AVEP ANALYSIS RESULTS

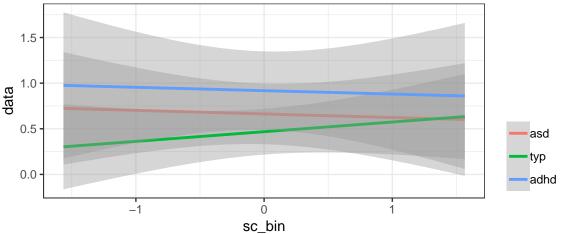
```
top folder = '/Users/kohler/Dropbox/WRITING/Articles/2018 AVEP/data for r'
cond_names <- c("vis_sweep", "aud_sweep", "vis_sweep+aud", "aud_sweep+vis")</pre>
counter = 0
for (q in c(1,2,3,4)) {
  cur_file = switch(q, "r_vis_rc1_1F1", "r_vis_rc1_2F1", "r_aud_rc1_1F2", "r_aud_rc1_2F2")
  for (c in c(1,2,3,4)) {
    cur_csv <- sprintf('%s/%s_%d.csv', top_folder, cur_file, c)</pre>
    cur data <-data.frame( read.csv(file = cur csv ) )</pre>
    cur_data$group_lbl <- factor(cur_data$group_lbl, levels=c("typ","asd","adhd"))</pre>
    cur_data$group_lbl2 <- factor(cur_data$group_lbl, levels=c("asd","typ","adhd"))</pre>
    cur_data$sc_bin <- scale(log(cur_data$bin,2))</pre>
    if (q == 1) {
      cur_data$condition=factor(c)
      if (c == 1) {
        vis_frame <- cur_data</pre>
      } else {
        vis frame <- rbind(vis frame, cur data)</pre>
    g <- ggplot(data = cur_data, aes(x=sc_bin, y=data, color=group_lb12), ylim(0,15)) +
      geom_smooth(method="lm") + theme_bw()
    g <- g + theme(
      legend.title=element blank(),
      legend.justification=c(1,0),
      legend.background = element_blank()) +
      ggtitle(toupper(sprintf('%s, %s\n',cur_file, cond_names[c])))
    print(g)
    m1 <- lmer(data ~ group_lbl * sc_bin + (1|subject), cur_data)</pre>
    m1_alt <- lmer(data ~ group_lbl2 * sc_bin + (1|subject), cur_data)
    m2 <- lmer(data ~ group_lbl + sc_bin + (1|subject), cur_data)</pre>
    cat("ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS\n")
    print(anova(m1), type='pdf')
    cat("\nSUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD\n")
    print(prettify(summary(m1)), type='pdf')
    cat("\nSUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD\n")
    print(prettify(summary(m1_alt)), type='pdf')
    cat("\nTEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT\n")
    print(anova(m1, m2))
  }
}
```

R_VIS_RC1_1F1, VIS_SWEEP

```
asd typ adhd
```

```
## 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)
                     88.9
                             44.5
                                      2
                                           84
                                                3.5972
                                                          0.0317 *
## group_lbl
## sc_bin
                   4438.4
                           4438.4
                                          780 359.0979 < 2.2e-16 ***
                            133.3
                                      2
                                          780
                                              10.7861 2.395e-05 ***
## group_lbl:sc_bin 266.6
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                             Estimate CI (lower) CI (upper) Std. Error df
                                                                               t value Pr(>|t|)
## 1
               (Intercept) 5.6749523 4.86284840 6.4870562 0.4170347 84 13.60786592
                                                                                         <0.001 ***
            group 1b1: asd -1.5469751 -2.74506113 -0.3488891 0.6152457 84 -2.51440206
                                                                                          0.014
##
           group_lbl: adhd 0.0300026 -1.60974825 1.6697534 0.8420511 84 0.03563037
                                                                                          0.972
##
                    sc_bin 1.8499624 1.50547617 2.1944487 0.1758833 780 10.51812589
                                                                                         <0.001 ***
    group_lbl: asd:sc_bin 0.4407662 -0.06744973 0.9489822 0.2594782 780
                                                                                           0.09
                                                                           1.69866356
## 6 group_lbl: adhd:sc_bin 1.6485999 0.95303421 2.3441656 0.3551328 780 4.64220665
                                                                                         <0.001 ***
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                              Estimate CI (lower) CI (upper) Std. Error
                                                                                    t value Pr(>|t|)
## 1
                (Intercept) 4.1279772 3.24712685 5.00882760 0.4523377 83.99996
                                                                                   9.125875
                                                                                              <0.001 ***
##
            group_lbl2: typ 1.5469751 0.34888905 2.74506113 0.6152458 83.99996
                                                                                   2.514402
                                                                                               0.014
## 3
           group_lbl2: adhd 1.5769777 -0.09788573 3.25184109 0.8600824 83.99996 1.833519
                                                                                                0.07
## 4
                     sc bin 2.2907287 1.91708086 2.66437647 0.1907722 780.00002 12.007665
                                                                                              <0.001 ***
## 5
    group_lbl2: typ:sc_bin -0.4407662 -0.94898220 0.06744973 0.2594782 780.00002 -1.698664
                                                                                                0.09
## 6 group_lbl2: adhd:sc_bin 1.2078337 0.49737358 1.91829378 0.3627374 780.00002 3.329774
                                                                                               0.001 ***
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
## m1: data ~ group_lbl * sc_bin + (1 | subject)
##
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
## m2 6 4834.1 4862.8 -2411.1
                                4822.1
                                4800.8 21.361
## m1 8 4816.8 4854.9 -2400.4
                                                   2 2.299e-05 ***
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
```

R_VIS_RC1_1F1, AUD_SWEEP



```
## 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)
##
## group_lbl
                    21.2902 10.6451
                                       2
                                            863 1.3828 0.2514
                                            863
## sc_bin
                     0.0676 0.0676
                                                0.0088 0.9254
  group_lbl:sc_bin 4.4998 2.2499
                                            863
                                               0.2923 0.7466
                                       2
  SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                              Estimate CI (lower) CI (upper) Std. Error df
##
                                                                               t value Pr(>|t|)
## 1
                (Intercept) 0.4680138 0.19640899 0.7396187 0.1389037 863
                                                                             3.3693402
                                                                                           0.001 ***
## 2
            group_lbl: asd 0.1947242 -0.20569999
                                                    0.5951483
                                                               0.2047843 863
                                                                              0.9508747
                                                                                           0.342
##
  3
           group_lbl: adhd 0.4496139 -0.09827646 0.9975043
                                                              0.2802012 863
                                                                              1.6046110
                                                                                           0.109
                     sc_bin 0.1058864 -0.16554498 0.3773177
                                                               0.1388150 863
                                                                             0.7627879
                                                                                           0.446
     group lbl: asd:sc bin -0.1449576 -0.54538848 0.2554733
                                                               0.2047877 863 -0.7078431
                                                                                           0.479
## 6 group_lbl: adhd:sc_bin -0.1428835 -0.69092563 0.4051587
                                                               0.2802788 863 -0.5097906
                                                                                            0.61
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                                Estimate CI (lower) CI (upper) Std. Error df
                                                                                   t value Pr(>|t|)
## 1
                 (Intercept) 0.66273802 0.3685097 0.9569664 0.1504738 863
                                                                               4.404342574
                                                                                             <0.001 ***
## 2
            group_lbl2: typ -0.19472417 -0.5951483 0.2057000
                                                               0.2047843 863 -0.950874674
                                                                                              0.342
##
           group_lbl2: adhd 0.25488974 -0.3045609
                                                    0.8143403
                                                               0.2861133 863
                                                                              0.890869952
                                                                                              0.373
##
                      sc_bin -0.03907119 -0.3334688
                                                    0.2553264
                                                               0.1505603 863 -0.259505228
                                                                                              0.795
## 5
     group_lbl2: typ:sc_bin 0.14495757 -0.2554733
                                                    0.5453885
                                                               0.2047877 863
                                                                              0.707843096
                                                                                              0.479
## 6 group_lbl2: adhd:sc_bin 0.00207408 -0.5576983 0.5618465 0.2862779 863
                                                                              0.007244988
                                                                                              0.994
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
  m1: data ~ group_lbl * sc_bin + (1 | subject)
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
##
     Df
           AIC
## m2 6 4246.3 4274.9 -2117.2
                                4234.3
## m1 8 4249.7 4287.9 -2116.9
                                4233.7 0.5884
                                                          0.7451
```

R_VIS_RC1_1F1, VIS_SWEEP+AUD

```
asd typ adhd
```

```
## 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)
                     71.0
                             35.5
                                      2
                                           84
                                               2.7266
                                                        0.07124 .
## group_lbl
## sc_bin
                   4873.3
                           4873.3
                                          780 374.3011 < 2.2e-16 ***
                            173.2
                                      2
                                          780
                                             13.3029 2.084e-06 ***
## group_lbl:sc_bin 346.4
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                             Estimate CI (lower) CI (upper) Std. Error df
                                                                              t value Pr(>|t|)
## 1
               (Intercept) 5.8201237 4.97155369 6.6686938 0.4357609 84 13.3562310
                                                                                        <0.001 ***
            group 1bl: asd -1.3721396 -2.62402364 -0.1202556 0.6428723 84 -2.1343891
                                                                                         0.036
           group_lbl: adhd 0.1547345 -1.55864651 1.8681156 0.8798620 84 0.1758623
##
                                                                                         0.861
## 4
                    sc_bin 1.8492892 1.49572379 2.2028545
                                                             0.1805188 780 10.2443042
                                                                                        <0.001 ***
    group_lbl: asd:sc_bin 0.5859786 0.06436835 1.1075889 0.2663169 780
                                                                            2.2003056
                                                                                         0.028
## 6 group_lbl: adhd:sc_bin 1.8709979 1.15710019 2.5848956 0.3644925 780 5.1331585
                                                                                        <0.001 ***
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                              Estimate CI (lower) CI (upper) Std. Error df
                                                                              t value Pr(>|t|)
## 1
                (Intercept) 4.4479841 3.5275807 5.36838758 0.4726491 84
                                                                             9.410753
                                                                                        <0.001 ***
## 2
            group_lbl2: typ 1.3721396 0.1202556 2.62402364
                                                              0.6428723
                                                                        84
                                                                             2.134389
                                                                                         0.036
## 3
           group_lbl2: adhd 1.5268742 -0.2231961 3.27694443
                                                             0.8987028 84
                                                                            1.698976
                                                                                         0.093
## 4
                     sc bin 2.4352678 2.0517723 2.81876325
                                                             0.1958001 780 12.437521
                                                                                        <0.001 ***
## 5
    group_lbl2: typ:sc_bin -0.5859786 -1.1075889 -0.06436835 0.2663169 780 -2.200306
                                                                                         0.028
## 6 group_lbl2: adhd:sc_bin 1.2850193 0.5558346 2.01420390 0.3722975 780 3.451592
                                                                                         0.001 ***
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
## m1: data ~ group_lbl * sc_bin + (1 | subject)
##
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
## m2 6 4887.4 4916.0 -2437.7
                                4875.4
## m1 8 4865.2 4903.3 -2424.6
                                4849.2 26.263
                                                  2 1.982e-06 ***
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
```

R_VIS_RC1_1F1, AUD_SWEEP+VIS

```
7.5

step 5.0

2.5

0.0

1

sc bin
```

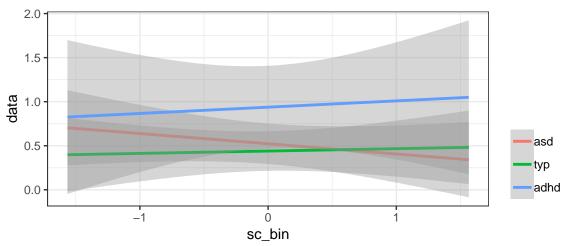
```
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
## Type III Analysis of Variance Table with Satterthwaite's method
                    Sum Sq Mean Sq NumDF DenDF F value
##
                    64.124 32.062
                                       2
                                            84 3.2239
                                                         0.04477 *
## group_lbl
## sc_bin
                   183.887 183.887
                                           780 18.4901 1.924e-05 ***
                                           780 14.8030 4.900e-07 ***
## group_lbl:sc_bin 294.435 147.217
                                       2
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
                            Estimate CI (lower) CI (upper) Std. Error
##
                                                                                  t value Pr(>|t|)
                                                                             df
## 1
                (Intercept) 3.532275 1.9871581 5.0773922 0.7934566 83.99931
                                                                                4.451756
                                                                                            <0.001 ***
            group lbl: asd 1.964438 -0.3150526 4.2439285
                                                           1.1705759
                                                                       83.99931
                                                                                1.678181
                                                                                             0.097
##
           group 1b1: adhd 3.778450 0.6586433 6.8982562 1.6020994
                                                                      83.99931
                                                                                2.358437
                                                                                             0.021
##
                    sc bin -1.290905 -1.5999146 -0.9818947
                                                           0.1577702 780.00024 -8.182183
                                                                                            <0.001 ***
     group_lbl: asd:sc_bin 1.178534 0.7226553 1.6344118 0.2327563 780.00024 5.063381
                                                                                            <0.001 ***
## 6 group_lbl: adhd:sc_bin 1.139235 0.5153012 1.7631694 0.3185600 780.00024 3.576203
                                                                                            <0.001 ***
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                               Estimate CI (lower) CI (upper) Std. Error
                                                                                      t value Pr(>|t|)
## 1
                 (Intercept) 5.49671311 3.8207983 7.1726279 0.8606245 83.99931 6.3868886
                                                                                                <0.001 ***
##
            group_lbl2: typ -1.96443795 -4.2439285 0.3150526
                                                              1.1705759
                                                                         83.99931 -1.6781807
                                                                                                 0.097
##
  .3
           group_lbl2: adhd 1.81401184 -1.3726001 5.0006238
                                                              1.6364057 83.99931 1.1085343
                                                                                                 0.271
## 4
                     sc bin -0.11237109 -0.4475394 0.2227972
                                                              0.1711258 780.00024 -0.6566578
                                                                                                 0.512
## 5
     group_lbl2: typ:sc_bin -1.17853356 -1.6344118 -0.7226553
                                                              0.2327563 780.00024 -5.0633809
                                                                                                <0.001 ***
## 6 group_lbl2: adhd:sc_bin -0.03929826 -0.6765929 0.5979963 0.3253814 780.00024 -0.1207760
                                                                                                 0.904
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
  m1: data ~ group_lbl * sc_bin + (1 | subject)
##
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
## m2 6 4783.7 4812.3 -2385.8
                                4771.7
## m1 8 4758.5 4796.7 -2371.3
                                4742.5 29.17
                                                  2 4.633e-07 ***
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

R_VIS_RC1_2F1, VIS_SWEEP

```
etebo 2 asd typ adhd
```

```
## 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
##
                    41.87
                            20.94
                                      2
                                           84 2.2175 0.115216
## group_lbl
## sc_bin
                   553.22
                           553.22
                                          780 58.5961 5.725e-14 ***
                                      2
                                          780 6.5628 0.001491 **
## group_lbl:sc_bin 123.92
                            61.96
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                              Estimate CI (lower) CI (upper) Std. Error df
                                                                              t value Pr(>|t|)
## 1
               (Intercept) 1.75543475 1.1865583 2.3243112 0.2921316 84 6.0090548
                                                                                        <0.001 ***
            group lbl: asd -0.68735601 -1.5266118 0.1518997 0.4309778 84 -1.5948756
                                                                                         0.114
## 3
           group_lbl: adhd 0.44832095 -0.7003197 1.5969616 0.5898543 84 0.7600537
                                                                                         0.449
## 4
                    sc_bin 1.11472743 0.8136474 1.4158075 0.1537215 780
                                                                            7.2516042
                                                                                        <0.001 ***
    group_lbl: asd:sc_bin -0.74652751 -1.1907069 -0.3023482 0.2267833 780 -3.2918105
                                                                                         0.001
## 6 group_lbl: adhd:sc_bin 0.09939398 -0.5085285 0.7073165 0.3103851 780 0.3202279
                                                                                         0.749
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                             Estimate CI (lower) CI (upper) Std. Error df t value Pr(>|t|)
## 1
                (Intercept) 1.0680787 0.45104563 1.6851118 0.3168612 84 3.370809
                                                                                       0.001
## 2
            group_lbl2: typ 0.6873560 -0.15189975
                                                 1.5266118 0.4309778 84 1.594876
                                                                                       0.114
## 3
           group_lbl2: adhd 1.1356770 -0.03755995 2.3089139 0.6024851 84 1.884988
                                                                                       0.063
## 4
                     sc bin 0.3681999 0.04163277 0.6947671
                                                             0.1667344 780 2.208302
                                                                                       0.028
## 5 group_lbl2: typ:sc_bin 0.7465275 0.30234817 1.1907069
                                                             0.2267833 780 3.291810
                                                                                       0.001
## 6 group_lbl2: adhd:sc_bin 0.8459215 0.22498134 1.4668616 0.3170315 780 2.668257
                                                                                       0.008
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
## m1: data ~ group_lbl * sc_bin + (1 | subject)
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
## m2 6 4553.0 4581.6 -2270.5
                                4541.0
## m1 8 4543.9 4582.1 -2264.0
                                4527.9 13.066
                                                       0.001454 **
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
```

R_VIS_RC1_2F1, AUD_SWEEP



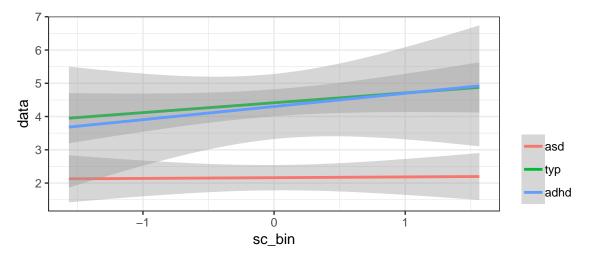
```
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
## Type III Analysis of Variance Table with Satterthwaite's method
##
                    Sum Sq Mean Sq NumDF DenDF F value Pr(>F)
## group_lbl
                   19.3500 9.6750
                                       2 84.08 1.8737 0.1599
                    0.0236
## sc_bin
                           0.0236
                                       1 779.15 0.0046 0.9461
  group_lbl:sc_bin 5.0841 2.5420
                                       2 779.15 0.4923 0.6114
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                              Estimate
                                         CI (lower) CI (upper) Std. Error
                                                                                     t value Pr(>|t|)
## 1
               (Intercept) 0.43983556 0.189930124 0.6897450 0.1283338
                                                                          84.30383
                                                                                    3.4272771
                                                                                                0.001 ***
## 2
            group_lbl: asd 0.08266378 -0.285825659
                                                    0.4511492 0.1892265
                                                                          84.13542
                                                                                    0.4368511
                                                                                                0.663
##
  3
           group_lbl: adhd 0.49791187 -0.006310286
                                                    1.0021300 0.2589276
                                                                         84.06873
                                                                                    1.9229775
                                                                                                0.058
                    sc bin 0.02681755 -0.195851177
                                                    0.2494883 0.1136882 779.15852
                                                                                                0.814
                                                    group lbl: asd:sc bin -0.14275808 -0.471253934
                                                                                                0.395
## 6 group lbl: adhd:sc bin 0.04467799 -0.404861621
                                                   0.4942652 0.2295457 779.15145
                                                                                                0.846
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                               Estimate CI (lower) CI (upper) Std. Error
                                                                                df
                                                                                      t value Pr(>|t|)
## 1
                (Intercept) 0.52249934 0.25170557 0.7932931 0.1390578
                                                                          83.99237
                                                                                   3.7574246
                                                                                                <0.001 ***
                                                    0.2858257
## 2
            group_lbl2: typ -0.08266378 -0.45114921
                                                               0.1892265
                                                                          84.13542 -0.4368511
                                                                                                0.663
##
           group_lbl2: adhd 0.41524809 -0.09964365
                                                    0.9301398
                                                              0.2644069
                                                                          83.99237
                                                                                    1.5704890
                                                                                                 0.12
##
                     sc_bin -0.11594054 -0.35745051
                                                    0.1255694
                                                               0.1233074 779.14915 -0.9402558
                                                                                                0.347
## 5
     group_lbl2: typ:sc_bin 0.14275808 -0.18573578
                                                    0.4712539
                                                               0.1677192 779.15346 0.8511732
                                                                                                0.395
                                                    0.6466471 0.2344588 779.14915 0.7994415
## 6 group_lbl2: adhd:sc_bin 0.18743608 -0.27177497
                                                                                                0.424
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
  m1: data ~ group_lbl * sc_bin + (1 | subject)
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
##
     Df
## m2 6 3920.6 3949.2 -1954.3
                                3908.6
## m1 8 3923.6 3961.8 -1953.8
                                3907.6 0.9878
                                                        0.6103
```

R_VIS_RC1_2F1, VIS_SWEEP+AUD

```
asd typ adhd
```

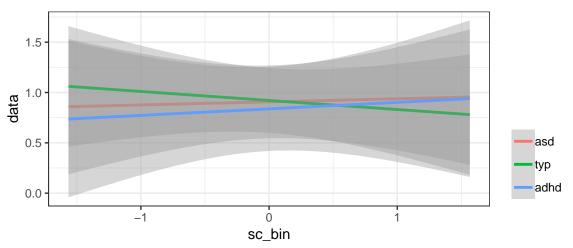
```
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
## Type III Analysis of Variance Table with Satterthwaite's method
                   Sum Sq Mean Sq NumDF DenDF F value
##
                                                         Pr(>F)
                    26.88
                            13.44
                                      2
                                           84 1.5371
                                                          0.221
## group_lbl
                   395.68
## sc_bin
                           395.68
                                          780 45.2524 3.351e-11 ***
                                      2
                                          780 13.1449 2.429e-06 ***
## group_lbl:sc_bin 229.88 114.94
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                              Estimate CI (lower) CI (upper) Std. Error df
                                                                              t value Pr(>|t|)
## 1
               (Intercept) 1.96916556 1.3608174 2.5775137 0.3124013 84 6.3033216
                                                                                        <0.001 ***
            group 1b1: asd -0.77346133 -1.6709492 0.1240265 0.4608814 84 -1.6782221
                                                                                         0.097
## 3
           group_lbl: adhd -0.05374726 -1.2820868 1.1745923 0.6307816 84 -0.0852074
                                                                                         0.932
## 4
                    sc_bin 1.23495646 0.9452079 1.5247050 0.1479360 780 8.3479100
                                                                                        <0.001 ***
    group_lbl: asd:sc_bin -1.10883304 -1.5362952 -0.6813709 0.2182480 780 -5.0806101
                                                                                        <0.001 ***
## 6 group_lbl: adhd:sc_bin -0.31509334 -0.9001360 0.2699493 0.2987034 780 -1.0548703
                                                                                         0.292
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                             Estimate CI (lower) CI (upper) Std. Error df
                                                                            t value Pr(>|t|)
## 1
                (Intercept) 1.1957042 0.5358580 1.8555504 0.3388467
                                                                       84 3.5287465
                                                                                       0.001 ***
## 2
            group_lbl2: typ 0.7734613 -0.1240265 1.6709492
                                                            0.4608814
                                                                       84 1.6782221
                                                                                       0.097
           group_lbl2: adhd 0.7197141 -0.5349283
## 3
                                                 1.9743565
                                                            0.6442888
                                                                       84 1.1170675
                                                                                       0.267
## 4
                     sc bin 0.1261234 -0.1881530 0.4403998 0.1604591 780 0.7860159
                                                                                       0.432
## 5 group_lbl2: typ:sc_bin 1.1088330 0.6813709 1.5362952 0.2182480 780 5.0806101
                                                                                      <0.001 ***
## 6 group_lbl2: adhd:sc_bin 0.7937397 0.1961694 1.3913101 0.3050996 780 2.6015755
                                                                                       0.009 **
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
## m1: data ~ group_lbl * sc_bin + (1 | subject)
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
## m2 6 4517.5 4546.1 -2252.8
                                4505.5
                                4479.5 25.956
## m1 8 4495.5 4533.7 -2239.8
                                                   2 2.311e-06 ***
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
```

R_VIS_RC1_2F1, AUD_SWEEP+VIS



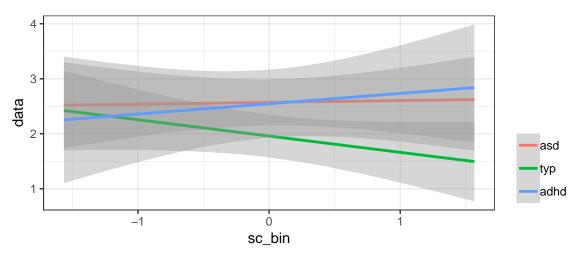
```
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
## Type III Analysis of Variance Table with Satterthwaite's method
                   Sum Sq Mean Sq NumDF DenDF F value
##
                   31.061 15.531
                                      2
                                           84 3.6379 0.030536 *
## group_lbl
                   38.807
## sc_bin
                           38.807
                                          780 9.0901 0.002653 **
                            9.706
                                      2
                                          780 2.2735 0.103630
## group_lbl:sc_bin 19.412
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                             Estimate CI (lower) CI (upper) Std. Error df
                                                                                 t value Pr(>|t|)
## 1
               (Intercept) 4.4138769 3.25761033 5.57014347 0.5937704 84 7.43364224
                                                                                           <0.001 ***
            group 1b1: asd -2.2517053 -3.95752993 -0.54588075 0.8759816 84 -2.57049401
                                                                                            0.012
##
           group_lbl: adhd -0.1113467 -2.44600989 2.22331640 1.1989051 84 -0.09287369
                                                                                            0.926
##
                    sc_bin = 0.2960992 = 0.09363958 = 0.49855873 = 0.1033692 = 780 = 2.86448272
                                                                                            0.004 **
     group_lbl: asd:sc_bin -0.2739604 -0.57264627 0.02472554 0.1524991 780 -1.79647164
                                                                                            0.073
## 6 group_lbl: adhd:sc_bin 0.0999857 -0.30880837 0.50877977 0.2087167 780 0.47904981
                                                                                            0.632
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                              Estimate CI (lower) CI (upper) Std. Error df t value Pr(>|t|)
## 1
                (Intercept) 2.16217155 0.90802437 3.4163187 0.6440344
                                                                         84 3.357230
                                                                                         0.001
##
            group_lbl2: typ 2.25170534 0.54588075 3.9575299
                                                               0.8759816
                                                                         84 2.570494
                                                                                         0.012
## 3
           group_lbl2: adhd 2.14035860 -0.24429752 4.5250147
                                                               1.2245777 84 1.747834
                                                                                         0.084
## 4
                     sc bin 0.02213879 -0.19745945 0.2417370
                                                              0.1121196 780 0.197457
                                                                                         0.844
## 5
     group_lbl2: typ:sc_bin 0.27396036 -0.02472554
                                                    0.5726463  0.1524991  780  1.796472
                                                                                         0.073
## 6 group_lbl2: adhd:sc_bin 0.37394606 -0.04360165 0.7914938 0.2131860 780 1.754083
                                                                                          0.08
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
## m1: data ~ group_lbl * sc_bin + (1 | subject)
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
## m2 6 4046.5 4075.1 -2017.2
                                4034.5
## m1 8 4045.9 4084.1 -2015.0
                                4029.9 4.5513
                                                         0.1027
```

R_AUD_RC1_1F2, VIS_SWEEP



```
## 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)
##
                    0.6347 0.31736
                                      2
                                           84 0.0310 0.9694
## group_lbl
## sc_bin
                    0.0022 0.00224
                                           780
                                               0.0002 0.9882
                                       2
                                          780
                                               0.1830 0.8328
  group_lbl:sc_bin 3.7424 1.87121
##
  SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                               Estimate CI (lower) CI (upper) Std. Error
                                                                                df
                                                                                       t value Pr(>|t|)
## 1
                (Intercept) 0.92076324 0.5962151 1.2453114 0.1666632
                                                                         83.99913 5.52469600
                                                                                                 <0.001 ***
##
            group_lbl: asd -0.01384482 -0.4926464 0.4649568
                                                              0.2458759
                                                                         83.99913 -0.05630814
                                                                                                  0.955
##
  3
           group lbl: adhd -0.08330129 -0.7386093 0.5720067
                                                              0.3365161 83.99913 -0.24754029
                                                                                                  0.805
                    sc bin -0.08977416 -0.4030792 0.2235309
                                                              0.1599632 779.99872 -0.56121747
                                                                                                  0.575
     group lbl: asd:sc bin 0.12024884 -0.3419659
##
                                                   0.5824636
                                                              0.2359916 779.99872 0.50954711
                                                                                                  0.611
  6 group lbl: adhd:sc bin 0.15450070 -0.4781059 0.7871073 0.3229880 779.99872 0.47834809
                                                                                                  0.633
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                                Estimate CI (lower) CI (upper) Std. Error
                                                                                 df
                                                                                        t value Pr(>|t|)
## 1
                 (Intercept) 0.90691843 0.5548965 1.2589404 0.1807716 83.99913 5.01693069
                                                                                                  <0.001 ***
## 2
            group_lbl2: typ 0.01384482 -0.4649568 0.4926464 0.2458759
                                                                          83.99913
                                                                                    0.05630814
                                                                                                   0.955
##
           group_lbl2: adhd -0.06945648 -0.7387968 0.5998838
                                                               0.3437220
                                                                          83.99913 -0.20207164
                                                                                                    0.84
##
                     sc_bin 0.03047468 -0.3093524
                                                    0.3703017
                                                               0.1735045 779.99872 0.17564205
                                                                                                   0.861
## 5
     group_lbl2: typ:sc_bin -0.12024884 -0.5824636
                                                    0.3419659
                                                               0.2359916 779.99872 -0.50954711
                                                                                                   0.611
  6 group_lbl2: adhd:sc_bin 0.03425186 -0.6119010 0.6804046
                                                              0.3299043 779.99872 0.10382364
                                                                                                   0.917
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
  m1: data ~ group_lbl * sc_bin + (1 | subject)
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
##
      Df
           AIC
## m2 6 4505.0 4533.6 -2246.5
                                4493.0
## m1 8 4508.6 4546.8 -2246.3
                                4492.6 0.3674
                                                          0.8322
```

R_AUD_RC1_1F2, AUD_SWEEP



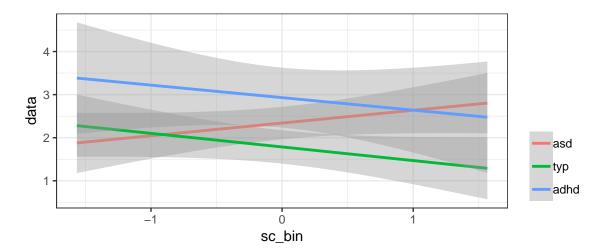
```
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
## Type III Analysis of Variance Table with Satterthwaite's method
                   Sum Sq Mean Sq NumDF DenDF F value Pr(>F)
##
## group_lbl
                   27.236 13.618
                                    2 83.94 1.0631 0.3500
## sc_bin
                   0.452
                           0.452
                                     1 778.98 0.0353 0.8510
## group_lbl:sc_bin 32.192 16.096
                                    2 778.98 1.2565 0.2852
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                            Estimate CI (lower) CI (upper) Std. Error
                                                                               t value Pr(>|t|)
## 1
               (Intercept) 1.9621866 1.3708660 2.55355926 0.3036725
                                                                     84.05313
                                                                              6.461523
                                                                                         <0.001 ***
## 2
            group_lbl: asd 0.6089838 -0.2632312 1.48114679 0.4478913
                                                                     83.97173
                                                                                          0.178
                                                                              1.359669
## 3
           group_lbl: adhd 0.5840306 -0.6095924 1.77760140 0.6129418 83.93949 0.952832
                                                                                          0.343
                   sc bin -0.2970420 -0.6477510 0.05369297 0.1790670 778.97966 -1.658831
                                                                                          0.098
    group lbl: asd:sc bin 0.3298351 -0.1875821 0.84722637 0.2641695 778.97720
                                                                              1.248574
                                                                                          0.212
## 6 group_lbl: adhd:sc_bin 0.4841965 -0.2239515 1.19231860 0.3615503 778.97623 1.339223
                                                                                          0.181
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                              Estimate CI (lower) CI (upper) Std. Error
                                                                            df
                                                                                   t value Pr(>|t|)
## 1
                (Intercept) 2.57117045 1.9300599 3.2122810 0.3292259 83.90257 7.80974560
                                                                                             <0.001 ***
## 2
            group_lbl2: typ -0.60898385 -1.4811468 0.2632312 0.4478913 83.97173 -1.35966870
                                                                                              0.178
## 3
           0.968
                    sc_bin 0.03279312 -0.3476030 0.4131893
## 4
                                                            0.1942177 778.97512 0.16884724
                                                                                              0.866
## 5
    group_lbl2: typ:sc_bin -0.32983508 -0.8472264 0.1875821
                                                            0.2641695 778.97720 -1.24857376
                                                                                              0.212
## 6 group_lbl2: adhd:sc_bin 0.15436140 -0.5689301 0.8776529 0.3692887 778.97512 0.41799653
                                                                                              0.676
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
## m1: data ~ group_lbl * sc_bin + (1 | subject)
                 BIC logLik deviance Chisq Chi Df Pr(>Chisq)
##
     Df
           AIC
## m2 6 4782.6 4811.2 -2385.3
                               4770.6
## m1 8 4784.1 4822.2 -2384.0
                               4768.1 2.5184
                                                       0.2839
```

R_AUD_RC1_1F2, VIS_SWEEP+AUD

```
asd typ adhd sc_bin
```

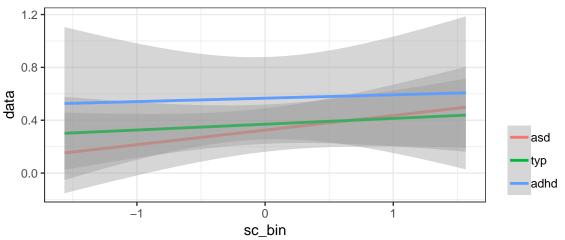
```
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
## Type III Analysis of Variance Table with Satterthwaite's method
                    Sum Sq Mean Sq NumDF DenDF F value
##
                    39.383 19.691
                                      2
                                           84
                                              1.7585 0.178587
## group_lbl
## sc_bin
                    98.284
                           98.284
                                          780
                                               8.7770 0.003143 **
                                      2
                                          780 0.0878 0.915938
## group_lbl:sc_bin 1.967
                            0.983
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                              Estimate CI (lower) CI (upper) Std. Error
                                                                                      t value Pr(>|t|)
                                                                                df
## 1
                (Intercept) 1.20589736 0.68293880 1.7288559 0.2685517 83.99997
                                                                                    4.4903730
                                                                                                 <0.001 ***
            group lbl: asd 0.69618873 -0.07532503 1.4677025 0.3961907
                                                                                                 0.083
                                                                          83.99997
                                                                                    1.7572059
                                                                                                 0.231
##
            group lbl: adhd 0.65450517 -0.40142096 1.7104313 0.5422433 83.99997
                                                                                    1.2070323
##
                    sc_bin -0.44592494 -0.77382009 -0.1180298 0.1674124 780.00002 -2.6636314
                                                                                                 0.008
     group_lbl: asd:sc_bin 0.08253789 -0.40120143 0.5662772 0.2469813 780.00002 0.3341868
                                                                                                 0.738
## 6 group_lbl: adhd:sc_bin 0.11844564 -0.54362031 0.7805116 0.3380289 780.00002 0.3504009
                                                                                                 0.726
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                                                     CI (upper) Std. Error
                               Estimate CI (lower)
                                                                                  df
                                                                                         t value Pr(>|t|)
## 1
                 (Intercept) 1.90208610 1.3348579
                                                    2.469314296 0.2912852 83.99997 6.52997780
                                                                                                   <0.001 ***
##
             group_lbl2: typ -0.69618873 -1.4677025
                                                    0.075325028
                                                                 0.3961907
                                                                            83.99997 -1.75720593
                                                                                                    0.083
##
  .3
            group_lbl2: adhd -0.04168357 -1.1202206
                                                   1.036853477
                                                                 0.5538545 83.99997 -0.07526086
                                                                                                     0.94
## 4
                     sc bin -0.36338705 -0.7190393 -0.007734822 0.1815842 780.00002 -2.00120361
                                                                                                    0.046
## 5
     group_lbl2: typ:sc_bin -0.08253789 -0.5662772 0.401201435
                                                                 0.2469813 780.00002 -0.33418683
                                                                                                    0.738
## 6 group_lbl2: adhd:sc_bin 0.03590775 -0.6403353 0.712150748 0.3452673 780.00002 0.10399986
                                                                                                    0.917
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
## m1: data ~ group_lbl * sc_bin + (1 | subject)
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
## m2 6 4659.1 4687.7 -2323.5
                                4647.1
  m1 8 4662.9 4701.1 -2323.4
                                4646.9 0.1763
                                                         0.9156
```

R_AUD_RC1_1F2, AUD_SWEEP+VIS



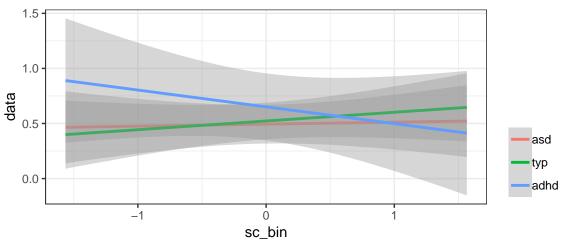
```
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
## Type III Analysis of Variance Table with Satterthwaite's method
                   Sum Sq Mean Sq NumDF DenDF F value Pr(>F)
##
                   48.932
                           24.466
                                      2
                                           84 2.0140 0.13985
## group_lbl
                    7.358
## sc_bin
                            7.358
                                          780 0.6057 0.43663
                                      2
                                          780 3.1208 0.04467 *
## group_lbl:sc_bin 75.823 37.912
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
                              Estimate CI (lower) CI (upper) Std. Error df
##
                                                                                t value Pr(>|t|)
## 1
               (Intercept) 1.78544515 1.20275120 2.3681391 0.2992272 84
                                                                             5.96685398
                                                                                          <0.001 ***
            group lbl: asd 0.55569147 -0.30394912 1.4153321 0.4414459
                                                                                           0.212
                                                                        84
                                                                             1.25879853
##
           group lbl: adhd 1.14493949 -0.03160072
                                                   2.3214797 0.6041814
                                                                                           0.062
                                                                         84
                                                                             1.89502599
##
                    sc_bin -0.31611438 -0.65763557 0.0254068 0.1743694 780 -1.81290047
                                                                                            0.07
     group_lbl: asd:sc_bin 0.61146135 0.10761972 1.1153030 0.2572449 780
                                                                             2.37696244
                                                                                           0.018
## 6 group_lbl: adhd:sc_bin 0.02582904 -0.66374977 0.7154078 0.3520761 780
                                                                             0.07336209
                                                                                           0.942
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                              Estimate CI (lower) CI (upper) Std. Error df
                                                                              t value Pr(>|t|)
## 1
                (Intercept) 2.3411366 1.70911629 2.9731570 0.3245575
                                                                         84
                                                                             7.213319
                                                                                        <0.001 ***
##
            group_lbl2: typ -0.5556915 -1.41533207 0.3039491
                                                              0.4414459
                                                                         84 -1.258799
                                                                                         0.212
## 3
           group_1b12: adhd 0.5892480 -0.61248587 1.7909819 0.6171190 84
                                                                            0.954837
                                                                                         0.342
## 4
                     sc bin 0.2953470 -0.07508477 0.6657787
                                                              0.1891302 780
                                                                                         0.119
                                                                            1.561607
     group_lbl2: typ:sc_bin -0.6114614 -1.11530298 -0.1076197   0.2572449 780 -2.376962
                                                                                         0.018
## 5
## 6 group_lbl2: adhd:sc_bin -0.5856323 -1.28997732 0.1187127 0.3596152 780 -1.628497
                                                                                         0.104
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
## m1: data ~ group_lbl * sc_bin + (1 | subject)
##
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
## m2 6 4747.7 4776.3 -2367.9
                                4735.7
## m1 8 4745.5 4783.6 -2364.7
                                4729.5 6.2407
                                                        0.04414 *
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
```

R_AUD_RC1_2F2, VIS_SWEEP



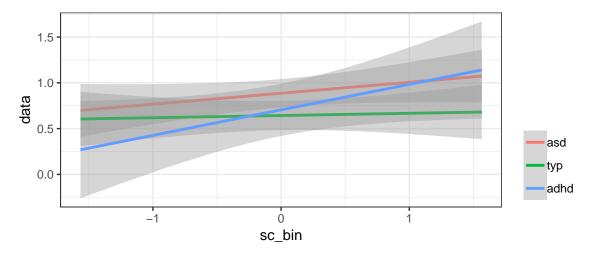
```
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
## Type III Analysis of Variance Table with Satterthwaite's method
                    Sum Sq Mean Sq NumDF DenDF F value Pr(>F)
##
## group_lbl
                    4.7674 2.38371
                                       2
                                            84 0.9834 0.3783
## sc_bin
                    2.4677 2.46766
                                           780
                                               1.0180 0.3133
  group_lbl:sc_bin 1.0761 0.53807
                                       2
                                           780
                                               0.2220 0.8010
##
  SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                               Estimate CI (lower) CI (upper) Std. Error
                                                                                      t value Pr(>|t|)
## 1
                (Intercept) 0.37001264 0.2059956 0.5340296 0.08422663 83.99999
                                                                                    4.3930599
                                                                                                <0.001 ***
## 2
            group_lbl: asd -0.04438613 -0.2863582 0.1975860 0.12425842
                                                                          83.99999 -0.3572082
                                                                                                 0.722
##
  3
           group_lb1: adhd 0.19685489 -0.1343183 0.5280280 0.17006529 83.99999
                                                                                    1.1575254
                                                                                                  0.25
                     sc bin 0.04389073 -0.1086680 0.1964495 0.07789146 779.99997
                                                                                                 0.573
     group lbl: asd:sc bin 0.06658690 -0.1584810 0.2916548 0.11491223 779.99997
                                                                                                 0.562
                                                                                    0.5794588
## 6 group_lbl: adhd:sc_bin -0.01813067 -0.3261681 0.2899067 0.15727370 779.99997 -0.1152810
                                                                                                 0.908
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                                Estimate CI (lower) CI (upper) Std. Error
                                                                            df
                                                                                  t value Pr(>|t|)
## 1
                 (Intercept) 0.32562652 0.14772510 0.5035279 0.09135661
                                                                            84
                                                                               3.5643454
                                                                                             0.001 ***
## 2
            group_lbl2: typ 0.04438613 -0.19758596 0.2863582 0.12425843
                                                                            84
                                                                               0.3572082
                                                                                             0.722
##
           group_lbl2: adhd 0.24124101 -0.09702367
                                                      0.5795057 0.17370697
                                                                            84
                                                                               1.3887814
                                                                                             0.169
##
                      sc_bin 0.11047764 -0.05499559
                                                      0.2759509 0.08448515 780
                                                                                1.3076575
                                                                                             0.191
## 5
     group_lbl2: typ:sc_bin -0.06658690 -0.29165482
                                                      0.1584810 0.11491223 780 -0.5794588
                                                                                             0.562
## 6 group_lbl2: adhd:sc_bin -0.08471757 -0.39935109 0.2299159 0.16064146 780 -0.5273706
                                                                                             0.598
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
  m1: data ~ group_lbl * sc_bin + (1 | subject)
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
##
     Df
## m2 6 3259.4 3288.0 -1623.7
                                3247.4
## m1 8 3262.9 3301.1 -1623.5
                                3246.9 0.4455
                                                          0.8003
```

R_AUD_RC1_2F2, AUD_SWEEP



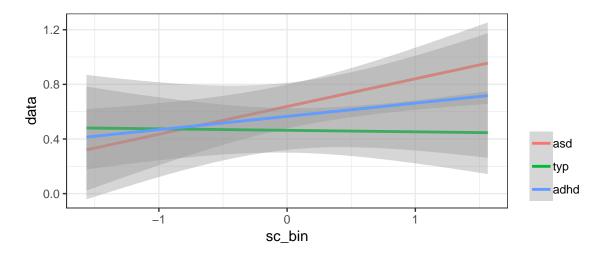
```
## ANOVA TEST FOR MAIN EFFECTS AND INTERACTIONS
## Type III Analysis of Variance Table with Satterthwaite's method
                    Sum Sq Mean Sq NumDF DenDF F value Pr(>F)
##
## group_lbl
                    1.7147 0.85736
                                      2 83.87 0.3137 0.7316
## sc_bin
                    0.2330 0.23296
                                       1 778.94 0.0852 0.7704
  group_lbl:sc_bin 5.2541 2.62706
                                      2 778.94 0.9611 0.3829
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                               Estimate CI (lower) CI (upper) Std. Error
                                                                                df
                                                                                       t value Pr(>|t|)
## 1
                (Intercept) 0.52333765 0.33410052 0.71260922 0.09718770 84.07952 5.3848136
                                                                                                 <0.001 ***
## 2
            group_lbl: asd -0.02930789 -0.30839024 0.24973990 0.14330748 83.92255 -0.2045105
                                                                                                  0.838
           group_lbl: adhd 0.12784281 -0.25403908 0.50969009 0.19609746 83.86038 0.6519351
##
  3
                                                                                                  0.516
                    sc bin 0.07903575 -0.08296123 0.24104988 0.08271458 778.94311 0.9555238
                                                                                                   0.34
     group 1b1: asd:sc bin -0.06098599 -0.29999420 0.17800507 0.12202517 778.93836 -0.4997821
                                                                                                  0.617
## 6 group_lbl: adhd:sc_bin -0.23146698 -0.55857778 0.09562668 0.16700739 778.93648 -1.3859685
                                                                                                  0.166
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                                Estimate CI (lower) CI (upper) Std. Error
                                                                                       t value Pr(>|t|)
## 1
                 (Intercept) 0.49402976 0.2889442 0.6991154 0.1053166 83.78921
                                                                                    4.6909012
                                                                                                 <0.001 ***
## 2
            group_lbl2: typ 0.02930789 -0.2497399 0.3083902 0.1433075
                                                                          83.92255
                                                                                    0.2045105
                                                                                                  0.838
## 3
           group_lbl2: adhd 0.15715070 -0.2328025 0.5471039
                                                               0.2002507 83.78921
                                                                                    0.7847697
                                                                                                  0.435
##
                     sc_bin 0.01804976 -0.1576631
                                                    0.1937627
                                                               0.0897131 778.93433
                                                                                    0.2011942
                                                                                                  0.841
## 5
     group_lbl2: typ:sc_bin 0.06098599 -0.1780051 0.2999942 0.1220252 778.93836
                                                                                    0.4997821
                                                                                                  0.617
## 6 group_lbl2: adhd:sc_bin -0.17048098 -0.5045844 0.1636224 0.1705820 778.93433 -0.9994081
                                                                                                  0.318
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
  m1: data ~ group_lbl * sc_bin + (1 | subject)
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
##
     Df
           AIC
## m2 6 3375.8 3404.4 -1681.9
                                3363.8
## m1 8 3377.8 3416.0 -1680.9
                                3361.8 1.9274
                                                          0.3815
```

R_AUD_RC1_2F2, VIS_SWEEP+AUD



```
## 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)
## group_lbl
                    3.9088 1.9544
                                       2
                                            84 0.9462 0.39231
## sc_bin
                   13.5668 13.5668
                                           780 6.5683 0.01057 *
                                           780 1.5892 0.20474
## group_lbl:sc_bin 6.5651 3.2826
                                       2
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                             Estimate CI (lower) CI (upper) Std. Error df
                                                                              t value Pr(>|t|)
## 1
               (Intercept) 0.64313785 0.40665152 0.8796242 0.12144136 84 5.2958716
                                                                                        <0.001 ***
            group lbl: asd 0.24338991 -0.10549520 0.5922750 0.17916081 84 1.3584997
                                                                                         0.178
##
           group_lbl: adhd 0.06180318 -0.41569563 0.5393020 0.24520701 84 0.2520449
                                                                                         0.802
                    sc_bin 0.02416240 -0.11666251 0.1649873 0.07190053 780 0.3360531
##
                                                                                         0.737
     group_lbl: asd:sc_bin 0.09557986 -0.11217724 0.3033370 0.10607390 780 0.9010687
                                                                                         0.368
## 6 group_lbl: adhd:sc_bin 0.25428914 -0.03005595 0.5386342 0.14517719 780 1.7515778
                                                                                          0.08
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                               Estimate CI (lower) CI (upper) Std. Error df
                                                                                t value Pr(>|t|)
## 1
                (Intercept) 0.88652776 0.6300223 1.1430332 0.13172165 84
                                                                              6.7303117
                                                                                          <0.001 ***
##
            group_lbl2: typ -0.24338991 -0.5922750 0.1054952 0.17916081 84 -1.3584997
                                                                                           0.178
## 3
           group_lbl2: adhd -0.18158673 -0.6693104 0.3061369 0.25045771 84 -0.7250195
                                                                                            0.47
## 4
                     sc bin 0.11974226 -0.0330038 0.2724883 0.07798708 780 1.5354115
                                                                                           0.125
## 5
     group_lbl2: typ:sc_bin -0.09557986 -0.3033370 0.1121772 0.10607390 780 -0.9010687
                                                                                           0.368
## 6 group_lbl2: adhd:sc_bin 0.15870928 -0.1317246 0.4491432 0.14828592 780 1.0702923
                                                                                           0.285
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
## m1: data ~ group_lbl * sc_bin + (1 | subject)
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
## m2 6 3200.5 3229.1 -1594.2
                                3188.5
## m1 8 3201.3 3239.4 -1592.6
                                3185.3 3.1842
                                                         0.2035
```

R_AUD_RC1_2F2, AUD_SWEEP+VIS



```
## 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)
                    2.3183 1.1591
                                      2
                                           84 0.5387 0.58550
## group_lbl
                    6.3539
## sc_bin
                           6.3539
                                           780
                                               2.9530 0.08611 .
                                       2
                                          780
                                              1.9541 0.14239
## group_lbl:sc_bin 8.4090
                           4.2045
## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## SUMMARY AND POST-HOC TESTS, TYP VS ASD & TYP VS ADHD
##
                                         CI (lower) CI (upper) Std. Error df
                                                                                  t value Pr(>|t|)
                               Estimate
                                                                                            <0.001 ***
## 1
                (Intercept) 0.46346619 0.240612198 0.6863202 0.1144408
                                                                           84
                                                                               4.0498324
            group lbl: asd 0.17441100 -0.154362502 0.5031845 0.1688330
                                                                                             0.305
                                                                           84
                                                                               1.0330384
##
            group lbl: adhd 0.10218243 -0.347790785
                                                     0.5521557
                                                                0.2310720
                                                                               0.4422104
                                                                                             0.659
                                                                           84
##
                    sc_bin -0.01095934 -0.154691926
                                                    0.1327732 0.0733851 780 -0.1493402
                                                                                             0.881
     group_lbl: asd:sc_bin 0.21389291 0.001846149
                                                     0.4259397 0.1082641 780
                                                                                             0.049
                                                                               1.9756595
## 6 group_lbl: adhd:sc_bin 0.10802688 -0.182189212 0.3982430 0.1481747 780 0.7290506
                                                                                             0.466
## SUMMARY AND POST-HOC TESTS, ASD VS TYP & ASD VS ADHD
##
                                                       CI (upper) Std. Error
                                Estimate CI (lower)
                                                                             df
                                                                                    t value Pr(>|t|)
## 1
                 (Intercept) 0.63787719 0.39615810
                                                      0.879596274 0.12412851
                                                                             84
                                                                                 5.1388452
                                                                                              <0.001 ***
##
             group_lbl2: typ -0.17441100 -0.50318451
                                                      0.154362502 0.16883303
                                                                             84 -1.0330384
                                                                                               0.305
##
  3
            group_lbl2: adhd -0.07222857 -0.53183722
                                                      0.387380087 0.23601999 84 -0.3060273
                                                                                                0.76
## 4
                     sc bin 0.20293356 0.04703369
                                                     0.358833438 0.07959731 780 2.5495027
                                                                                               0.011
## 5
     group_lbl2: typ:sc_bin -0.21389291 -0.42593966 -0.001846149 0.10826405 780 -1.9756595
                                                                                               0.049
## 6 group_lbl2: adhd:sc_bin -0.10586603 -0.40229662 0.190564567 0.15134764 780 -0.6994891
                                                                                               0.484
## TEST OF WHETHER OR NOT THE INTERACTION PROVIDES A BETTER FIT
## Data: cur_data
## Models:
## m2: data ~ group_lbl + sc_bin + (1 | subject)
## m1: data ~ group_lbl * sc_bin + (1 | subject)
           AIC
                  BIC logLik deviance Chisq Chi Df Pr(>Chisq)
## m2 6 3222.9 3251.5 -1605.4
                                3210.9
  m1 8 3222.9 3261.1 -1603.5
                                3206.9 3.9133
                                                          0.1413
```