HR Prediction Model Results

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Setup

Wiri MSE Model

```
wiri_model_mse <- lmerTest::lmer(MSE ~ Emotion * Intensity * DataSubset + (1|Fold), data = all_data[all
## fixed-effect model matrix is rank deficient so dropping 12 columns / coefficients
summary(wiri_model_mse)
## Linear mixed model fit by maximum likelihood . t-tests use Satterthwaite's
     method [lmerModLmerTest]
## Formula: MSE ~ Emotion * Intensity * DataSubset + (1 | Fold)
      Data: all_data[all_data$Dataset == "Wiri", ]
##
##
##
                   BIC
                          logLik deviance
         AIC
                                            df.resid
   932076.6 933307.1 -465901.3 931802.6
##
                                                58653
##
## Scaled residuals:
       Min
              1Q Median
                                3Q
                                       Max
## -4.6862 -0.5293 -0.0494 0.4493 9.8855
##
## Random effects:
## Groups
             Name
                         Variance Std.Dev.
             (Intercept) 37029
                                  192.4
## Fold
## Residual
                         447404
                                  668.9
## Number of obs: 58790, groups: Fold, 5
##
## Fixed effects:
                                                  Estimate Std. Error
## (Intercept)
                                                 1706.1501
                                                              97.6540
                                                                          8.2737
## EmotionMana
                                                -2285.9042
                                                            122.1207 58784.9999
## EmotionPouri
                                                -135.5429
                                                              66.0872 58785.0000
## EmotionRihariha
                                                  322.4098
                                                              61.2978 58785.0000
## EmotionRiri
                                                 -720.7607
                                                              62.0587 58785.0000
## EmotionTeKore
                                                 -547.2291
                                                              70.8306 58785.0000
## EmotionUruwehi
                                                 -841.0633
                                                              58.7059 58785.0001
## IntensityL2
                                                  -46.8664
                                                              84.2713 58785.0000
## IntensityL3
                                                    6.1218
                                                              72.9811 58785.0001
## IntensityL4
                                                 -403.3179
                                                              87.8808 58784.9998
## IntensityL5
                                                 -571.2084
                                                              79.9468 58785.0000
## IntensityL6
                                                 2512.2448
                                                              89.9771 58784.9998
```

| ## | IntensityL7 | 84.6260 | 87.8808 58785.0001 |
|----|---------------------------------|---------------------|--|
| | DataSubsettrain | 61.3740 | 49.9722 58785.0003 |
| | DataSubsetval | 54.3626 | 59.9791 58785.0031 |
| ## | EmotionMana:IntensityL2 | 2235.9409 | 162.0990 58785.0000 |
| | EmotionPouri:IntensityL2 | -157.5248 | 111.4640 58785.0000 |
| | EmotionRihariha:IntensityL2 | -424.7183 | 107.3538 58785.0000 |
| | EmotionRiri:IntensityL2 | 135.8009 | 110.7430 58785.0000 |
| | EmotionTeKore:IntensityL2 | -253.5973 | 110.5674 58785.0000 |
| | EmotionUruwehi:IntensityL2 | 544.9528 | 106.7719 58785.0000 |
| | EmotionPouri:IntensityL3 | -222.4676 | 104.2946 58785.0000 |
| | EmotionRihariha:IntensityL3 | -236.9912 | 100.1933 58785.0001 |
| | EmotionRiri:IntensityL3 | -350.2198 | 105.4245 58785.0001 |
| | EmotionTeKore:IntensityL3 | 458.2288 | 98.2647 58785.0000 |
| | EmotionUruwehi:IntensityL3 | 433.6015 | 105.4332 58785.0000 |
| | EmotionMana:IntensityL4 | 2776.5414 | 195.9647 58785.0000 |
| | EmotionPouri:IntensityL4 | 26.2729 | 122.1934 58784.9998 |
| | EmotionRihariha:IntensityL4 | -678.8003 | 120.8865 58784.9999 |
| | EmotionRiri:IntensityL4 | 1234.4242 | 121.2741 58784.9999 |
| | EmotionTeKore:IntensityL4 | 557.2470 | 113.3426 58784.9999 |
| | EmotionUruwehi:IntensityL4 | 660.8146 | 111.1442 58784.9999 |
| | EmotionPouri:IntensityL5 | 942.0127 | 111.8882 58785.0000 |
| ## | EmotionRihariha:IntensityL5 | 1152.7286 | 113.9718 58785.0000 |
| | EmotionRiri:IntensityL5 | 1534.8331 | 108.8147 58785.0000 |
| ## | EmotionTeKore: IntensityL5 | 467.7859 | 123.4639 58784.9999 |
| ## | EmotionUruwehi:IntensityL5 | 1162.1443 | 120.7912 58785.0001 |
| ## | EmotionPouri:IntensityL6 | -787.4145 | 127.6647 58784.9999 |
| ## | EmotionRihariha:IntensityL6 | -1025.2132 | 121.2186 58784.9999 |
| ## | EmotionRiri:IntensityL6 | 95.5626 | 124.1338 58784.9999 |
| ## | EmotionTeKore:IntensityL6 | -1714.4759 | 121.9542 58784.9999 |
| ## | EmotionUruwehi:IntensityL6 | 646.8212 | 132.4628 58784.9999 |
| ## | EmotionPouri:IntensityL7 | 222.0008 | 123.3841 58785.0001 |
| | EmotionRihariha:IntensityL7 | -18.3672 | 109.4612 58785.0000 |
| | EmotionRiri:IntensityL7 | 1091.7403 | 114.1186 58785.0001 |
| | EmotionTeKore:IntensityL7 | 793.2360 | 122.8151 58785.0000 |
| | EmotionUruwehi:IntensityL7 | 1440.8129 | 106.7412 58785.0001 |
| | EmotionMana:DataSubsettrain | -166.9513 | |
| | EmotionPouri:DataSubsettrain | -131.5601 | 70.5696 58785.0002 |
| | EmotionRihariha:DataSubsettrain | -168.2894 | 66.1779 58785.0003 |
| | EmotionRiri:DataSubsettrain | -97.9240 | 66.9603 58785.0002 |
| | EmotionTeKore:DataSubsettrain | 41.8488 | 75.8476 58785.0002 |
| | EmotionUruwehi:DataSubsettrain | -49.4250 | 63.3168 58785.0007 |
| | EmotionMana:DataSubsetval | -158.8142 | 163.6692 58785.0006 |
| | EmotionPouri:DataSubsetval | -120.4208 | 82.5705 58785.0029 |
| | EmotionRihariha:DataSubsetval | -165.1124 | 79.0314 58785.0032 |
| | EmotionRiri:DataSubsetval | -88.4585 | 79.8810 58785.0017 |
| | EmotionTeKore:DataSubsetval | 30.5301 | 89.2223 58785.0025 |
| | EmotionUruwehi:DataSubsetval | -40.4949 | 75.4796 58785.0072 |
| ## | IntensityL2:DataSubsettrain | -80.9528 | 89.5509 58785.0001 |
| ## | IntensityL4:DataSubsettrain | -86.2884 | 79.0888 58785.0003 |
| ## | IntensityL4:DataSubsettrain | -105.7778 | 93.3901 58785.0002 |
| ## | IntensityL5:DataSubsettrain | -116.7942 | 86.5132 58785.0002 |
| ## | IntensityI7:DataSubsettrain | 62.8152 | 95.1384 58785.0000 92.4463 58785.0004 |
| ## | IntensityI7:DataSubsettrain | 70.2210 -64.5535 | 103.7912 58785.0004 |
| ## | IntensityL2:DataSubsetval | -04.5535 | 103.7912 00700.0012 |

```
## IntensityL3:DataSubsetval
                                                  -75.3594
                                                               95.0871 58785.0022
  IntensityL4:DataSubsetval
                                                  -85.9974
                                                              108.2498 58785.0037
   IntensityL5:DataSubsetval
                                                 -116.1148
                                                              103.7487 58785.0022
                                                   64.2819
  IntensityL6:DataSubsetval
                                                              109.1685 58785.0020
   IntensityL7:DataSubsetval
                                                   62.1321
                                                              104.9593 58785.0041
  EmotionMana:IntensityL2:DataSubsettrain
                                                              175.2714 58785.0003
                                                  171.7204
  EmotionPouri:IntensityL2:DataSubsettrain
                                                  -28.4098
                                                              118.2265 58785.0002
  EmotionRihariha:IntensityL2:DataSubsettrain
                                                  214.0793
                                                              114.6611 58785.0003
  EmotionRiri:IntensityL2:DataSubsettrain
                                                  213.5249
                                                              117.8390 58785.0001
   EmotionTeKore:IntensityL2:DataSubsettrain
                                                  -30.7328
                                                              117.7539 58785.0001
   EmotionUruwehi:IntensityL2:DataSubsettrain
                                                    5.7503
                                                              113.5362 58785.0003
   EmotionPouri:IntensityL3:DataSubsettrain
                                                  106.5866
                                                              112.0427 58785.0001
   EmotionRihariha:IntensityL3:DataSubsettrain
                                                              108.8157 58785.0003
                                                  133.7939
                                                              113.1344 58785.0003
   EmotionRiri:IntensityL3:DataSubsettrain
                                                  123.8580
  EmotionTeKore:IntensityL3:DataSubsettrain
                                                 -114.9626
                                                              105.6298 58785.0003
   EmotionUruwehi:IntensityL3:DataSubsettrain
                                                   38.0948
                                                              112.9127 58785.0002
   EmotionMana:IntensityL4:DataSubsettrain
                                                  144.2067
                                                              209.9380 58785.0002
   EmotionPouri:IntensityL4:DataSubsettrain
                                                  185.8736
                                                              129.4078 58785.0000
  EmotionRihariha:IntensityL4:DataSubsettrain
                                                              128.4928 58785.0001
                                                   82.5469
  EmotionRiri:IntensityL4:DataSubsettrain
                                                   86.8963
                                                              128.9713 58785.0001
  EmotionTeKore:IntensityL4:DataSubsettrain
                                                   66.6511
                                                              120.9488 58785.0000
  EmotionUruwehi:IntensityL4:DataSubsettrain
                                                   96.7016
                                                              118.9361 58785.0006
## EmotionPouri:IntensityL5:DataSubsettrain
                                                  202.9605
                                                              120.5987 58785.0002
## EmotionRihariha:IntensityL5:DataSubsettrain
                                                  358.1277
                                                              122.8987 58785.0003
## EmotionRiri:IntensityL5:DataSubsettrain
                                                              117.8369 58785.0000
                                                    9.7689
  EmotionTeKore:IntensityL5:DataSubsettrain
                                                   -0.3798
                                                              130.8196 58785.0003
  EmotionUruwehi:IntensityL5:DataSubsettrain
                                                  264.0449
                                                              128.7241 58785.0003
   EmotionPouri:IntensityL6:DataSubsettrain
                                                  -35.1019
                                                              135.4273 58785.0001
   EmotionRihariha:IntensityL6:DataSubsettrain
                                                  605.5067
                                                              129.3811 58785.0000
  EmotionRiri:IntensityL6:DataSubsettrain
                                                              131.7092 58784.9999
                                                 -542.3013
   EmotionTeKore:IntensityL6:DataSubsettrain
                                                 -224.4917
                                                              129.1412 58785.0000
   EmotionUruwehi:IntensityL6:DataSubsettrain
                                                  202.0492
                                                              142.6279 58785.0010
   EmotionPouri:IntensityL7:DataSubsettrain
                                                 -115.5478
                                                              129.6465 58785.0004
  EmotionRihariha:IntensityL7:DataSubsettrain
                                                   37.6677
                                                              115.9516 58785.0003
   EmotionRiri:IntensityL7:DataSubsettrain
                                                              121.1136 58785.0003
                                                   68.3071
  EmotionTeKore:IntensityL7:DataSubsettrain
                                                 -171.4834
                                                              129.3190 58785.0003
  EmotionUruwehi:IntensityL7:DataSubsettrain
                                                  -72.0899
                                                              113.0417 58785.0006
  EmotionMana:IntensityL2:DataSubsetval
                                                              209.8878 58785.0036
                                                  150.9751
  EmotionPouri:IntensityL2:DataSubsetval
                                                              136.5198 58785.0025
                                                  -58.5277
  EmotionRihariha:IntensityL2:DataSubsetval
                                                  196.3584
                                                              134.2180 58785.0033
  EmotionRiri:IntensityL2:DataSubsetval
                                                  197.7816
                                                              136.9391 58785.0014
  EmotionTeKore:IntensityL2:DataSubsetval
                                                  -32.3515
                                                              137.0715 58785.0011
  EmotionUruwehi:IntensityL2:DataSubsetval
                                                  -22.6178
                                                              131.7628 58785.0026
   EmotionPouri:IntensityL3:DataSubsetval
                                                   92.0633
                                                              132.5982 58785.0011
   EmotionRihariha:IntensityL3:DataSubsetval
                                                  136.4401
                                                              131.3301 58785.0028
  EmotionRiri:IntensityL3:DataSubsetval
                                                  107.2472
                                                              133.6223 58785.0029
  EmotionTeKore: IntensityL3: DataSubsetval
                                                 -108.2633
                                                              125.1519 58785.0028
   EmotionUruwehi:IntensityL3:DataSubsetval
                                                   34.3255
                                                              132.8488 58785.0019
  EmotionMana:IntensityL4:DataSubsetval
                                                   98.5884
                                                              247.1646 58785.0024
  EmotionPouri:IntensityL4:DataSubsetval
                                                  152.1085
                                                              148.9703 58785.0018
  EmotionRihariha:IntensityL4:DataSubsetval
                                                   65.8953
                                                              149.0012 58785.0025
## EmotionRiri:IntensityL4:DataSubsetval
                                                   65.1795
                                                              149.7083 58785.0026
## EmotionTeKore:IntensityL4:DataSubsetval
                                                   49.6040
                                                              141.3331 58785.0015
## EmotionUruwehi:IntensityL4:DataSubsetval
                                                   71.8765
                                                              139.7320 58785.0080
```

```
## EmotionPouri:IntensityL5:DataSubsetval
                                                 190.0080
                                                            143.5954 58785.0026
                                                 372.0462
## EmotionRihariha:IntensityL5:DataSubsetval
                                                            146.4516 58785.0028
## EmotionRiri:IntensityL5:DataSubsetval
                                                  23.4388
                                                            141.4931 58785.0000
## EmotionTeKore:IntensityL5:DataSubsetval
                                                  19.8746
                                                            150.7501 58785.0037
## EmotionUruwehi:IntensityL5:DataSubsetval
                                                 251.4557
                                                            150.0281 58785.0027
## EmotionPouri:IntensityL6:DataSubsetval
                                                          156.4222 58785.0034
                                                 -31.6361
## EmotionRihariha:IntensityL6:DataSubsetval
                                                 590.5602 151.2484 58785.0007
## EmotionRiri:IntensityL6:DataSubsetval
                                                -538.4383 152.1895 58785.0003
## EmotionTeKore:IntensityL6:DataSubsetval
                                                -204.1388
                                                            148.6322 58785.0014
## EmotionUruwehi:IntensityL6:DataSubsetval
                                                 236.6508
                                                            169.5105 58785.0116
## EmotionPouri:IntensityL7:DataSubsetval
                                                -102.3853
                                                            146.8416 58785.0041
## EmotionRihariha:IntensityL7:DataSubsetval
                                                            133.5449 58785.0034
                                                  72.8412
## EmotionRiri:IntensityL7:DataSubsetval
                                                  51.4588
                                                            140.0181 58785.0023
## EmotionTeKore:IntensityL7:DataSubsetval
                                                -156.0156
                                                            147.1169 58785.0034
## EmotionUruwehi:IntensityL7:DataSubsetval
                                                 -41.3341
                                                            130.1281 58785.0067
##
                                               t value Pr(>|t|)
                                                17.471 8.02e-08 ***
## (Intercept)
## EmotionMana
                                               -18.718 < 2e-16 ***
## EmotionPouri
                                                -2.051 0.040274 *
## EmotionRihariha
                                                 5.260 1.45e-07 ***
                                               -11.614 < 2e-16 ***
## EmotionRiri
## EmotionTeKore
                                                -7.726 1.13e-14 ***
## EmotionUruwehi
                                               -14.327 < 2e-16 ***
## IntensitvL2
                                                -0.556 0.578119
## IntensityL3
                                                 0.084 0.933150
## IntensityL4
                                                -4.589 4.45e-06 ***
## IntensityL5
                                                -7.145 9.11e-13 ***
                                                27.921 < 2e-16 ***
## IntensityL6
## IntensityL7
                                                 0.963 0.335570
## DataSubsettrain
                                                 1.228 0.219391
## DataSubsetval
                                                 0.906 0.364749
## EmotionMana:IntensityL2
                                                13.794 < 2e-16 ***
## EmotionPouri:IntensityL2
                                                -1.413 0.157592
## EmotionRihariha:IntensityL2
                                                -3.956 7.62e-05 ***
## EmotionRiri:IntensityL2
                                                 1.226 0.220101
## EmotionTeKore:IntensityL2
                                               -2.294 0.021817 *
## EmotionUruwehi:IntensityL2
                                                5.104 3.34e-07 ***
## EmotionPouri:IntensityL3
                                                -2.133 0.032923 *
## EmotionRihariha:IntensityL3
                                                -2.365 0.018017 *
## EmotionRiri:IntensityL3
                                                -3.322 0.000894 ***
## EmotionTeKore:IntensityL3
                                                4.663 3.12e-06 ***
## EmotionUruwehi:IntensityL3
                                                4.113 3.92e-05 ***
## EmotionMana:IntensityL4
                                                14.169 < 2e-16 ***
                                                 0.215 0.829760
## EmotionPouri:IntensityL4
## EmotionRihariha:IntensityL4
                                                -5.615 1.97e-08 ***
## EmotionRiri:IntensityL4
                                                10.179 < 2e-16 ***
## EmotionTeKore:IntensityL4
                                                 4.916 8.83e-07 ***
## EmotionUruwehi:IntensityL4
                                                 5.946 2.77e-09 ***
## EmotionPouri:IntensityL5
                                                 8.419 < 2e-16 ***
## EmotionRihariha:IntensityL5
                                                10.114 < 2e-16 ***
## EmotionRiri:IntensityL5
                                                14.105 < 2e-16 ***
## EmotionTeKore:IntensityL5
                                                 3.789 0.000151 ***
## EmotionUruwehi:IntensityL5
                                                 9.621 < 2e-16 ***
## EmotionPouri:IntensityL6
                                                -6.168 6.97e-10 ***
```

```
## EmotionRihariha:IntensityL6
                                                -8.458 < 2e-16 ***
## EmotionRiri:IntensityL6
                                                 0.770 0.441401
## EmotionTeKore:IntensityL6
                                               -14.058 < 2e-16 ***
## EmotionUruwehi:IntensityL6
                                                 4.883 1.05e-06 ***
## EmotionPouri:IntensityL7
                                                 1.799 0.071982
## EmotionRihariha:IntensityL7
                                                -0.168 0.866744
## EmotionRiri:IntensityL7
                                                 9.567 < 2e-16 ***
## EmotionTeKore:IntensityL7
                                                 6.459 1.06e-10 ***
## EmotionUruwehi:IntensityL7
                                                 13.498 < 2e-16 ***
## EmotionMana:DataSubsettrain
                                                -1.248 0.211860
## EmotionPouri:DataSubsettrain
                                                -1.864 0.062290
## EmotionRihariha:DataSubsettrain
                                                -2.543 0.010994
## EmotionRiri:DataSubsettrain
                                                -1.462 0.143632
                                                 0.552 0.581123
## EmotionTeKore:DataSubsettrain
## EmotionUruwehi:DataSubsettrain
                                                -0.781 0.435042
## EmotionMana:DataSubsetval
                                                 -0.970 0.331883
## EmotionPouri:DataSubsetval
                                                -1.458 0.144736
## EmotionRihariha:DataSubsetval
                                                -2.089 0.036694
## EmotionRiri:DataSubsetval
                                                -1.107 0.268135
## EmotionTeKore:DataSubsetval
                                                 0.342 0.732216
                                                -0.537 0.591614
## EmotionUruwehi:DataSubsetval
## IntensityL2:DataSubsettrain
                                                -0.904 0.366007
## IntensityL3:DataSubsettrain
                                                -1.091 0.275263
## IntensityL4:DataSubsettrain
                                                -1.133 0.257368
## IntensityL5:DataSubsettrain
                                                -1.350 0.177016
## IntensityL6:DataSubsettrain
                                                 0.660 0.509096
## IntensityL7:DataSubsettrain
                                                 0.760 0.447504
## IntensityL2:DataSubsetval
                                                -0.622 0.533974
## IntensityL3:DataSubsetval
                                                -0.793 0.428055
## IntensityL4:DataSubsetval
                                                -0.794 0.426946
## IntensityL5:DataSubsetval
                                                 -1.119 0.263063
## IntensityL6:DataSubsetval
                                                 0.589 0.555976
## IntensityL7:DataSubsetval
                                                 0.592 0.553877
## EmotionMana:IntensityL2:DataSubsettrain
                                                 0.980 0.327219
## EmotionPouri:IntensityL2:DataSubsettrain
                                                 -0.240 0.810099
## EmotionRihariha:IntensityL2:DataSubsettrain
                                                 1.867 0.061898
## EmotionRiri:IntensityL2:DataSubsettrain
                                                  1.812 0.069991
## EmotionTeKore:IntensityL2:DataSubsettrain
                                                 -0.261 0.794100
## EmotionUruwehi:IntensityL2:DataSubsettrain
                                                  0.051 0.959607
## EmotionPouri:IntensityL3:DataSubsettrain
                                                  0.951 0.341454
## EmotionRihariha:IntensityL3:DataSubsettrain
                                                  1.230 0.218872
## EmotionRiri:IntensityL3:DataSubsettrain
                                                  1.095 0.273615
## EmotionTeKore:IntensityL3:DataSubsettrain
                                                 -1.088 0.276443
## EmotionUruwehi:IntensityL3:DataSubsettrain
                                                  0.337 0.735830
## EmotionMana:IntensityL4:DataSubsettrain
                                                  0.687 0.492148
## EmotionPouri:IntensityL4:DataSubsettrain
                                                  1.436 0.150911
## EmotionRihariha:IntensityL4:DataSubsettrain
                                                  0.642 0.520600
## EmotionRiri:IntensityL4:DataSubsettrain
                                                  0.674 0.500464
## EmotionTeKore:IntensityL4:DataSubsettrain
                                                  0.551 0.581589
## EmotionUruwehi:IntensityL4:DataSubsettrain
                                                  0.813 0.416190
## EmotionPouri:IntensityL5:DataSubsettrain
                                                  1.683 0.092392
## EmotionRihariha:IntensityL5:DataSubsettrain
                                                  2.914 0.003570 **
## EmotionRiri:IntensityL5:DataSubsettrain
                                                  0.083 0.933930
## EmotionTeKore:IntensityL5:DataSubsettrain
                                                 -0.003 0.997684
```

```
## EmotionUruwehi:IntensityL5:DataSubsettrain
                                                 2.051 0.040247 *
## EmotionPouri:IntensityL6:DataSubsettrain
                                                -0.259 0.795486
                                                 4.680 2.87e-06 ***
## EmotionRihariha:IntensityL6:DataSubsettrain
## EmotionRiri:IntensityL6:DataSubsettrain
                                                -4.117 3.84e-05 ***
## EmotionTeKore:IntensityL6:DataSubsettrain
                                                -1.738 0.082156
## EmotionUruwehi:IntensityL6:DataSubsettrain
                                                 1.417 0.156600
## EmotionPouri:IntensityL7:DataSubsettrain
                                                -0.891 0.372797
## EmotionRihariha:IntensityL7:DataSubsettrain
                                                 0.325 0.745291
## EmotionRiri:IntensityL7:DataSubsettrain
                                                 0.564 0.572762
## EmotionTeKore:IntensityL7:DataSubsettrain
                                                -1.326 0.184828
## EmotionUruwehi:IntensityL7:DataSubsettrain
                                                -0.638 0.523653
## EmotionMana:IntensityL2:DataSubsetval
                                                 0.719 0.471951
## EmotionPouri:IntensityL2:DataSubsetval
                                                -0.429 0.668134
## EmotionRihariha:IntensityL2:DataSubsetval
                                                 1.463 0.143478
## EmotionRiri:IntensityL2:DataSubsetval
                                                 1.444 0.148659
## EmotionTeKore:IntensityL2:DataSubsetval
                                                -0.236 0.813419
## EmotionUruwehi:IntensityL2:DataSubsetval
                                                -0.172 0.863709
## EmotionPouri:IntensityL3:DataSubsetval
                                                 0.694 0.487495
## EmotionRihariha:IntensityL3:DataSubsetval
                                                 1.039 0.298851
## EmotionRiri:IntensityL3:DataSubsetval
                                                 0.803 0.422201
## EmotionTeKore:IntensityL3:DataSubsetval
                                                -0.865 0.387012
## EmotionUruwehi:IntensityL3:DataSubsetval
                                                 0.258 0.796114
## EmotionMana:IntensityL4:DataSubsetval
                                                 0.399 0.689985
## EmotionPouri:IntensityL4:DataSubsetval
                                                 1.021 0.307227
## EmotionRihariha:IntensityL4:DataSubsetval
                                                 0.442 0.658312
## EmotionRiri:IntensityL4:DataSubsetval
                                                 0.435 0.663291
## EmotionTeKore:IntensityL4:DataSubsetval
                                                 0.351 0.725611
## EmotionUruwehi:IntensityL4:DataSubsetval
                                                 0.514 0.606982
## EmotionPouri:IntensityL5:DataSubsetval
                                                 1.323 0.185768
## EmotionRihariha:IntensityL5:DataSubsetval
                                                 2.540 0.011075 *
## EmotionRiri:IntensityL5:DataSubsetval
                                                 0.166 0.868430
## EmotionTeKore:IntensityL5:DataSubsetval
                                                 0.132 0.895113
## EmotionUruwehi:IntensityL5:DataSubsetval
                                                 1.676 0.093732
## EmotionPouri:IntensityL6:DataSubsetval
                                                -0.202 0.839724
## EmotionRihariha:IntensityL6:DataSubsetval
                                                 3.905 9.45e-05 ***
## EmotionRiri:IntensityL6:DataSubsetval
                                                -3.538 0.000404 ***
## EmotionTeKore:IntensityL6:DataSubsetval
                                                -1.373 0.169618
## EmotionUruwehi:IntensityL6:DataSubsetval
                                                 1.396 0.162695
## EmotionPouri:IntensityL7:DataSubsetval
                                                -0.697 0.485649
## EmotionRihariha:IntensityL7:DataSubsetval
                                                 0.545 0.585451
## EmotionRiri:IntensityL7:DataSubsetval
                                                 0.368 0.713236
## EmotionTeKore:IntensityL7:DataSubsetval
                                                -1.060 0.288928
## EmotionUruwehi:IntensityL7:DataSubsetval
                                                -0.318 0.750758
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## Correlation matrix not shown by default, as p = 135 > 12.
## Use print(x, correlation=TRUE) or
##
       vcov(x)
                      if you need it
## fit warnings:
## fixed-effect model matrix is rank deficient so dropping 12 columns / coefficients
```

Wiri Correlation Model

```
wiri_model_correlation <- lmerTest::lmer(Correlation ~ Emotion * Intensity * DataSubset + (1|Fold), dat
## fixed-effect model matrix is rank deficient so dropping 12 columns / coefficients
summary(wiri_model_correlation)
## Linear mixed model fit by maximum likelihood . t-tests use Satterthwaite's
    method [lmerModLmerTest]
## Formula: Correlation ~ Emotion * Intensity * DataSubset + (1 | Fold)
     Data: all_data[all_data$Dataset == "Wiri", ]
##
##
##
                      logLik deviance df.resid
   66051.9 67282.4 -32889.0 65777.9
                                         58653
##
##
## Scaled residuals:
                      Median
                 10
## -2.52937 -0.69355 0.00101 0.71117 2.39984
## Random effects:
## Groups
                        Variance Std.Dev.
            Name
## Fold
             (Intercept) 6.193e-05 0.007869
## Residual
                        1.792e-01 0.423341
## Number of obs: 58790, groups: Fold, 5
## Fixed effects:
##
                                                Estimate Std. Error
## (Intercept)
                                               6.507e-02 2.942e-02 1.250e+04
## EmotionMana
                                              -2.022e-02 7.729e-02 5.878e+04
## EmotionPouri
                                              -3.233e-02 4.183e-02 5.878e+04
## EmotionRihariha
                                              -9.066e-02 3.880e-02 5.878e+04
                                              -6.234e-03 3.928e-02 5.878e+04
## EmotionRiri
## EmotionTeKore
                                              -6.756e-02 4.483e-02 5.878e+04
## EmotionUruwehi
                                              -1.027e-01 3.716e-02 5.878e+04
                                              -3.730e-03 5.334e-02 5.878e+04
## IntensityL2
## IntensityL3
                                              -7.807e-02 4.619e-02
                                                                     5.878e+04
## IntensityL4
                                              -4.269e-02 5.562e-02 5.878e+04
## IntensityL5
                                               2.949e-02 5.060e-02 5.878e+04
                                              -7.003e-02 5.695e-02 5.878e+04
## IntensityL6
                                              -4.037e-02 5.562e-02 5.878e+04
## IntensityL7
## DataSubsettrain
                                              -1.705e-02 3.163e-02 5.879e+04
## DataSubsetval
                                               9.633e-03 3.796e-02 5.879e+04
                                               6.384e-02 1.026e-01
## EmotionMana:IntensityL2
                                                                     5.878e+04
## EmotionPouri:IntensityL2
                                              -8.806e-02 7.055e-02
                                                                     5.878e+04
## EmotionRihariha:IntensityL2
                                              -1.811e-02 6.795e-02 5.878e+04
## EmotionRiri:IntensityL2
                                              -1.772e-02 7.009e-02 5.878e+04
## EmotionTeKore:IntensityL2
                                               3.812e-02 6.998e-02 5.878e+04
## EmotionUruwehi:IntensityL2
                                               4.849e-02 6.758e-02 5.878e+04
## EmotionPouri:IntensityL3
                                               7.398e-02 6.601e-02 5.878e+04
## EmotionRihariha:IntensityL3
                                               1.416e-01 6.341e-02 5.878e+04
## EmotionRiri:IntensityL3
                                              -4.879e-02 6.672e-02 5.878e+04
## EmotionTeKore:IntensityL3
                                               1.492e-01 6.219e-02 5.878e+04
## EmotionUruwehi:IntensityL3
                                               9.939e-02 6.673e-02 5.878e+04
                                              -1.882e-01 1.240e-01 5.878e+04
## EmotionMana:IntensityL4
```

```
## EmotionPouri:IntensityL4
                                              -3.573e-02 7.734e-02 5.878e+04
## EmotionRihariha:IntensityL4
                                               1.427e-02 7.651e-02 5.878e+04
## EmotionRiri:IntensityL4
                                               1.972e-01 7.676e-02 5.878e+04
## EmotionTeKore:IntensityL4
                                               3.792e-02 7.174e-02 5.878e+04
## EmotionUruwehi:IntensityL4
                                               1.344e-01 7.034e-02
                                                                     5.878e+04
## EmotionPouri:IntensityL5
                                               4.072e-02 7.082e-02 5.878e+04
## EmotionRihariha:IntensityL5
                                              -5.481e-02 7.213e-02 5.878e+04
## EmotionRiri:IntensityL5
                                               1.117e-01 6.887e-02 5.878e+04
## EmotionTeKore:IntensityL5
                                               1.202e-01 7.814e-02
                                                                     5.878e+04
## EmotionUruwehi:IntensityL5
                                               1.881e-02 7.645e-02
                                                                     5.878e+04
## EmotionPouri:IntensityL6
                                               1.329e-01 8.080e-02
                                                                     5.878e+04
                                                                     5.878e+04
## EmotionRihariha:IntensityL6
                                               1.965e-01 7.672e-02
## EmotionRiri:IntensityL6
                                              -5.011e-02 7.857e-02
                                                                     5.878e+04
## EmotionTeKore:IntensityL6
                                               6.158e-02 7.719e-02 5.878e+04
## EmotionUruwehi:IntensityL6
                                               2.071e-01 8.384e-02
                                                                     5.878e+04
## EmotionPouri:IntensityL7
                                              -3.971e-02 7.809e-02
                                                                     5.878e+04
## EmotionRihariha:IntensityL7
                                               6.618e-02 6.928e-02
                                                                     5.878e+04
## EmotionRiri:IntensityL7
                                               2.381e-02 7.223e-02
                                                                     5.878e+04
## EmotionTeKore:IntensityL7
                                               2.167e-03 7.773e-02 5.878e+04
## EmotionUruwehi:IntensityL7
                                               1.735e-01 6.756e-02 5.878e+04
## EmotionMana:DataSubsettrain
                                              -4.662e-02 8.463e-02 5.879e+04
## EmotionPouri:DataSubsettrain
                                               6.067e-02 4.466e-02 5.879e+04
## EmotionRihariha:DataSubsettrain
                                               1.009e-01 4.188e-02 5.879e+04
## EmotionRiri:DataSubsettrain
                                              -7.148e-03 4.238e-02
                                                                     5.879e+04
## EmotionTeKore:DataSubsettrain
                                              -2.706e-02 4.800e-02 5.879e+04
## EmotionUruwehi:DataSubsettrain
                                               7.626e-02 4.007e-02 5.879e+04
## EmotionMana:DataSubsetval
                                              -8.127e-03 1.036e-01
                                                                     5.879e+04
## EmotionPouri:DataSubsetval
                                               3.746e-04 5.226e-02
                                                                     5.879e+04
## EmotionRihariha:DataSubsetval
                                               7.703e-02 5.002e-02 5.879e+04
## EmotionRiri:DataSubsetval
                                              -6.547e-03 5.056e-02
                                                                     5.879e+04
## EmotionTeKore:DataSubsetval
                                               6.313e-04 5.647e-02
                                                                     5.879e+04
## EmotionUruwehi:DataSubsetval
                                               5.220e-02 4.777e-02
                                                                     5.879e+04
## IntensityL2:DataSubsettrain
                                              -3.435e-02 5.668e-02
                                                                     5.879e+04
## IntensityL3:DataSubsettrain
                                              8.359e-02 5.006e-02 5.879e+04
## IntensityL4:DataSubsettrain
                                               6.102e-02 5.911e-02
                                                                     5.879e+04
## IntensityL5:DataSubsettrain
                                              -7.523e-02 5.475e-02 5.879e+04
## IntensityL6:DataSubsettrain
                                               6.063e-02 6.021e-02 5.879e+04
## IntensityL7:DataSubsettrain
                                               1.969e-02 5.851e-02 5.879e+04
## IntensityL2:DataSubsetval
                                              -5.013e-02 6.569e-02
                                                                     5.879e+04
## IntensityL3:DataSubsetval
                                               5.467e-02 6.018e-02 5.879e+04
## IntensityL4:DataSubsetval
                                               3.765e-02 6.851e-02 5.879e+04
## IntensityL5:DataSubsetval
                                              -5.233e-02 6.566e-02 5.879e+04
## IntensityL6:DataSubsetval
                                               1.521e-02 6.909e-02 5.879e+04
  IntensityL7:DataSubsetval
                                              -1.061e-02 6.643e-02 5.879e+04
## EmotionMana:IntensityL2:DataSubsettrain
                                               8.147e-02 1.109e-01
                                                                     5.879e+04
## EmotionPouri:IntensityL2:DataSubsettrain
                                               7.929e-02 7.483e-02
                                                                     5.879e+04
## EmotionRihariha:IntensityL2:DataSubsettrain -1.864e-02 7.257e-02
                                                                     5.879e+04
## EmotionRiri:IntensityL2:DataSubsettrain
                                               4.784e-02 7.458e-02
                                                                     5.879e+04
## EmotionTeKore:IntensityL2:DataSubsettrain
                                               2.678e-02 7.453e-02
                                                                     5.879e+04
## EmotionUruwehi:IntensityL2:DataSubsettrain
                                              -3.340e-02 7.186e-02
                                                                     5.879e+04
## EmotionPouri:IntensityL3:DataSubsettrain
                                              -1.420e-01 7.091e-02 5.879e+04
## EmotionRihariha:IntensityL3:DataSubsettrain -2.006e-01 6.887e-02 5.879e+04
## EmotionRiri:IntensityL3:DataSubsettrain
                                               3.203e-02 7.160e-02 5.879e+04
## EmotionTeKore:IntensityL3:DataSubsettrain
                                              -3.909e-02 6.685e-02 5.879e+04
```

```
## EmotionUruwehi:IntensityL3:DataSubsettrain
                                                -8.611e-02 7.146e-02
                                                                        5.879e+04
## EmotionMana:IntensityL4:DataSubsettrain
                                                 1.869e-01
                                                            1.329e-01
                                                                        5.879e+04
  EmotionPouri:IntensityL4:DataSubsettrain
                                                -4.757e-02
                                                            8.190e-02
                                                                        5.879e+04
  EmotionRihariha:IntensityL4:DataSubsettrain -3.097e-02
                                                            8.132e-02
                                                                        5.879e+04
   EmotionRiri:IntensityL4:DataSubsettrain
                                                -2.672e-01
                                                            8.163e-02
                                                                        5.879e+04
  EmotionTeKore:IntensityL4:DataSubsettrain
                                                 9.391e-03
                                                            7.655e-02
                                                                        5.879e+04
  EmotionUruwehi:IntensityL4:DataSubsettrain
                                                -1.397e-01
                                                            7.528e-02
                                                                        5.879e+04
  EmotionPouri:IntensityL5:DataSubsettrain
                                                -7.168e-02
                                                            7.633e-02
                                                                        5.879e+04
  EmotionRihariha:IntensityL5:DataSubsettrain
                                                 7.686e-02
                                                            7.778e-02
                                                                        5.879e+04
  EmotionRiri:IntensityL5:DataSubsettrain
                                                -7.541e-02
                                                            7.458e-02
                                                                        5.878e+04
  EmotionTeKore:IntensityL5:DataSubsettrain
                                                -5.998e-02
                                                            8.280e-02
                                                                        5.879e+04
  EmotionUruwehi:IntensityL5:DataSubsettrain
                                                 2.120e-02
                                                            8.147e-02
                                                                        5.879e+04
   EmotionPouri:IntensityL6:DataSubsettrain
                                                -1.250e-01
                                                            8.571e-02
                                                                        5.879e+04
   EmotionRihariha:IntensityL6:DataSubsettrain -1.910e-01
                                                            8.189e-02
                                                                        5.879e+04
  EmotionRiri:IntensityL6:DataSubsettrain
                                                 7.555e-02
                                                            8.336e-02
                                                                        5.879e+04
  EmotionTeKore:IntensityL6:DataSubsettrain
                                                -2.264e-02
                                                            8.173e-02
                                                                        5.879e+04
  EmotionUruwehi:IntensityL6:DataSubsettrain
                                                -1.900e-01
                                                            9.027e-02
                                                                        5.879e+04
   EmotionPouri:IntensityL7:DataSubsettrain
                                                 2.466e-02
                                                            8.205e-02
                                                                        5.879e+04
  EmotionRihariha:IntensityL7:DataSubsettrain -7.183e-02
                                                            7.339e-02
                                                                        5.879e+04
  EmotionRiri:IntensityL7:DataSubsettrain
                                                 1.740e-02
                                                            7.665e-02
                                                                        5.879e+04
  EmotionTeKore:IntensityL7:DataSubsettrain
                                                 8.393e-02
                                                            8.185e-02
                                                                        5.879e+04
  EmotionUruwehi:IntensityL7:DataSubsettrain
                                                -1.062e-01
                                                            7.154e-02
                                                                        5.879e+04
## EmotionMana:IntensityL2:DataSubsetval
                                                -3.622e-02
                                                            1.328e-01
                                                                        5.879e+04
## EmotionPouri:IntensityL2:DataSubsetval
                                                 1.027e-01
                                                            8.640e-02
                                                                        5.879e+04
## EmotionRihariha:IntensityL2:DataSubsetval
                                                -4.279e-02
                                                            8.495e-02
                                                                        5.879e+04
  EmotionRiri:IntensityL2:DataSubsetval
                                                -1.776e-02
                                                            8.667e-02
                                                                        5.879e+04
## EmotionTeKore:IntensityL2:DataSubsetval
                                                -8.424e-03
                                                            8.675e-02
                                                                        5.879e+04
   EmotionUruwehi:IntensityL2:DataSubsetval
                                                -1.055e-02
                                                            8.339e-02
                                                                        5.879e+04
   EmotionPouri:IntensityL3:DataSubsetval
                                                -8.583e-02
                                                            8.392e-02
                                                                        5.879e+04
  EmotionRihariha:IntensityL3:DataSubsetval
                                                            8.312e-02
                                                                        5.879e+04
                                                -1.492e-01
  EmotionRiri:IntensityL3:DataSubsetval
                                                 4.352e-02
                                                            8.457e-02
                                                                        5.879e+04
  EmotionTeKore: IntensityL3: DataSubsetval
                                                -5.769e-02
                                                            7.921e-02
                                                                        5.879e+04
   EmotionUruwehi:IntensityL3:DataSubsetval
                                                -2.129e-02
                                                            8.408e-02
                                                                        5.879e+04
  EmotionMana:IntensityL4:DataSubsetval
                                                 1.021e-01
                                                            1.564e-01
                                                                        5.879e+04
   EmotionPouri:IntensityL4:DataSubsetval
                                                            9.428e-02
                                                                        5.879e+04
                                                 1.941e-02
  EmotionRihariha:IntensityL4:DataSubsetval
                                                -1.422e-02
                                                            9.430e-02
                                                                        5.879e+04
  EmotionRiri:IntensityL4:DataSubsetval
                                                -2.568e-01
                                                            9.475e-02
                                                                        5.879e+04
  EmotionTeKore:IntensityL4:DataSubsetval
                                                -2.225e-02
                                                            8.945e-02
                                                                        5.879e+04
## EmotionUruwehi:IntensityL4:DataSubsetval
                                                            8.844e-02
                                                -1.056e-01
                                                                        5.879e+04
## EmotionPouri:IntensityL5:DataSubsetval
                                                -2.646e-02
                                                            9.088e-02
                                                                        5.879e+04
  EmotionRihariha:IntensityL5:DataSubsetval
                                                 6.210e-02
                                                            9.269e-02
                                                                        5.879e+04
  EmotionRiri:IntensityL5:DataSubsetval
                                                                        5.879e+04
                                                -8.836e-02
                                                            8.955e-02
  EmotionTeKore: IntensityL5: DataSubsetval
                                                -1.214e-01
                                                            9.541e-02
                                                                        5.879e+04
   EmotionUruwehi:IntensityL5:DataSubsetval
                                                -1.827e-02
                                                            9.495e-02
                                                                        5.879e+04
  EmotionPouri:IntensityL6:DataSubsetval
                                                -4.391e-02
                                                            9.900e-02
                                                                        5.879e+04
  EmotionRihariha:IntensityL6:DataSubsetval
                                                -1.532e-01
                                                            9.573e-02
                                                                        5.879e+04
  EmotionRiri:IntensityL6:DataSubsetval
                                                 1.067e-01
                                                            9.632e-02
                                                                        5.879e+04
  EmotionTeKore:IntensityL6:DataSubsetval
                                                -3.045e-02
                                                            9.407e-02
                                                                        5.879e+04
  EmotionUruwehi:IntensityL6:DataSubsetval
                                                -1.396e-01
                                                            1.073e-01
                                                                        5.879e+04
  EmotionPouri:IntensityL7:DataSubsetval
                                                 5.950e-02
                                                            9.294e-02
                                                                        5.879e+04
  EmotionRihariha:IntensityL7:DataSubsetval
                                                            8.452e-02
                                                                        5.879e+04
                                                -4.039e-02
## EmotionRiri:IntensityL7:DataSubsetval
                                                -1.294e-02
                                                            8.862e-02
                                                                        5.879e+04
## EmotionTeKore:IntensityL7:DataSubsetval
                                                 5.608e-02
                                                            9.311e-02
                                                                        5.879e+04
## EmotionUruwehi:IntensityL7:DataSubsetval
                                                -9.318e-02 8.236e-02
                                                                        5.879e+04
```

```
##
                                               t value Pr(>|t|)
## (Intercept)
                                                 2.211 0.02702 *
## EmotionMana
                                                -0.262 0.79361
## EmotionPouri
                                                -0.773 0.43962
## EmotionRihariha
                                                -2.337 0.01945
## EmotionRiri
                                                -0.159 0.87389
## EmotionTeKore
                                                -1.507 0.13182
                                                -2.764 0.00572 **
## EmotionUruwehi
## IntensityL2
                                                -0.070 0.94424
## IntensityL3
                                                -1.690 0.09100
## IntensityL4
                                                -0.768 0.44274
                                                0.583 0.55996
## IntensityL5
## IntensityL6
                                                -1.230 0.21881
                                                -0.726 0.46796
## IntensityL7
## DataSubsettrain
                                                -0.539 0.58973
## DataSubsetval
                                                0.254 0.79967
## EmotionMana:IntensityL2
                                                0.622 0.53380
## EmotionPouri:IntensityL2
                                               -1.248 0.21194
## EmotionRihariha:IntensityL2
                                               -0.267 0.78983
                                                -0.253 0.80038
## EmotionRiri:IntensityL2
## EmotionTeKore:IntensityL2
                                                0.545 0.58589
## EmotionUruwehi:IntensityL2
                                                0.718 0.47307
## EmotionPouri:IntensityL3
                                                1.121 0.26243
## EmotionRihariha:IntensityL3
                                                2.232 0.02560 *
## EmotionRiri:IntensityL3
                                               -0.731 0.46467
## EmotionTeKore:IntensityL3
                                                2.399 0.01644
## EmotionUruwehi:IntensityL3
                                                1.489 0.13639
## EmotionMana:IntensityL4
                                                -1.518 0.12914
## EmotionPouri:IntensityL4
                                               -0.462 0.64412
## EmotionRihariha:IntensityL4
                                                0.187 0.85204
## EmotionRiri:IntensityL4
                                                 2.569 0.01021 *
## EmotionTeKore:IntensityL4
                                                 0.529 0.59709
## EmotionUruwehi:IntensityL4
                                                1.910 0.05615
## EmotionPouri:IntensityL5
                                                0.575 0.56532
## EmotionRihariha:IntensityL5
                                                -0.760 0.44739
## EmotionRiri:IntensityL5
                                                1.622 0.10480
## EmotionTeKore:IntensityL5
                                                1.538 0.12410
## EmotionUruwehi:IntensityL5
                                                0.246 0.80568
## EmotionPouri:IntensityL6
                                                1.645 0.10001
## EmotionRihariha:IntensityL6
                                                2.561 0.01042 *
## EmotionRiri:IntensityL6
                                               -0.638 0.52358
## EmotionTeKore:IntensityL6
                                                0.798 0.42500
## EmotionUruwehi:IntensityL6
                                                2.470 0.01350 *
## EmotionPouri:IntensityL7
                                               -0.508 0.61111
## EmotionRihariha:IntensityL7
                                                0.955 0.33942
                                                0.330 0.74171
## EmotionRiri:IntensityL7
## EmotionTeKore:IntensityL7
                                                0.028 0.97776
## EmotionUruwehi:IntensityL7
                                                2.568 0.01023 *
## EmotionMana:DataSubsettrain
                                               -0.551 0.58178
## EmotionPouri:DataSubsettrain
                                                1.358 0.17438
## EmotionRihariha:DataSubsettrain
                                                2.408 0.01604 *
## EmotionRiri:DataSubsettrain
                                               -0.169 0.86606
## EmotionTeKore:DataSubsettrain
                                               -0.564 0.57295
                                                1.903 0.05705 .
## EmotionUruwehi:DataSubsettrain
```

```
## EmotionMana:DataSubsetval
                                                -0.078 0.93747
## EmotionPouri:DataSubsetval
                                                 0.007
                                                        0.99428
## EmotionRihariha:DataSubsetval
                                                 1.540
                                                        0.12355
## EmotionRiri:DataSubsetval
                                                -0.129
                                                        0.89697
## EmotionTeKore:DataSubsetval
                                                 0.011
                                                        0.99108
## EmotionUruwehi:DataSubsetval
                                                 1.093 0.27452
  IntensityL2:DataSubsettrain
                                                -0.606 0.54453
## IntensityL3:DataSubsettrain
                                                 1.670 0.09494
  IntensityL4:DataSubsettrain
                                                 1.032
                                                        0.30193
  IntensityL5:DataSubsettrain
                                                -1.374 0.16948
  IntensityL6:DataSubsettrain
                                                 1.007 0.31398
## IntensityL7:DataSubsettrain
                                                 0.337 0.73643
  IntensityL2:DataSubsetval
                                                -0.763 0.44538
   IntensityL3:DataSubsetval
                                                 0.908 0.36370
                                                 0.549 0.58269
  IntensityL4:DataSubsetval
   IntensityL5:DataSubsetval
                                                -0.797
                                                        0.42551
                                                 0.220
  IntensityL6:DataSubsetval
                                                        0.82578
  IntensityL7:DataSubsetval
                                                -0.160 0.87314
## EmotionMana:IntensityL2:DataSubsettrain
                                                 0.734 0.46267
## EmotionPouri:IntensityL2:DataSubsettrain
                                                 1.060 0.28933
## EmotionRihariha:IntensityL2:DataSubsettrain
                                                -0.257 0.79734
## EmotionRiri:IntensityL2:DataSubsettrain
                                                 0.641 0.52126
## EmotionTeKore:IntensityL2:DataSubsettrain
                                                 0.359
                                                        0.71939
## EmotionUruwehi:IntensityL2:DataSubsettrain
                                                -0.465
                                                        0.64209
## EmotionPouri:IntensityL3:DataSubsettrain
                                                -2.002 0.04530 *
## EmotionRihariha:IntensityL3:DataSubsettrain
                                                -2.913
                                                        0.00358
## EmotionRiri:IntensityL3:DataSubsettrain
                                                 0.447
                                                        0.65466
## EmotionTeKore:IntensityL3:DataSubsettrain
                                                -0.585 0.55873
## EmotionUruwehi:IntensityL3:DataSubsettrain
                                                -1.205 0.22821
## EmotionMana:IntensityL4:DataSubsettrain
                                                 1.406 0.15960
## EmotionPouri:IntensityL4:DataSubsettrain
                                                -0.581
                                                        0.56141
## EmotionRihariha:IntensityL4:DataSubsettrain
                                                -0.381
                                                        0.70336
## EmotionRiri:IntensityL4:DataSubsettrain
                                                -3.274
                                                        0.00106 **
## EmotionTeKore:IntensityL4:DataSubsettrain
                                                 0.123
                                                       0.90237
  EmotionUruwehi:IntensityL4:DataSubsettrain
                                                -1.856
                                                        0.06345
## EmotionPouri:IntensityL5:DataSubsettrain
                                                -0.939
                                                       0.34768
## EmotionRihariha:IntensityL5:DataSubsettrain
                                                 0.988 0.32309
## EmotionRiri:IntensityL5:DataSubsettrain
                                                -1.011
                                                        0.31199
## EmotionTeKore:IntensityL5:DataSubsettrain
                                                -0.724
                                                        0.46884
## EmotionUruwehi:IntensityL5:DataSubsettrain
                                                 0.260
                                                        0.79472
## EmotionPouri:IntensityL6:DataSubsettrain
                                                -1.458
                                                        0.14481
## EmotionRihariha:IntensityL6:DataSubsettrain
                                                -2.333
                                                       0.01965
## EmotionRiri:IntensityL6:DataSubsettrain
                                                 0.906
                                                        0.36479
  EmotionTeKore:IntensityL6:DataSubsettrain
                                                -0.277
                                                        0.78178
## EmotionUruwehi:IntensityL6:DataSubsettrain
                                                -2.105 0.03530 *
## EmotionPouri:IntensityL7:DataSubsettrain
                                                 0.301
                                                        0.76375
## EmotionRihariha:IntensityL7:DataSubsettrain
                                                -0.979
                                                        0.32766
## EmotionRiri:IntensityL7:DataSubsettrain
                                                 0.227
                                                        0.82043
## EmotionTeKore:IntensityL7:DataSubsettrain
                                                 1.026 0.30513
## EmotionUruwehi:IntensityL7:DataSubsettrain
                                                -1.485
                                                        0.13766
## EmotionMana:IntensityL2:DataSubsetval
                                                -0.273 0.78512
## EmotionPouri:IntensityL2:DataSubsetval
                                                 1.188 0.23473
## EmotionRihariha:IntensityL2:DataSubsetval
                                                -0.504
                                                        0.61446
## EmotionRiri:IntensityL2:DataSubsetval
                                                -0.205 0.83760
```

```
## EmotionTeKore:IntensityL2:DataSubsetval
                                               -0.097 0.92265
## EmotionUruwehi:IntensityL2:DataSubsetval
                                               -0.126 0.89936
## EmotionPouri:IntensityL3:DataSubsetval
                                               -1.023 0.30644
## EmotionRihariha:IntensityL3:DataSubsetval
                                               -1.794 0.07275
## EmotionRiri:IntensityL3:DataSubsetval
                                                0.515 0.60681
## EmotionTeKore:IntensityL3:DataSubsetval
                                               -0.728 0.46644
## EmotionUruwehi:IntensityL3:DataSubsetval
                                               -0.253 0.80013
## EmotionMana:IntensityL4:DataSubsetval
                                                0.653 0.51391
## EmotionPouri:IntensityL4:DataSubsetval
                                                0.206 0.83688
## EmotionRihariha:IntensityL4:DataSubsetval
                                               -0.151 0.88014
## EmotionRiri:IntensityL4:DataSubsetval
                                               -2.710 0.00673 **
## EmotionTeKore:IntensityL4:DataSubsetval
                                               -0.249 0.80357
## EmotionUruwehi:IntensityL4:DataSubsetval
                                               -1.194 0.23244
## EmotionPouri:IntensityL5:DataSubsetval
                                               -0.291 0.77090
## EmotionRihariha:IntensityL5:DataSubsetval
                                                0.670 0.50289
## EmotionRiri:IntensityL5:DataSubsetval
                                               -0.987 0.32382
## EmotionTeKore:IntensityL5:DataSubsetval
                                               -1.273 0.20311
## EmotionUruwehi:IntensityL5:DataSubsetval
                                               -0.192 0.84741
## EmotionPouri:IntensityL6:DataSubsetval
                                               -0.443 0.65742
## EmotionRihariha:IntensityL6:DataSubsetval
                                               -1.600 0.10955
## EmotionRiri:IntensityL6:DataSubsetval
                                                1.108 0.26786
## EmotionTeKore:IntensityL6:DataSubsetval
                                               -0.324 0.74614
## EmotionUruwehi:IntensityL6:DataSubsetval
                                               -1.301 0.19327
## EmotionPouri:IntensityL7:DataSubsetval
                                                0.640 0.52206
## EmotionRihariha:IntensityL7:DataSubsetval
                                               -0.478 0.63273
## EmotionRiri:IntensityL7:DataSubsetval
                                               -0.146 0.88392
## EmotionTeKore:IntensityL7:DataSubsetval
                                                0.602 0.54696
## EmotionUruwehi:IntensityL7:DataSubsetval
                                               -1.131 0.25790
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## Correlation matrix not shown by default, as p = 135 > 12.
## Use print(x, correlation=TRUE)
      vcov(x)
                     if you need it
##
## fit warnings:
## fixed-effect model matrix is rank deficient so dropping 12 columns / coefficients
```

eMotion MSE Model

Scaled residuals:

```
eMotion_model_mse <- lmerTest::lmer(MSE ~ Emotion * DataSubset + (1|Fold), data = all_data[all_data$Dat
summary(eMotion_model_mse)

## Linear mixed model fit by maximum likelihood . t-tests use Satterthwaite's
## method [lmerModLmerTest]

## Formula: MSE ~ Emotion * DataSubset + (1 | Fold)

## Data: all_data[all_data$Dataset == "eMotion", ]

##

## AIC BIC logLik deviance df.resid
## 1148636.4 1148767.8 -574304.2 1148608.4 88086</pre>
```

```
1Q Median
                                3Q
## -0.7879 -0.4384 -0.2852 0.0672 26.6518
##
## Random effects:
  Groups
            Name
                        Variance Std.Dev.
                          218.5
                                  14.78
## Fold
             (Intercept)
                         26888.1 163.98
  Residual
## Number of obs: 88100, groups: Fold, 4
##
## Fixed effects:
##
                                          Estimate Std. Error
                                                                     df t value
## (Intercept)
                                                        8.198
                                                                  5.989 12.373
                                           101.437
## EmotionConversation_2
                                            -5.524
                                                        5.032 88096.000 -1.098
## EmotionConversation_3
                                            -3.810
                                                        4.868 88096.000
                                                                        -0.783
## EmotionConversation_4
                                                        5.015 88096.000
                                            -4.361
                                                                        -0.870
## DataSubsettrain
                                           -11.397
                                                        3.777 88096.001
                                                                         -3.018
## DataSubsetval
                                             3.499
                                                        4.386 88096.013
                                                                          0.798
## EmotionConversation 2:DataSubsettrain
                                             5.824
                                                        5.350 88096.001
                                                                          1.089
## EmotionConversation_3:DataSubsettrain
                                             2.982
                                                       5.201 88096.001
                                                                          0.573
## EmotionConversation_4:DataSubsettrain
                                             4.411
                                                       5.351 88096.001
                                                                          0.824
## EmotionConversation_2:DataSubsetval
                                             6.271
                                                       6.206 88096.012
                                                                          1.011
## EmotionConversation_3:DataSubsetval
                                                       6.096 88096.012
                                             2.570
                                                                          0.422
## EmotionConversation_4:DataSubsetval
                                                                          0.396
                                                       6.241 88096.016
                                             2.474
                                         Pr(>|t|)
## (Intercept)
                                         1.72e-05 ***
## EmotionConversation 2
                                          0.27226
## EmotionConversation_3
                                          0.43383
## EmotionConversation_4
                                          0.38454
## DataSubsettrain
                                          0.00255 **
## DataSubsetval
                                          0.42491
## EmotionConversation_2:DataSubsettrain 0.27632
## EmotionConversation_3:DataSubsettrain 0.56641
## EmotionConversation_4:DataSubsettrain 0.40984
## EmotionConversation_2:DataSubsetval
                                          0.31222
## EmotionConversation_3:DataSubsetval
                                          0.67330
## EmotionConversation_4:DataSubsetval
                                          0.69182
## ---
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## Correlation of Fixed Effects:
                         (Intr) EmtC 2 EmtC 3 EmtC 4 DtSbstt DtSbstv
## EmtnCnvrs 2
                         -0.305
## EmtnCnvrs 3
                        -0.315 0.514
## EmtnCnvrs_4
                        -0.306 0.499 0.516
## DataSbsttrn
                        -0.407 0.662 0.685 0.665
## DataSubstvl
                        -0.350 0.570 0.590 0.572 0.760
## EmtnCnvrstn_2:DtSbstt 0.287 -0.941 -0.483 -0.469 -0.706
                                                            -0.536
## EmtnCnvrstn_3:DtSbstt 0.295 -0.481 -0.936 -0.483 -0.726
                                                             -0.552
## EmtnCnvrstn_4:DtSbstt 0.287 -0.467 -0.483 -0.937 -0.706
                                                             -0.536
## EmtnCnvrstn_2:DtSbstv 0.247 -0.811 -0.417 -0.404 -0.537
                                                             -0.707
## EmtnCnvrstn_3:DtSbstv 0.252 -0.410 -0.799 -0.412 -0.547
                                                            -0.719
## EmtnCnvrstn_4:DtSbstv 0.246 -0.401 -0.414 -0.804 -0.534 -0.703
##
                         EmtnCnvrstn_2:DtSbstt EmtnCnvrstn_3:DtSbstt
## EmtnCnvrs 2
```

```
## EmtnCnvrs_3
## EmtnCnvrs_4
## DataSbsttrn
## DataSubstvl
## EmtnCnvrstn_2:DtSbstt
## EmtnCnvrstn_3:DtSbstt 0.513
## EmtnCnvrstn 4:DtSbstt 0.498
                                                0.512
## EmtnCnvrstn_2:DtSbstv 0.763
                                                0.390
## EmtnCnvrstn_3:DtSbstv 0.386
                                                0.747
## EmtnCnvrstn_4:DtSbstv 0.377
                                                0.388
                         EmtnCnvrstn_4:DtSbstt EmtnCnvrstn_2:DtSbstv
## EmtnCnvrs_2
## EmtnCnvrs_3
## EmtnCnvrs_4
## DataSbsttrn
## DataSubstvl
## EmtnCnvrstn_2:DtSbstt
## EmtnCnvrstn_3:DtSbstt
## EmtnCnvrstn_4:DtSbstt
## EmtnCnvrstn_2:DtSbstv 0.379
## EmtnCnvrstn_3:DtSbstv 0.386
                                                0.508
## EmtnCnvrstn_4:DtSbstv 0.753
                                                0.497
##
                         EmtnCnvrstn_3:DtSbstv
## EmtnCnvrs 2
## EmtnCnvrs_3
## EmtnCnvrs 4
## DataSbsttrn
## DataSubstvl
## EmtnCnvrstn_2:DtSbstt
## EmtnCnvrstn_3:DtSbstt
## EmtnCnvrstn_4:DtSbstt
## EmtnCnvrstn_2:DtSbstv
## EmtnCnvrstn_3:DtSbstv
## EmtnCnvrstn_4:DtSbstv 0.506
```

eMotion Correlation Model

```
eMotion_model_correlation <- lmerTest::lmer(Correlation ~ Emotion * DataSubset + (1|Fold), data = all_d
summary(eMotion_model_correlation)
## Linear mixed model fit by maximum likelihood . t-tests use Satterthwaite's
    method [lmerModLmerTest]
## Formula: Correlation ~ Emotion * DataSubset + (1 | Fold)
      Data: all_data[all_data$Dataset == "eMotion", ]
##
##
                       logLik deviance df.resid
##
        AIC
                 BIC
## 113894.3 114028.9 -56933.2 113866.3
##
## Scaled residuals:
##
       Min
                  1Q
                     Median
                                            Max
## -2.53633 -0.61033 -0.01142 0.61461 2.39240
```

```
## Random effects:
## Groups Name
                        Variance Std.Dev.
## Fold
            (Intercept) 0.0003089 0.01758
## Residual
                        0.1646269 0.40574
## Number of obs: 110125, groups: Fold, 5
##
## Fixed effects:
##
                                          Estimate Std. Error
                                                                     df t value
## (Intercept)
                                         3.153e-03 1.111e-02 1.903e+01
                                                                          0.284
## EmotionConversation_2
                                         3.441e-02 1.114e-02 1.101e+05
                                                                          3.090
## EmotionConversation_3
                                         2.952e-02 1.077e-02 1.101e+05
                                                                          2.740
## EmotionConversation_4
                                         1.543e-02 1.110e-02 1.101e+05
                                                                          1.390
## DataSubsettrain
                                        2.787e-02 8.358e-03 1.101e+05
                                                                          3.334
## DataSubsetval
                                       -3.434e-03 9.718e-03 1.101e+05 -0.353
## EmotionConversation_2:DataSubsettrain -1.895e-02 1.184e-02 1.101e+05 -1.600
## EmotionConversation_3:DataSubsettrain -2.164e-02 1.151e-02
                                                              1.101e+05 -1.880
## EmotionConversation_4:DataSubsettrain 6.155e-03 1.184e-02 1.101e+05
                                                                         0.520
## EmotionConversation 2:DataSubsetval -1.767e-02 1.374e-02 1.101e+05 -1.286
## EmotionConversation_3:DataSubsetval -8.704e-03 1.348e-02 1.101e+05 -0.646
## EmotionConversation_4:DataSubsetval
                                        2.497e-03 1.383e-02 1.101e+05
                                                                         0.180
##
                                       Pr(>|t|)
## (Intercept)
                                       0.779613
## EmotionConversation_2
                                       0.002004 **
## EmotionConversation 3
                                        0.006141 **
## EmotionConversation 4
                                        0.164537
## DataSubsettrain
                                        0.000855 ***
## DataSubsetval
                                        0.723836
## EmotionConversation_2:DataSubsettrain 0.109587
## EmotionConversation_3:DataSubsettrain 0.060137 .
## EmotionConversation_4:DataSubsettrain 0.603257
## EmotionConversation_2:DataSubsetval
                                      0.198426
## EmotionConversation_3:DataSubsetval
                                       0.518604
## EmotionConversation_4:DataSubsetval
## Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
## Correlation of Fixed Effects:
##
                        (Intr) EmtC_2 EmtC_3 EmtC_4 DtSbstt DtSbstv
## EmtnCnvrs 2
                        -0.498
## EmtnCnvrs_3
                        -0.515 0.514
## EmtnCnvrs 4
                        -0.500 0.499 0.516
## DataSbsttrn
                        -0.664 0.662 0.685 0.665
## DataSubstvl
                        -0.571 0.570 0.589 0.572 0.759
## EmtnCnvrstn_2:DtSbstt 0.469 -0.941 -0.483 -0.469 -0.706 -0.536
## EmtnCnvrstn_3:DtSbstt 0.482 -0.481 -0.936 -0.483 -0.726 -0.551
## EmtnCnvrstn_4:DtSbstt 0.469 -0.468 -0.483 -0.937 -0.706
                                                           -0.536
## EmtnCnvrstn_2:DtSbstv 0.404 -0.811 -0.417 -0.404 -0.537
                                                           -0.707
## EmtnCnvrstn_3:DtSbstv 0.412 -0.411 -0.799 -0.412 -0.547 -0.721
## EmtnCnvrstn_4:DtSbstv 0.401 -0.400 -0.414 -0.802 -0.533 -0.702
                        EmtnCnvrstn_2:DtSbstt EmtnCnvrstn_3:DtSbstt
## EmtnCnvrs_2
## EmtnCnvrs 3
## EmtnCnvrs 4
## DataSbsttrn
```

```
## DataSubstvl
## EmtnCnvrstn_2:DtSbstt
## EmtnCnvrstn 3:DtSbstt 0.512
## EmtnCnvrstn_4:DtSbstt 0.498
                                                0.512
## EmtnCnvrstn_2:DtSbstv 0.762
                                                0.390
## EmtnCnvrstn_3:DtSbstv 0.386
                                                0.748
## EmtnCnvrstn_4:DtSbstv 0.376
                                                0.387
                         EmtnCnvrstn_4:DtSbstt EmtnCnvrstn_2:DtSbstv
## EmtnCnvrs_2
## EmtnCnvrs_3
## EmtnCnvrs_4
## DataSbsttrn
## DataSubstvl
## EmtnCnvrstn_2:DtSbstt
## EmtnCnvrstn_3:DtSbstt
## EmtnCnvrstn_4:DtSbstt
## EmtnCnvrstn_2:DtSbstv 0.379
## EmtnCnvrstn_3:DtSbstv 0.386
                                                0.510
## EmtnCnvrstn_4:DtSbstv 0.752
                                                0.497
                         EmtnCnvrstn_3:DtSbstv
## EmtnCnvrs_2
## EmtnCnvrs_3
## EmtnCnvrs_4
## DataSbsttrn
## DataSubstvl
## EmtnCnvrstn_2:DtSbstt
## EmtnCnvrstn_3:DtSbstt
## EmtnCnvrstn_4:DtSbstt
## EmtnCnvrstn_2:DtSbstv
## EmtnCnvrstn_3:DtSbstv
## EmtnCnvrstn_4:DtSbstv 0.506
```