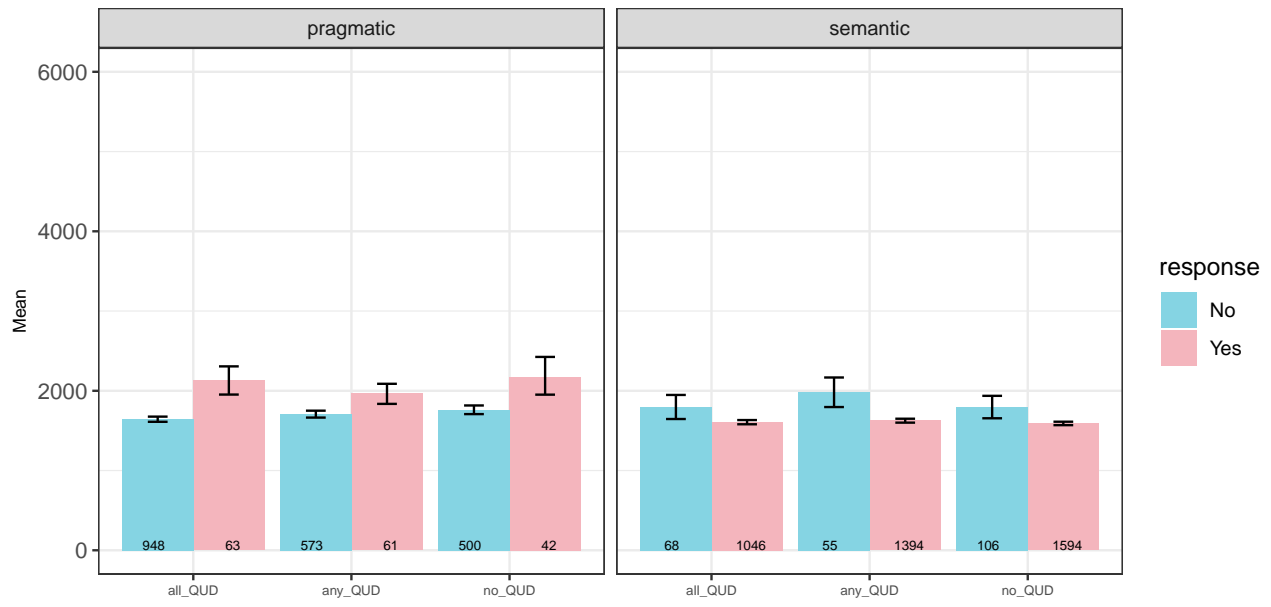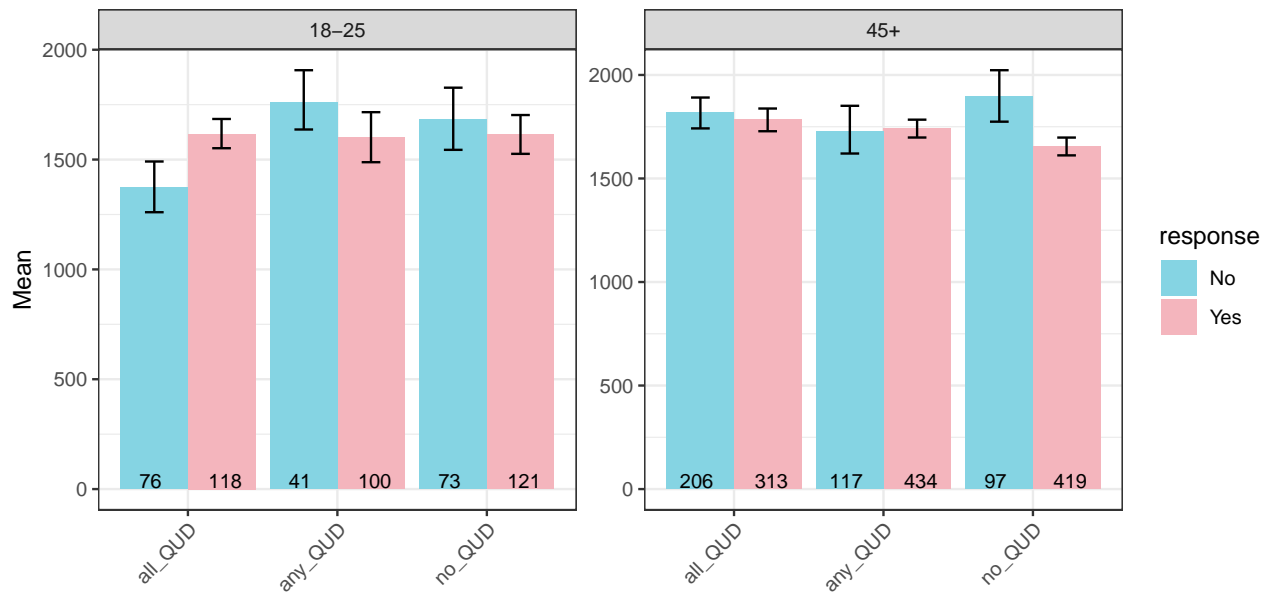

Response time and QUD
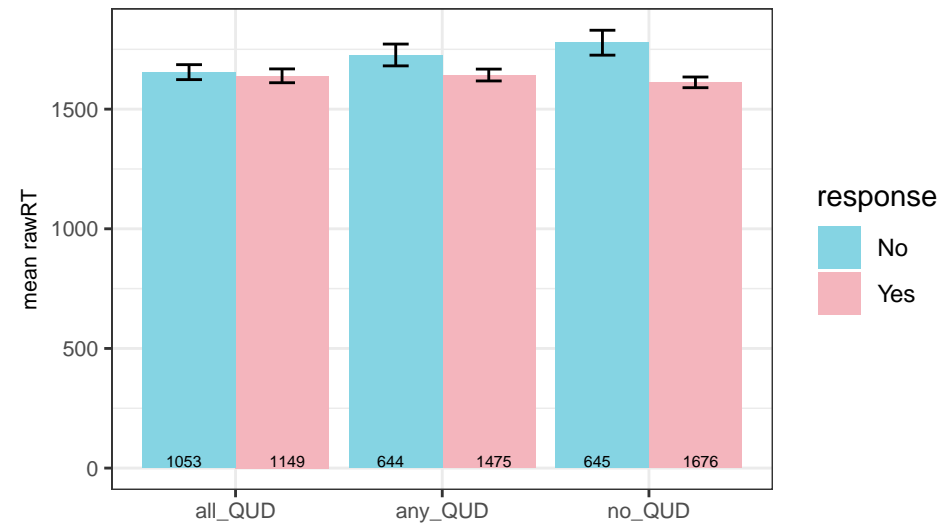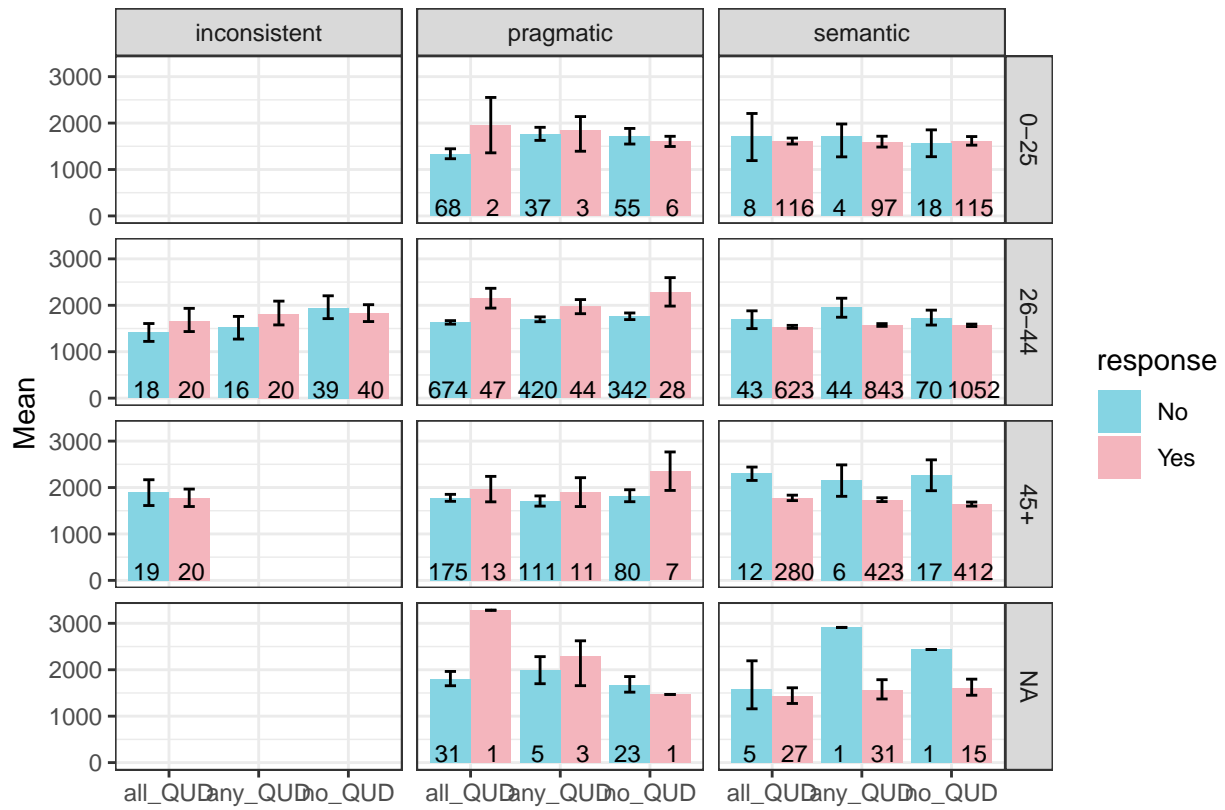

Response time, trial order and QUD

Response time, responder type and QUD

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Response time, age and QUD

Response time, age, responder type and QUD

EXTRA: Semanticity and response time

Models