### NUMEROSITY ANALYSIS RESULTS

```
top folder = '/Users/kohler/Google Drive/WRITING/Articles/2019 KohlerNumerositySSVEP/figures/results/experiment2
counter = 0
for (q in c(1,2,3,4)) {
  for (c in c(6,8)) {
    cur_file = switch(q, "RLS_carrier_rc1_carr", "RLS_oddball_rc1_carr", "RLS_carrier_rc2_carr", "RLS_oddball_rc
    cur_csv <- sprintf('%s/%s%d_full_projected_all_trials.csv', top_folder, cur_file, c)</pre>
    cur data <-data.frame( read.csv(file = cur csv ) )</pre>
    cur_data$cond <- factor(cur_data$condition, levels(cur_data$condition)[c(3,1,2)])</pre>
    cur_data$harm <- cur_data$harmonic</pre>
    cur_data$harm_alt <- factor(cur_data$harmonic, levels(cur_data$harmonic)[c(2,1,3,4)])</pre>
    g <- ggplot(cur_data, aes(harm, data, fill = cond)) +
      stat_summary(geom = "bar", fun.y = mean, position=position_dodge()) +
      stat_summary(geom = "errorbar", fun.data = mean_se, width=.3, position=position_dodge(.9))
    g <- g + theme(legend.title=element_blank(),
      legend.justification=c(1,0),
      legend.background = element_blank()) +
      ggtitle(toupper(sprintf('%s%d\n',cur_file, c)))
    if (q == 1 && c == 6) {
      cat("RESULTS BELOW\n ")
    print(g)
    m1 <- lmer(data ~ cond * harm + (1|subject), cur_data)</pre>
    emm = emmeans(m1, ~ cond * harm, lmer.df = "satterthwaite")
    m2 <- lmer(data ~ cond + harm + (1|subject), cur data)
    if (isSingular(m1)) {
      if (isSingular(m2)) {
        cat("WARNING: BOTH MODELS ARE SINGULAR! ")
        cat("WARNING: MODEL1 IS SINGULAR, BUT MODEL2 IS NOT! ")
      }
    } else {
      cat("LOVELY: NONE OF THE MODELS ARE SINGULAR! ")
    if (!performance::check_convergence(m1)) {
      if (!performance::check_convergence(m2)) {
        cat("WARNING: BOTH MODELS DID NOT CONVERGE!\n\n")
        cat("WARNING: MODEL1 DID NOT CONVERGE, BUT MODEL2 DID!\n\n")
    } else {
      cat("LOVELY: BOTH MODELS CONVERGED!\n\n")
    cat("ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS\n")
    print(anova(m1), type='pdf')
    write.csv(as.matrix(anova(m1)),
              file = sprintf('%s/%s/%d_full_projected_all_results.csv', top_folder, cur_file, c), na ="")
    cat("\nESTIMATED MARGINAL MEANS, SIMPLE MAIN EFFECTS OF CONDITION WITHOUT CORRECTION\n")
    print(prettify(summary(pairs(emm, simple = "cond", adjust = "none"))))
    cat("\nTEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT\n")
    print(anova(m1, m2))
}
```

## RESULTS BELOW

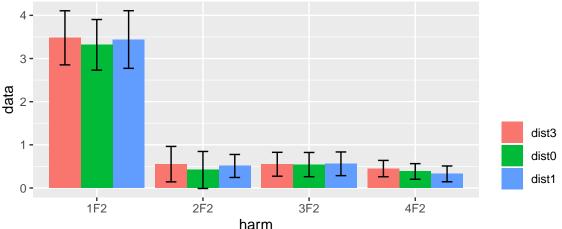
#### ##

# RLS\_CARRIER\_RC1\_CARR6

```
dist3
dist0
dist1
```

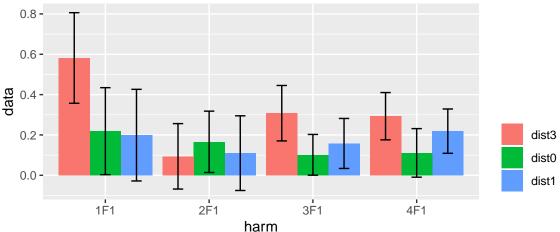
```
harm
## LOVELY: NONE OF THE MODELS ARE SINGULAR! LOVELY: BOTH MODELS CONVERGED!
##
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
## Type III Analysis of Variance Table with Satterthwaite's method
##
             Sum Sq Mean Sq NumDF DenDF F value Pr(>F)
                      0.100
                                    154 0.0836 0.9199
## cond
              0.200
                                2
             212.272
                     70.757
                                3
                                    154 59.0031 <2e-16 ***
## harm
                      0.532
              3.195
                                6
                                    154 0.4440 0.8484
##
  cond:harm
  Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
##
##
  ESTIMATED MARGINAL MEANS, SIMPLE MAIN EFFECTS OF CONDITION WITHOUT CORRECTION
##
              contrast harm
                                               SE df
                               estimate
                                                         t.ratio
## 1
       1 dist3 - dist0 1F2 0.483408479 0.3998686 154
                                                       1.2089183 0.2285471
##
  2
      2 dist3 - dist1 1F2 0.511023124 0.3998686 154
                                                       1.2779776 0.2031803
  3
      3 dist0 - dist1
                       1F2 0.027614645 0.3998686 154 0.0690593 0.9450320
##
      4 dist3 - dist0 2F2 -0.115142962 0.3998686 154 -0.2879520 0.7737706
      5 dist3 - dist1 2F2 -0.201511228 0.3998686 154 -0.5039436 0.6150212
##
## 6
      6 dist0 - dist1 2F2 -0.086368266 0.3998686 154 -0.2159916 0.8292801
  7
      7 dist3 - dist0 3F2 0.008830539 0.3998686 154 0.0220836 0.9824099
## 8
      8 dist3 - dist1 3F2 -0.210272088 0.3998686 154 -0.5258530 0.5997468
      9 dist0 - dist1 3F2 -0.219102627 0.3998686 154 -0.5479366 0.5845288
## 10 10 dist3 - dist0 4F2 -0.051334788 0.3998686 154 -0.1283791 0.8980164
## 11 11 dist3 - dist1 4F2 0.087975623 0.3998686 154 0.2200113 0.8261537
## 12 12 dist0 - dist1 4F2 0.139310411 0.3998686 154 0.3483905 0.7280228
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ cond + harm + (1 | subject)
  m1: data ~ cond * harm + (1 | subject)
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
## m2 8 587.13 612.67 -285.56
                                571.13
## m1 14 596.30 641.00 -284.15
                                568.30 2.8297
                                                         0.8299
```

# RLS\_CARRIER\_RC1\_CARR8



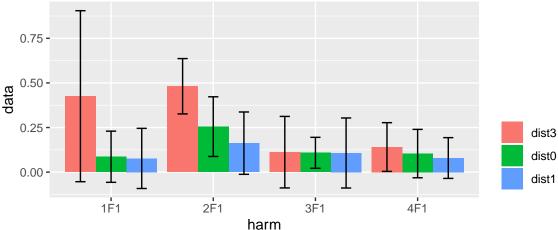
```
## LOVELY: NONE OF THE MODELS ARE SINGULAR! LOVELY: BOTH MODELS CONVERGED!
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
  Type III Analysis of Variance Table with Satterthwaite's method
##
             Sum Sq Mean Sq NumDF DenDF F value Pr(>F)
              0.259
                      0.129
                                2
                                    154 0.1019 0.9032
  cond
            291.384
                     97.128
                                    154 76.4352 <2e-16 ***
## harm
                                3
##
  cond:harm
              0.216
                      0.036
                                6
                                    154 0.0283 0.9999
##
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## ESTIMATED MARGINAL MEANS, SIMPLE MAIN EFFECTS OF CONDITION WITHOUT CORRECTION
##
             contrast harm
                              estimate
                                              SE df
                                                         t.ratio
##
      1 dist3 - dist0 1F2 0.16243456 0.4116188 154
                                                      0.39462378 0.6936665
  1
      2 dist3 - dist1 1F2 0.03923738 0.4116188 154
##
                                                      0.09532456 0.9241810
##
  3
      3 dist0 - dist1 1F2 -0.12319718 0.4116188 154 -0.29929922 0.7651153
##
      4 dist3 - dist0 2F2 0.13536052 0.4116188 154 0.32884923 0.7427164
      5 dist3 - dist1 2F2 0.04253188 0.4116188 154 0.10332832 0.9178368
##
  5
##
      6 dist0 - dist1
                       2F2 -0.09282864 0.4116188 154 -0.22552091 0.8218731
      7 dist3 - dist0 3F2 0.00724635 0.4116188 154 0.01760452 0.9859771
##
  7
      8 dist3 - dist1 3F2 -0.01072360 0.4116188 154 -0.02605225 0.9792494
      9 dist0 - dist1
                       3F2 -0.01796995 0.4116188 154 -0.04365677 0.9652346
## 10 10 dist3 - dist0
                       4F2 0.06643266 0.4116188 154 0.16139367 0.8719949
## 11 11 dist3 - dist1
                       4F2 0.12264568 0.4116188 154 0.29795939 0.7661358
## 12 12 dist0 - dist1
                      4F2 0.05621301 0.4116188 154 0.13656572 0.8915524
##
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ cond + harm + (1 | subject)
  m1: data ~ cond * harm + (1 | subject)
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
           AIC
## m2 8 594.84 620.38 -289.42
                                578.84
## m1 14 606.66 651.36 -289.33
                                578.66 0.1819
                                                         0.9999
```

# RLS\_ODDBALL\_RC1\_CARR6



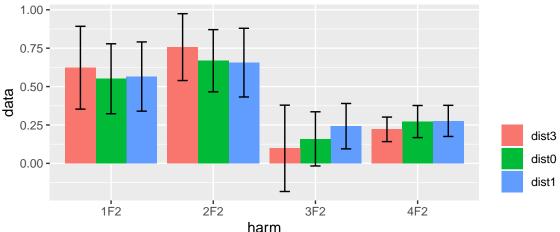
```
## WARNING: BOTH MODELS ARE SINGULAR! LOVELY: BOTH MODELS CONVERGED!
##
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
  Type III Analysis of Variance Table with Satterthwaite's method
##
             Sum Sq Mean Sq NumDF DenDF F value Pr(>F)
             1.0229 0.51147
                                    168
                                        1.2910 0.2777
  cond
             1.0389 0.34631
                                    168
                                        0.8741 0.4558
## harm
                                3
##
  cond:harm 1.0040 0.16734
                                6
                                    168
                                         0.4224 0.8634
##
## ESTIMATED MARGINAL MEANS, SIMPLE MAIN EFFECTS OF CONDITION WITHOUT CORRECTION
##
              contrast harm
                               estimate
                                               SE df
                                                          t.ratio
## 1
       1 dist3 - dist0 1F1 0.36281403 0.2298395 168
                                                      1.57855387 0.11631947
      2 dist3 - dist1 1F1 0.38249444 0.2298395 168
                                                       1.66418061 0.09794042
      3 dist0 - dist1 1F1 0.01968041 0.2298395 168
                                                       0.08562675 0.93186510
                       2F1 -0.07189634 0.2298395 168 -0.31281108 0.75481217
##
       4 dist3 - dist0
##
  5
      5 dist3 - dist1 2F1 -0.01579473 0.2298395 168 -0.06872072 0.94529365
      6 dist0 - dist1 2F1 0.05610161 0.2298395 168
                                                      0.24409036 0.80745867
  7
       7 dist3 - dist0
                       3F1 0.20638085 0.2298395 168
                                                       0.89793466 0.37050544
##
##
       8 dist3 - dist1
                       3F1 0.15005721 0.2298395 168
                                                       0.65287824 0.51472720
                       3F1 -0.05632364 0.2298395 168 -0.24505642 0.80671183
       9 dist0 - dist1
  10 10 dist3 - dist0
                      4F1 0.18194455 0.2298395 168
                                                       0.79161568 0.42970106
## 11 11 dist3 - dist1 4F1 0.07415749 0.2298395 168
                                                      0.32264904 0.74736224
  12 12 dist0 - dist1 4F1 -0.10778706 0.2298395 168 -0.46896664 0.63970148
##
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ cond + harm + (1 | subject)
  m1: data ~ cond * harm + (1 | subject)
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
           AIC
     8 350.44 375.99 -167.22
                                 334.44
## m1 14 359.75 404.45 -165.87
                                 331.75 2.6949
                                                          0.8461
```

# RLS\_ODDBALL\_RC1\_CARR8



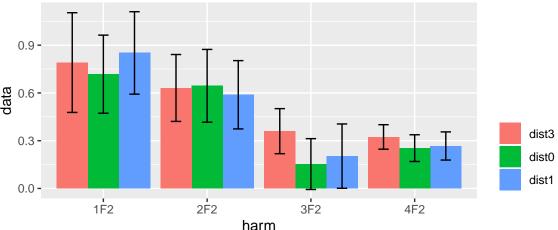
```
## LOVELY: NONE OF THE MODELS ARE SINGULAR! LOVELY: BOTH MODELS CONVERGED!
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
  Type III Analysis of Variance Table with Satterthwaite's method
##
              Sum Sq Mean Sq NumDF DenDF F value Pr(>F)
             1.15285 0.57642
                                 2
                                     154 0.9350 0.3948
## cond
             1.11449 0.37150
                                          0.6026 0.6143
## harm
                                 3
                                     154
## cond:harm 0.86813 0.14469
                                 6
                                     154
                                          0.2347 0.9646
##
## ESTIMATED MARGINAL MEANS, SIMPLE MAIN EFFECTS OF CONDITION WITHOUT CORRECTION
##
              contrast harm
                               estimate
                                               SE df
                                                          t.ratio
                                                                    p.value
## 1
       1 dist3 - dist0 1F1 0.339370833 0.2867019 154 1.183706287 0.2383533
      2 dist3 - dist1 1F1 0.348783386 0.2867019 154 1.216536739 0.2256418
      3 dist0 - dist1 1F1 0.009412553 0.2867019 154 0.032830452 0.9738523
       4 dist3 - dist0 2F1 0.226285282 0.2867019 154 0.789270275 0.4311675
##
##
  5
      5 dist3 - dist1 2F1 0.318910055 0.2867019 154 1.112340250 0.2677253
      6 dist0 - dist1 2F1 0.092624773 0.2867019 154 0.323069974 0.7470805
      7 dist3 - dist0 3F1 0.003657791 0.2867019 154 0.012758167 0.9898372
##
  7
##
       8 dist3 - dist1 3F1 0.004662915 0.2867019 154 0.016263984 0.9870448
      9 dist0 - dist1 3F1 0.001005124 0.2867019 154 0.003505817 0.9972073
## 10 10 dist3 - dist0 4F1 0.036675729 0.2867019 154 0.127922871 0.8983769
## 11 11 dist3 - dist1 4F1 0.061591786 0.2867019 154 0.214828670 0.8301851
  12 12 dist0 - dist1 4F1 0.024916057 0.2867019 154 0.086905799 0.9308593
##
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ cond + harm + (1 | subject)
## m1: data ~ cond * harm + (1 | subject)
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
            AIC
     8 430.35 455.90 -207.18
                                 414.35
## m1 14 440.85 485.55 -206.43
                                 412.85 1.5019
                                                          0.9594
```

# RLS\_CARRIER\_RC2\_CARR6



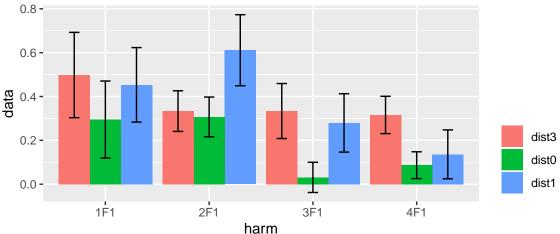
```
harm
## LOVELY: NONE OF THE MODELS ARE SINGULAR! LOVELY: BOTH MODELS CONVERGED!
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
  Type III Analysis of Variance Table with Satterthwaite's method
##
             Sum Sq Mean Sq NumDF DenDF F value
             0.0149 0.00744
                                    154
                                        0.0167 0.9834820
  cond
             8.6039 2.86798
                                    154
                                        6.4250 0.0003964 ***
## harm
                                3
##
  cond:harm 0.3049 0.05081
                                6
                                    154
                                        0.1138 0.9946983
##
  Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## ESTIMATED MARGINAL MEANS, SIMPLE MAIN EFFECTS OF CONDITION WITHOUT CORRECTION
##
              contrast harm
                                estimate
                                                SE df
                                                           t.ratio
##
       1 dist3 - dist0
                       1F2 0.071828598 0.2439611 154
                                                        0.29442649 0.7688285
  1
                       1F2 0.057472989 0.2439611 154
##
       2 dist3 - dist1
                                                        0.23558264 0.8140695
##
  3
       3 dist0 - dist1
                       1F2 -0.014355609 0.2439611 154 -0.05884385 0.9531528
##
       4 dist3 - dist0
                        2F2 0.088687900 0.2439611 154
                                                        0.36353302 0.7167053
      5 dist3 - dist1
                        2F2 0.101003648 0.2439611 154
                                                        0.41401545 0.6794388
##
  5
##
       6 dist0 - dist1
                        2F2 0.012315747 0.2439611 154
                                                        0.05048243 0.9598034
      7 dist3 - dist0 3F2 -0.061486917 0.2439611 154 -0.25203579 0.8013495
##
  7
       8 dist3 - dist1 3F2 -0.144248607 0.2439611 154 -0.59127718 0.5552016
       9 dist0 - dist1
                        3F2 -0.082761689 0.2439611 154 -0.33924139 0.7348901
  10 10 dist3 - dist0
                       4F2 -0.050824245 0.2439611 154 -0.20832934 0.8352471
## 11 11 dist3 - dist1
                       4F2 -0.054976600 0.2439611 154 -0.22534990 0.8220058
  12 12 dist0 - dist1
                       4F2 -0.004152355 0.2439611 154 -0.01702057 0.9864422
##
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ cond + harm + (1 | subject)
  m1: data ~ cond * harm + (1 | subject)
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
            AIC
## m2 8 393.79 419.34 -188.90
                                 377.79
## m1 14 405.06 449.76 -188.53
                                 377.06 0.7302
                                                          0.9938
```

# RLS\_CARRIER\_RC2\_CARR8



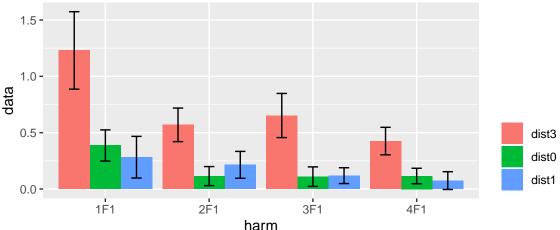
```
harm
## LOVELY: NONE OF THE MODELS ARE SINGULAR! LOVELY: BOTH MODELS CONVERGED!
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
  Type III Analysis of Variance Table with Satterthwaite's method
##
             Sum Sq Mean Sq NumDF DenDF F value
                                                  Pr(>F)
             0.2140 0.1070
                                   154
                                       0.2579
                                                  0.7730
## cond
             9.5334 3.1778
                                        7.6616 8.321e-05 ***
## harm
                               3
                                   154
##
  cond:harm 0.3370 0.0562
                               6
                                   154
                                        0.1354
                                                  0.9915
##
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## ESTIMATED MARGINAL MEANS, SIMPLE MAIN EFFECTS OF CONDITION WITHOUT CORRECTION
##
             contrast harm
                              estimate
                                              SE df
                                                         t.ratio
## 1
       1 dist3 - dist0 1F2 0.07297505 0.2351658 154
                                                      0.31031317 0.7567424
       2 dist3 - dist1 1F2 -0.06065915 0.2351658 154 -0.25794201 0.7967960
##
##
  3
      3 dist0 - dist1 1F2 -0.13363420 0.2351658 154 -0.56825519 0.5706894
       4 dist3 - dist0 2F2 -0.01358039 0.2351658 154 -0.05774815 0.9540241
                       2F2 0.04277160 0.2351658 154 0.18187848 0.8559173
##
      5 dist3 - dist1
##
       6 dist0 - dist1
                       2F2 0.05635199 0.2351658 154
                                                      0.23962663 0.8109384
                       3F2 0.20674243 0.2351658 154 0.87913465 0.3806980
##
  7
      7 dist3 - dist0
       8 dist3 - dist1
                       3F2 0.15674794 0.2351658 154 0.66654216 0.5060620
                       3F2 -0.04999449 0.2351658 154 -0.21259249 0.8319260
       9 dist0 - dist1
## 10 10 dist3 - dist0
                       4F2 0.07016915 0.2351658 154 0.29838157 0.7658142
## 11 11 dist3 - dist1
                       4F2 0.05682165 0.2351658 154 0.24162376 0.8093931
## 12 12 dist0 - dist1
                       4F2 -0.01334750 0.2351658 154 -0.05675781 0.9548117
##
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ cond + harm + (1 | subject)
  m1: data ~ cond * harm + (1 | subject)
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
           AIC
## m2 8 384.19 409.73 -184.09
                                368.19
## m1 14 395.32 440.02 -183.66
                                367.32 0.8683
                                                         0.9901
```

# RLS\_ODDBALL\_RC2\_CARR6



```
## LOVELY: NONE OF THE MODELS ARE SINGULAR! LOVELY: BOTH MODELS CONVERGED!
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
  Type III Analysis of Variance Table with Satterthwaite's method
##
             Sum Sq Mean Sq NumDF DenDF F value Pr(>F)
             1.44769 0.72384
                                2
                                    154 3.7696 0.02522 *
  cond
             2.18758 0.72919
                                         3.7975 0.01159 *
## harm
                                3
                                    154
##
  cond:harm 0.96378 0.16063
                                6
                                    154 0.8365 0.54346
##
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## ESTIMATED MARGINAL MEANS, SIMPLE MAIN EFFECTS OF CONDITION WITHOUT CORRECTION
##
             contrast harm
                              estimate
                                              SE df
                                                        t.ratio
##
       1 dist3 - dist0 1F1 0.20294695 0.1600089 154
                                                      1.2683479 0.20658774
  1
       2 dist3 - dist1 1F1 0.04487824 0.1600089 154
##
                                                      0.2804734 0.77949074
##
  3
      3 dist0 - dist1
                      1F1 -0.15806871 0.1600089 154 -0.9878745 0.32476368
       4 dist3 - dist0 2F1 0.02661440 0.1600089 154 0.1663307 0.86811486
##
                       2F1 -0.27776301 0.1600089 154 -1.7359223 0.08457766
##
  5
      5 dist3 - dist1
##
       6 dist0 - dist1
                       2F1 -0.30437741 0.1600089 154 -1.9022531 0.05900488
      7 dist3 - dist0 3F1 0.30270420 0.1600089 154 1.8917961 0.06039538
##
  7
       8 dist3 - dist1
                       3F1 0.05418727 0.1600089 154 0.3386516 0.73533348
      9 dist0 - dist1
                       3F1 -0.24851693 0.1600089 154 -1.5531445 0.12244130
  10 10 dist3 - dist0
                       4F1 0.22919965 0.1600089 154
                                                     1.4324182 0.15405088
## 11 11 dist3 - dist1
                       4F1 0.17968990 0.1600089 154 1.1229995 0.26318541
## 12 12 dist0 - dist1
                       4F1 -0.04950975 0.1600089 154 -0.3094187 0.75742128
##
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ cond + harm + (1 | subject)
  m1: data ~ cond * harm + (1 | subject)
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
           AIC
## m2 8 246.20 271.74 -115.10
                                230.20
## m1 14 252.91 297.61 -112.45
                                224.91 5.2918
                                                          0.507
```

# RLS\_ODDBALL\_RC2\_CARR8



```
harm
## LOVELY: NONE OF THE MODELS ARE SINGULAR! LOVELY: BOTH MODELS CONVERGED!
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
  Type III Analysis of Variance Table with Satterthwaite's method
##
             Sum Sq Mean Sq NumDF DenDF F value
                                                    Pr(>F)
             11.7624
                     5.8812
                                 2
                                     154 18.8575 4.727e-08 ***
  cond
             4.7903
                     1.5968
                                 3
                                         5.1199 0.002103 **
## harm
                                     154
##
  cond:harm 2.0517
                     0.3419
                                 6
                                     154
                                         1.0964
                                                 0.367033
##
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
##
## ESTIMATED MARGINAL MEANS, SIMPLE MAIN EFFECTS OF CONDITION WITHOUT CORRECTION
##
             contrast harm
                               estimate
                                               SE df
                                                          t.ratio
##
       1 dist3 - dist0
                       1F1
                            0.84346855 0.2039207 154
                                                       4.13625725 5.786860e-05
  1
                       1F1
##
       2 dist3 - dist1
                            0.94756777 0.2039207 154
                                                       4.64674592 7.190578e-06
##
  3
      3 dist0 - dist1
                       1F1
                            0.10409922 0.2039207 154
                                                       0.51048868 6.104401e-01
                       2F1
##
       4 dist3 - dist0
                             0.45468754 0.2039207 154
                                                       2.22972706 2.721218e-02
      5 dist3 - dist1
                       2F1 0.35488872 0.2039207 154
##
  5
                                                      1.74032694 8.379916e-02
##
       6 dist0 - dist1
                       2F1 -0.09979882 0.2039207 154 -0.48940011 6.252548e-01
                       3F1 0.54233203 0.2039207 154
##
  7
      7 dist3 - dist0
                                                       2.65952390 8.652841e-03
       8 dist3 - dist1
                       3F1 0.53364313 0.2039207 154
                                                      2.61691470 9.757156e-03
       9 dist0 - dist1
                       3F1 -0.00868890 0.2039207 154 -0.04260921 9.660683e-01
  10 10 dist3 - dist0
                       4F1
                            0.31024409 0.2039207 154
                                                      1.52139564 1.302112e-01
## 11 11 dist3 - dist1
                       4F1
                            0.35090445 0.2039207 154
                                                      1.72078862 8.729762e-02
## 12 12 dist0 - dist1
                       4F1
                            0.04066036 0.2039207 154
                                                      0.19939298 8.422184e-01
##
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ cond + harm + (1 | subject)
  m1: data ~ cond * harm + (1 | subject)
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
           AIC
## m2 8 328.19 353.73 -156.09
                                 312.19
## m1 14 333.29 377.99 -152.64
                                 305.29 6.9019
                                                            0.33
```