Advanced Analysis

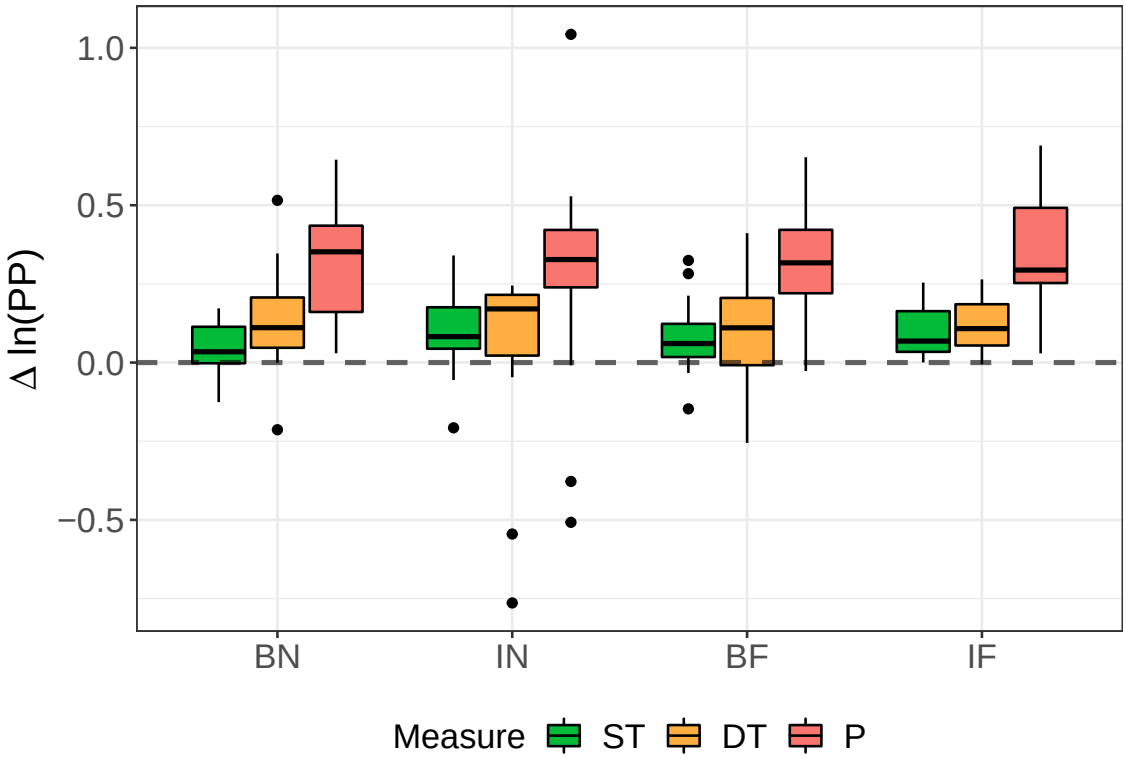
PP, 4 Groups:

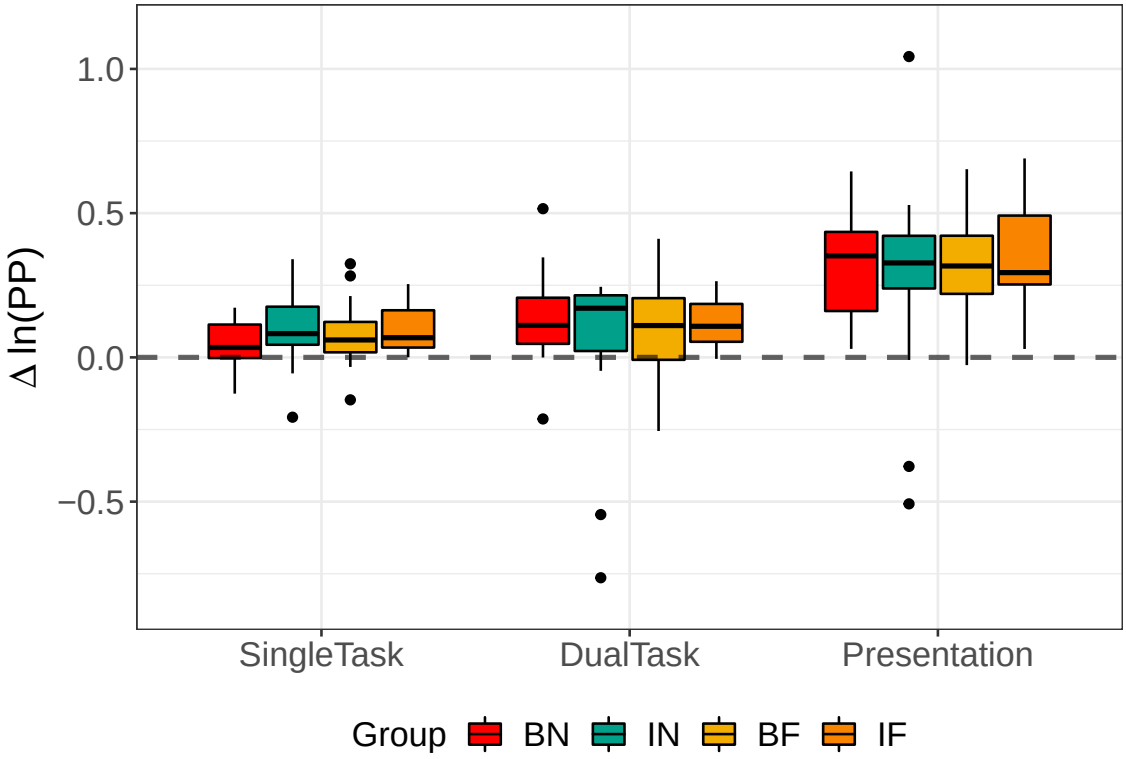
Stress Levels Across Activities

Our Linear Model:

$$\Delta ln(\bar{PP}) = 1 + Group + Activity + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: diff_df
##         AIC       BIC   logLik
##   -159.7081 -128.5336 88.85403
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.1406345 0.1264004
##
## Fixed effects: PP ~ 1 + Group + Activity
##                   Value  Std.Error  DF   t-value p-value
## (Intercept)  0.07955795 0.04500474 179  1.767768  0.0788
## GroupIN     -0.02487645 0.05761452  57 -0.431774  0.6675
## GroupBF      0.00648050 0.05757094  57  0.112566  0.9108
## GroupIF      0.02741133 0.05757094  57  0.476131  0.6358
## ActivityB   -0.03994539 0.02288751 179 -1.745292  0.0827
## ActivityDT   0.01434182 0.02288751 179  0.626622  0.5317
## ActivityP    0.23827553 0.02300790 179 10.356247  0.0000
##  Correlation:
##            (Intr) GropIN GropBF GropIF ActvtB ActvDT
## GroupIN    -0.706
## GroupBF    -0.706  0.551
## GroupIF    -0.706  0.551  0.552
## ActivityB  -0.254  0.000  0.000  0.000
## ActivityDT -0.254  0.000  0.000  0.000  0.500
## ActivityP  -0.254  0.004  0.000  0.000  0.497  0.497
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -3.59029668 -0.38559383 -0.05461809  0.43114569  4.31418896
##
## Number of Observations: 243
## Number of Groups: 61
```


1.0
0.5
0.0
−0.5
Δ ln(PP)
BN
IN
BF
IF
Measure
ST
DT
P

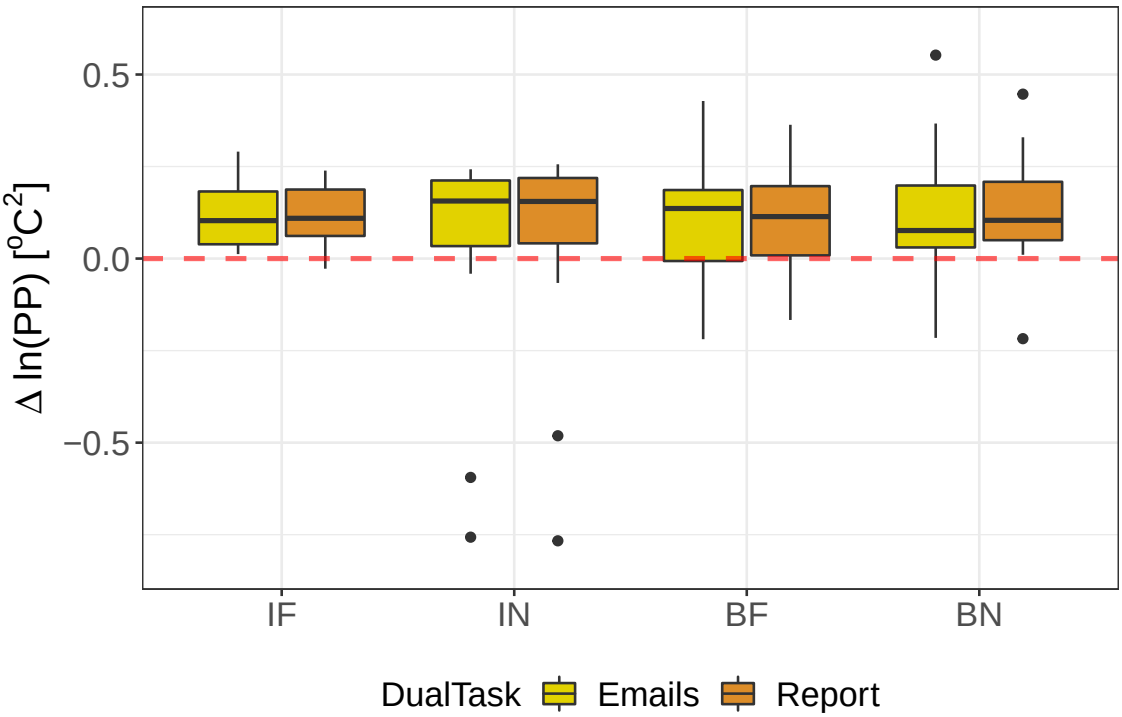

1.0
0.5
0.0
−0.5
Δ ln(PP)
SingleTask
DualTask
Presentation
Group
BN
IN
BF
IF

Stress Levels for Dual Task

Our Linear Model:

$$\Delta ln(\bar{PP}) = 1 + Group + DualTask + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: total_df
##         AIC      BIC   logLik
##   -213.6875 -194.473 113.8437
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)   Residual
## StdDev:   0.1893405 0.02749848
##
## Fixed effects: PP ~ 1 + Group + DualTask
##                       Value  Std.Error DF    t-value p-value
## (Intercept)     0.12350943 0.05284943 59  2.3370059  0.0229
## GroupIN        -0.07684567 0.07107042 56 -1.0812610  0.2842
## GroupBF        -0.01802287 0.07212457 56 -0.2498853  0.8036
## GroupIF        -0.00532004 0.07107042 56 -0.0748559  0.9406
## DualTaskReport -0.00078155 0.00502051 59 -0.1556704  0.8768
##  Correlation:
##                (Intr) GropIN GropBF GropIF
## GroupIN        -0.742
## GroupBF        -0.731  0.544
## GroupIF        -0.742  0.552  0.544
## DualTaskReport -0.047  0.000  0.000  0.000
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -2.29403815 -0.41434393 -0.02478253  0.35464021  2.05668822
##
## Number of Observations: 120
## Number of Groups: 60
```



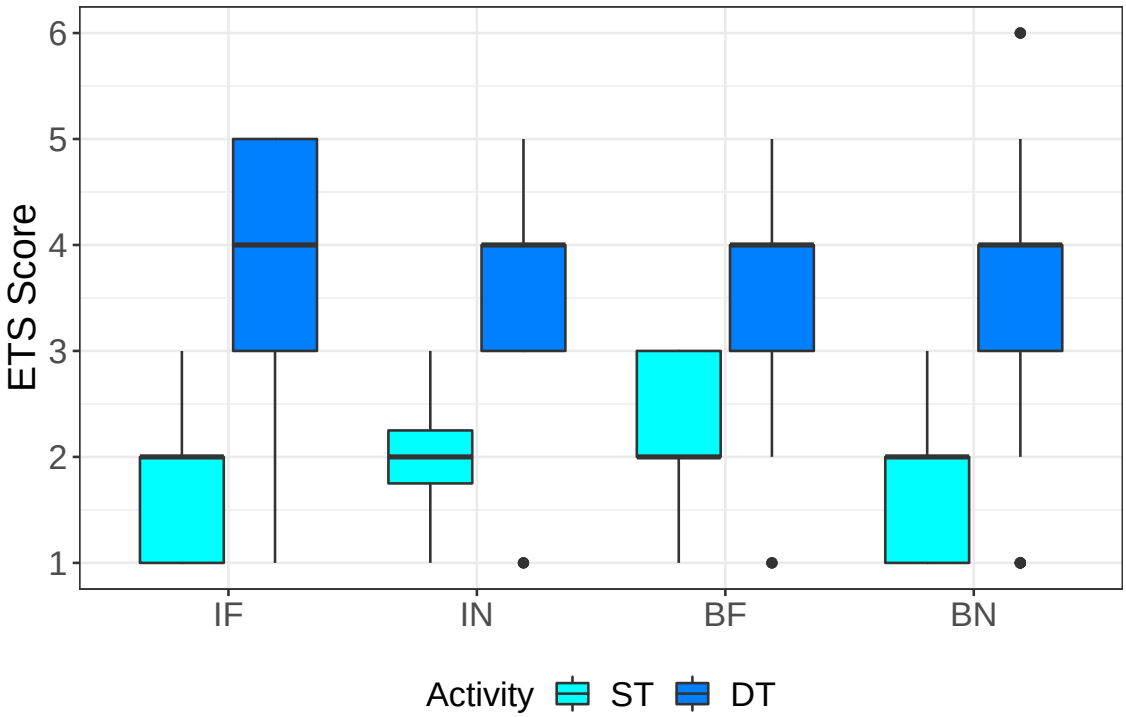

```
## Paired t-test
## For IF, p = 0.9543 > 0.05

## Paired t-test
## For IN, p = 0.5189 > 0.05

## Paired t-test
## For BF, p = 0.6713 > 0.05

## Paired t-test
## For BN, p = 0.6879 > 0.05
```

Linear Modelling for Writing Quality

Our Linear Model:

$$WritingQuality = 1 + Group + Activity + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: full_df
##        AIC      BIC    logLik
##   776.0695 802.7684 -381.0348
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.7942298 0.5990748
##
## Fixed effects: Score ~ 1 + Group + Activity
##                 Value  Std.Error  DF   t-value p-value
## (Intercept) 1.7911912 0.23349795 279  7.671122  0.0000
## GroupIN     0.2827544 0.31148183  56  0.907772  0.3679
## GroupBF     0.2252674 0.31617162  56  0.712485  0.4791
## GroupIF     0.1668252 0.31223769  56  0.534289  0.5953
## ActivityDT  1.7176471 0.06497879 279 26.433966  0.0000
##  Correlation:
##             (Intr) GropIN GropBF GropIF
## GroupIN    -0.735
## GroupBF    -0.724  0.543
## GroupIF    -0.733  0.550  0.542
## ActivityDT -0.139  0.000  0.000  0.000
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -2.47534599 -0.50864423 -0.02716344  0.54470639  2.10194004
##
## Number of Observations: 340
## Number of Groups: 60
```



Activity	Group	n
ST	BN	37
ST	IN	48
ST	BF	43
ST	IF	42
DT	BN	37
DT	IN	48
DT	BF	43
DT	IF	42

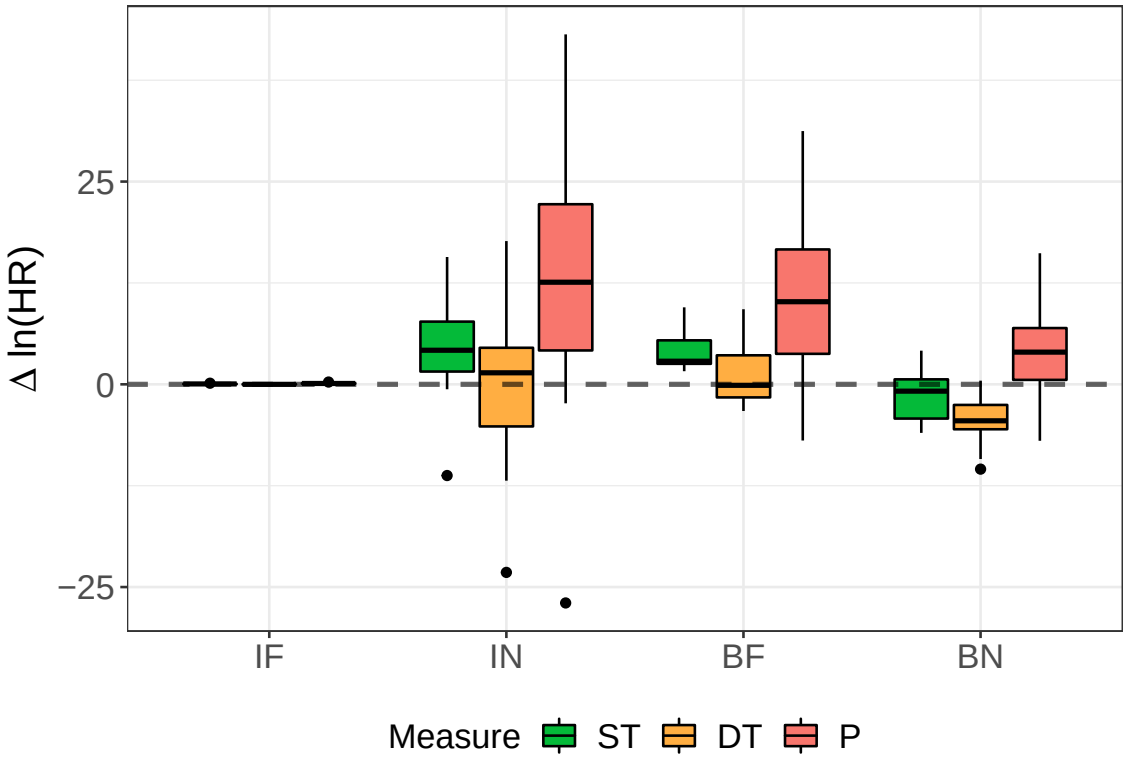
HR, 4 Groups:

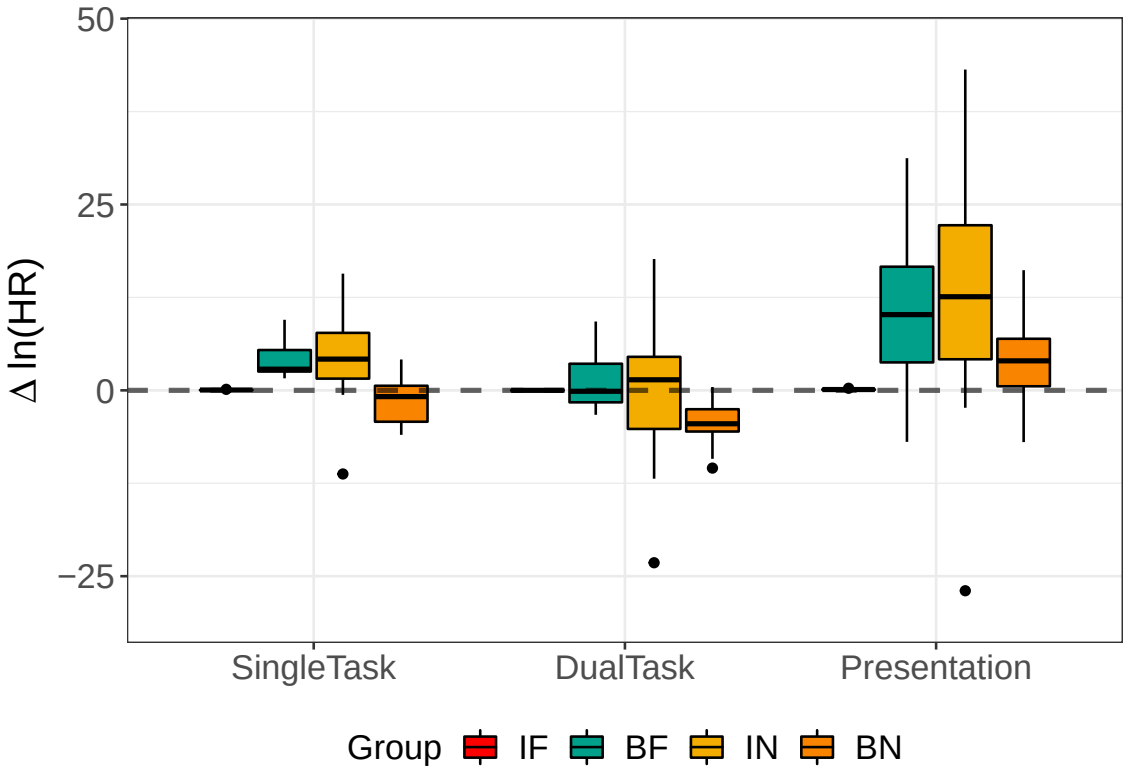
Stress Levels Across Activities

Our Linear Model:

$$\Delta\bar{HR} = 1 + Group + Activity + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: diff_df
##        AIC      BIC    logLik
##   1319.937 1349.255 -650.9687
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept) Residual
## StdDev:    4.833144 5.701939
##
## Fixed effects: HR ~ 1 + Group + Activity
##                 Value Std.Error  DF   t-value p-value
## (Intercept) -0.544686  1.832280 145 -0.297272  0.7667
## GroupIN      4.035679  2.271173  47  1.776913  0.0821
## GroupBF      5.514423  2.234632  47  2.467710  0.0173
## GroupIF      0.790169  2.401353  47  0.329051  0.7436
## ActivityB   -2.467650  1.129152 145 -2.185401  0.0305
## ActivityDT  -3.104998  1.129152 145 -2.749849  0.0067
## ActivityP    5.367556  1.166242 145  4.602436  0.0000
##  Correlation:
##             (Intr) GropIN GropBF GropIF ActvtB ActvDT
## GroupIN     -0.693
## GroupBF     -0.704  0.568
## GroupIF     -0.655  0.529  0.537
## ActivityB   -0.308  0.000  0.000  0.000
## ActivityDT -0.308  0.000  0.000  0.000  0.500
## ActivityP   -0.299  0.004 -0.002  0.000  0.484  0.484
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -3.35525022 -0.47010203  0.01757256  0.41003723  4.80153186
##
## Number of Observations: 199
## Number of Groups: 51
```


Δ ln(HR)
25
0
−25
IF
IN
BF
BN
Measure
ST
DT
P

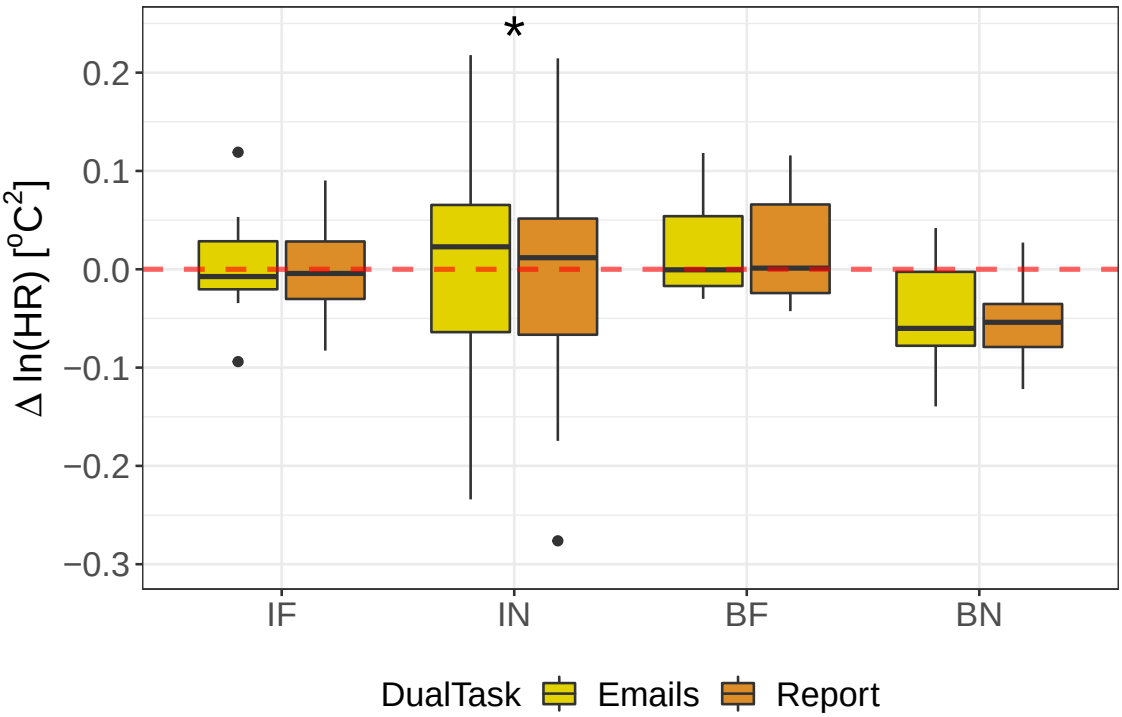

Δ ln(HR)
50
25
0
−25
SingleTask
DualTask
Presentation
Group
IF
BF
IN
BN

Stress Levels for Dual Task

Our Linear Model:

$$\Delta\bar{HR} = 1 + Group + DualTask + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: total_df
##         AIC       BIC   logLik
##   -315.3184 -297.4412 164.6592
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)   Residual
## StdDev:  0.07298497 0.01569881
##
## Fixed effects: HR ~ 1 + Group + DualTask
##                       Value   Std.Error DF   t-value p-value
## (Intercept)    -0.04780770 0.022314165 49 -2.142482  0.0371
## GroupIN         0.04526564 0.029744671 46  1.521807  0.1349
## GroupBF         0.07053375 0.029744671 46  2.371307  0.0220
## GroupIF         0.05263586 0.031478801 46  1.672105  0.1013
## DualTaskReport -0.00523438 0.003139762 49 -1.667126  0.1019
##  Correlation:
##                (Intr) GropIN GropBF GropIF
## GroupIN        -0.746
## GroupBF        -0.746  0.560
## GroupIF        -0.705  0.529  0.529
## DualTaskReport -0.070  0.000  0.000  0.000
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -1.83316239 -0.37950371  0.05274758  0.37118580  2.02150622
##
## Number of Observations: 100
## Number of Groups: 50
```



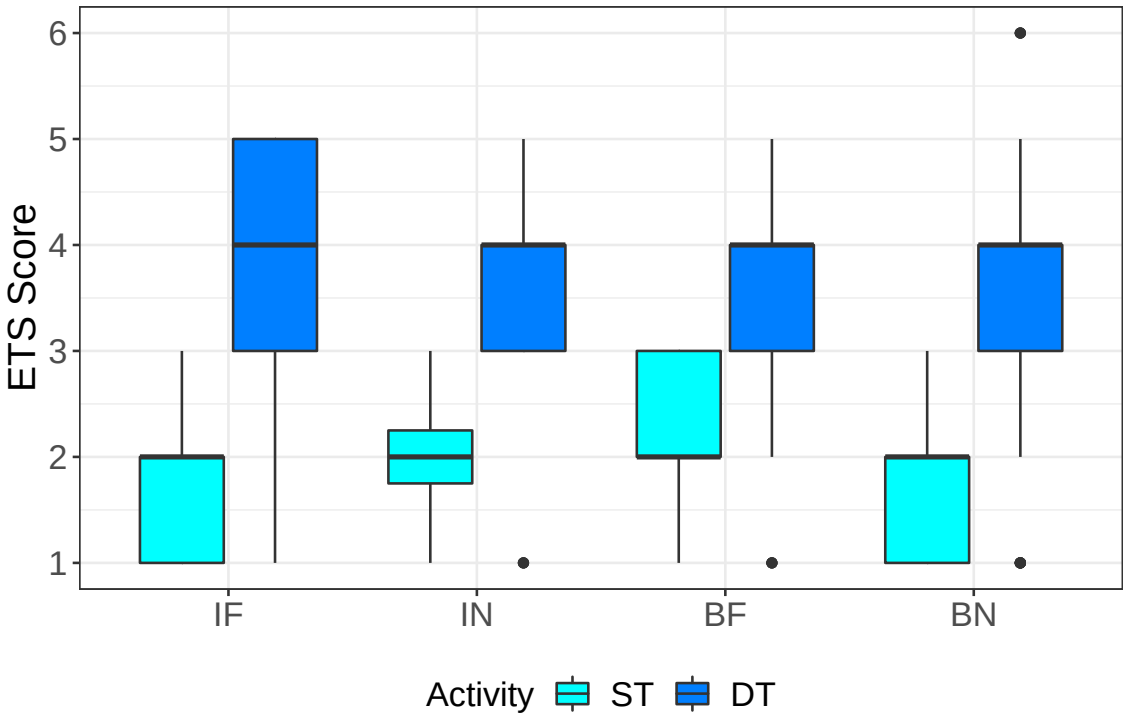

```
## Paired t-test
## For IF, p = 0.5041 > 0.05

## Paired t-test
## For IN, p = 0.0451 < 0.05  *

## Paired t-test
## For BF, p = 0.8961 > 0.05

## Paired t-test
## For BN, p = 0.6885 > 0.05
```

Linear Modelling for Writing Quality

Our Linear Model:

$$WritingQuality = 1 + Group + Activity + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: full_df
##        AIC      BIC    logLik
##   776.0695 802.7684 -381.0348
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.7942298 0.5990748
##
## Fixed effects: Score ~ 1 + Group + Activity
##                 Value  Std.Error  DF   t-value p-value
## (Intercept) 1.7911912 0.23349795 279  7.671122  0.0000
## GroupIN     0.2827544 0.31148183  56  0.907772  0.3679
## GroupBF     0.2252674 0.31617162  56  0.712485  0.4791
## GroupIF     0.1668252 0.31223769  56  0.534289  0.5953
## ActivityDT  1.7176471 0.06497879 279 26.433966  0.0000
##  Correlation:
##             (Intr) GropIN GropBF GropIF
## GroupIN    -0.735
## GroupBF    -0.724  0.543
## GroupIF    -0.733  0.550  0.542
## ActivityDT -0.139  0.000  0.000  0.000
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -2.47534599 -0.50864423 -0.02716344  0.54470639  2.10194004
##
## Number of Observations: 340
## Number of Groups: 60
```



Activity	Group	n
ST	BN	37
ST	IN	48
ST	BF	43
ST	IF	42
DT	BN	37
DT	IN	48
DT	BF	43
DT	IF	42

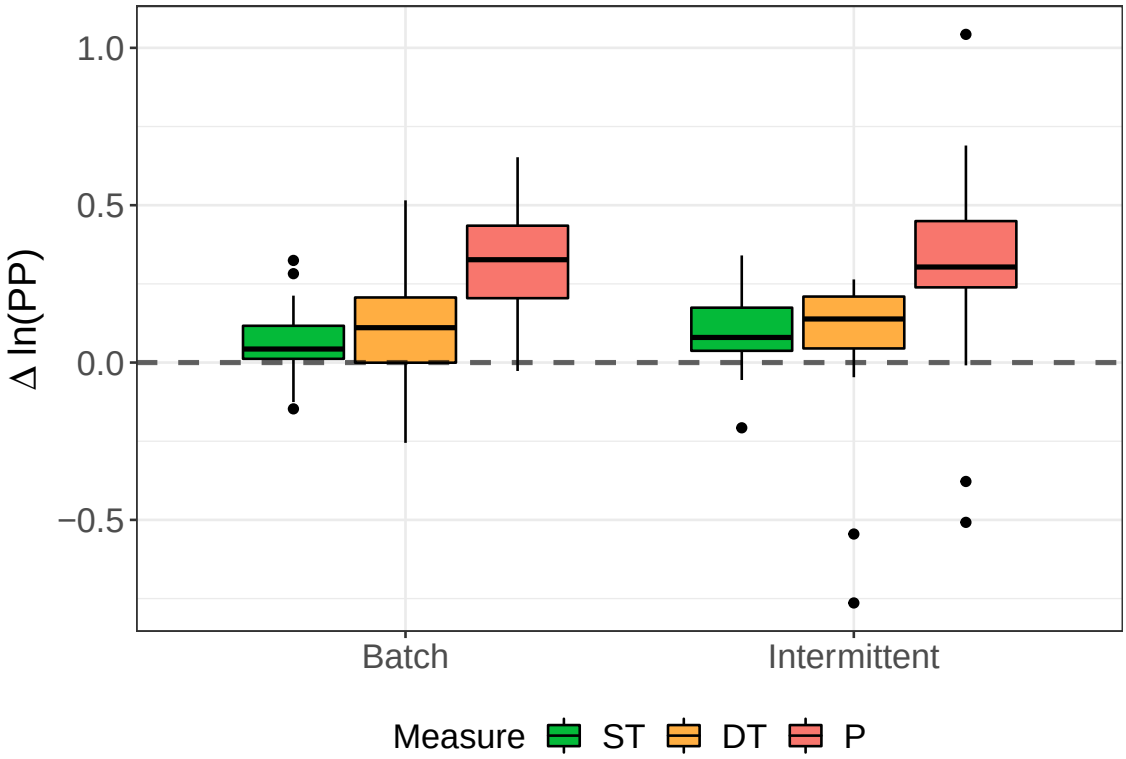
PP, 2 Groups:

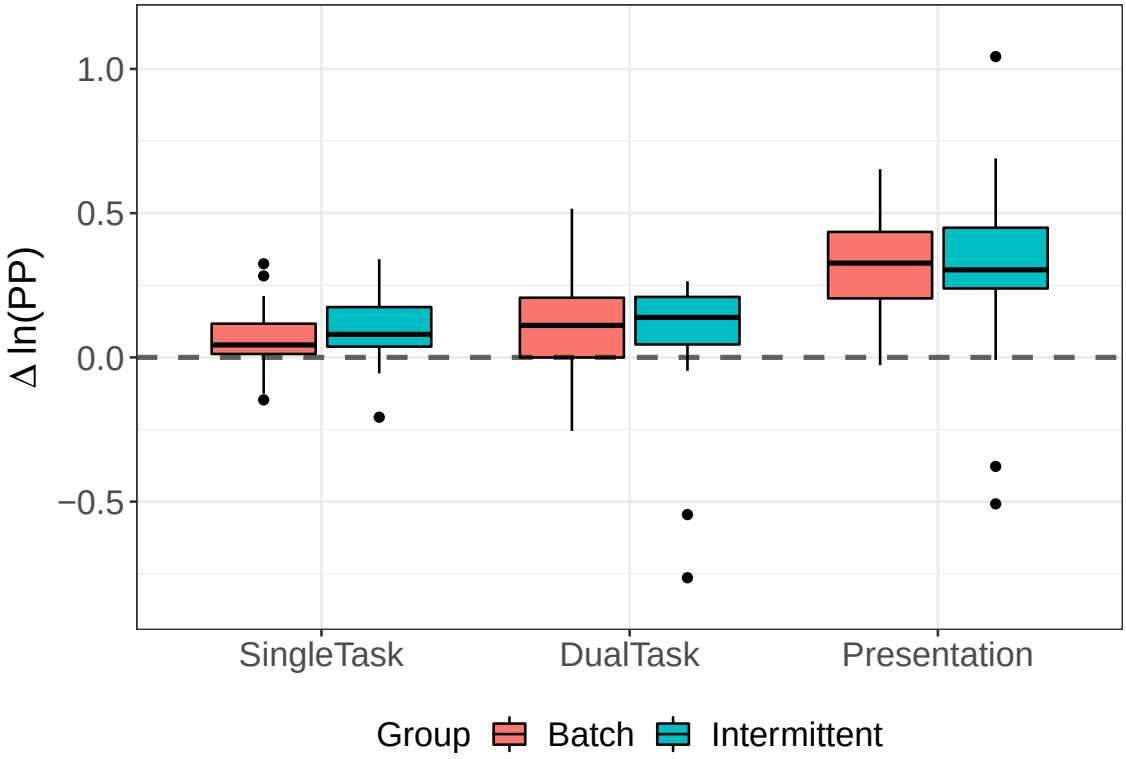
Stress Levels Across Activities

Our Linear Model:

$$\Delta ln(\bar{PP}) = 1 + Group + Activity + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: diff_df
##         AIC       BIC   logLik
##   -170.6372 -146.3313 92.31861
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.1391073 0.1263973
##
## Fixed effects: PP ~ 1 + Group + Activity
##                         Value  Std.Error  DF   t-value p-value
## (Intercept)        0.08311096 0.03165076 179  2.625876  0.0094
## GroupIntermittent -0.00226525 0.03918898  59 -0.057803  0.9541
## ActivityB         -0.03994539 0.02288694 179 -1.745335  0.0826
## ActivityDT         0.01434182 0.02288694 179  0.626638  0.5317
## ActivityP          0.23836527 0.02300701 179 10.360548  0.0000
##  Correlation:
##                   (Intr) GrpInt ActvtB ActvDT
## GroupIntermittent -0.650
## ActivityB         -0.362  0.000
## ActivityDT        -0.362  0.000  0.500
## ActivityP         -0.362  0.003  0.497  0.497
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -3.63648520 -0.39819875 -0.06225426  0.43602671  4.28428672
##
## Number of Observations: 243
## Number of Groups: 61
```


1.0
0.5
0.0
−0.5
Δ ln(PP)
Batch
Intermittent
Measure
ST
DT
P

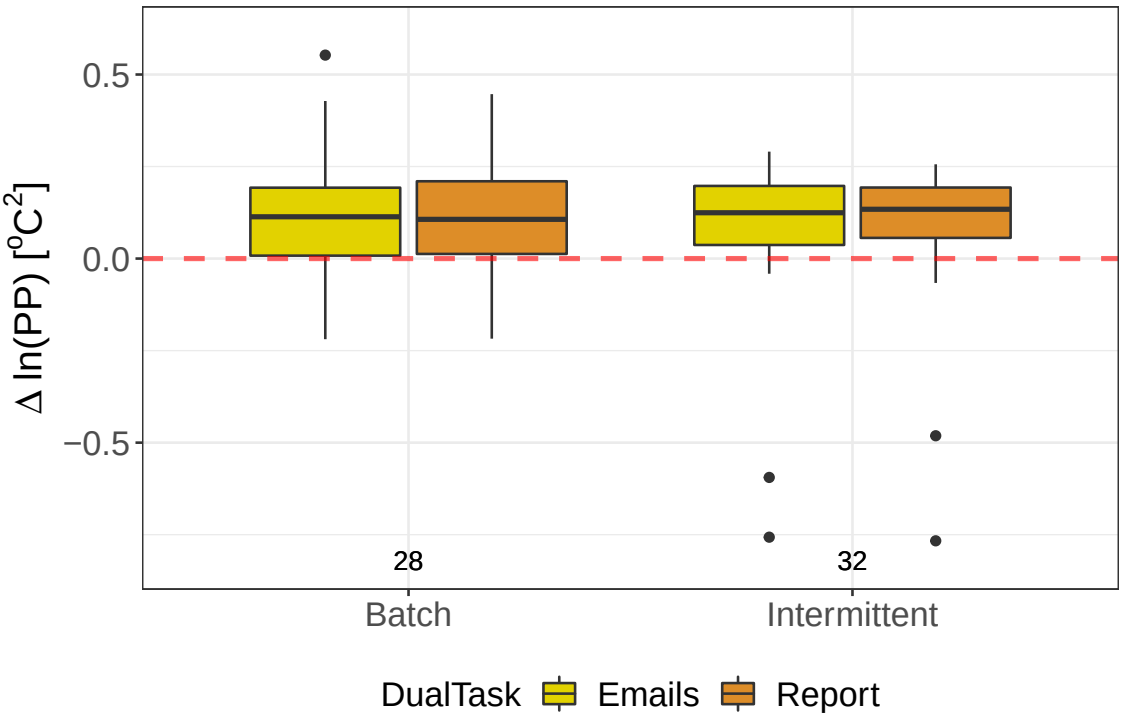

1.0
0.5
0.0
−0.5
Δ ln(PP)
SingleTask
DualTask
Presentation
Group
Batch
Intermittent

Stress Levels for Dual Task

Our Linear Model:

$$\Delta ln(\bar{PP}) = 1 + Group + DualTask + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: total_df
##         AIC       BIC   logLik
##   -223.4813 -209.6705 116.7407
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)   Residual
## StdDev:   0.1880032 0.02749848
##
## Fixed effects: PP ~ 1 + Group + DualTask
##                          Value  Std.Error DF   t-value p-value
## (Intercept)        0.11385432 0.03580689 59  3.179676  0.0023
## GroupIntermittent -0.03142775 0.04890997 58 -0.642563  0.5230
## DualTaskReport    -0.00078155 0.00502051 59 -0.155670  0.8768
##  Correlation:
##                   (Intr) GrpInt
## GroupIntermittent -0.728
## DualTaskReport    -0.070  0.000
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -2.31093395 -0.40968101 -0.01235216  0.36551279  2.06242302
##
## Number of Observations: 120
## Number of Groups: 60
```




```
## Paired t-test
## For Batch, p = 0.5488 > 0.05
```

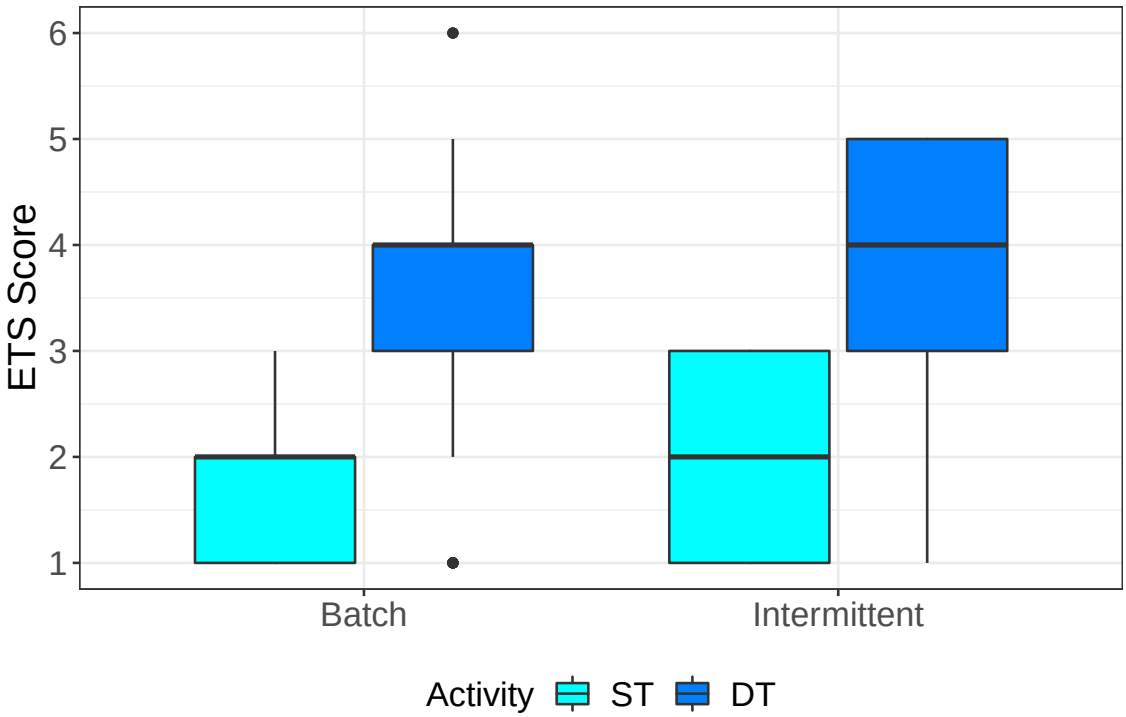
```
## Paired t-test
## For Intermittent, p = 0.5569 > 0.05
```

Linear Modelling for Writing Quality

Our Linear Model:

$$WritingQuality = 1 + Group + Activity + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: full_df
##        AIC      BIC    logLik
##   771.8609 790.9613 -380.9304
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.7856336 0.5990633
##
## Fixed effects: Score ~ 1 + Group + Activity
##                       Value  Std.Error  DF   t-value p-value
## (Intercept)       1.9469226 0.15680825 279 12.415945  0.0000
## GroupIntermittent 0.0396269 0.21379654  58  0.185349  0.8536
## ActivityDT        1.7176471 0.06497754 279 26.434473  0.0000
##  Correlation:
##                   (Intr) GrpInt
## GroupIntermittent -0.702
## ActivityDT        -0.207  0.000
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -2.46665263 -0.50243467 -0.02529764  0.54804118  2.07568494
##
## Number of Observations: 340
## Number of Groups: 60
```



Activity	Group	n
ST	Batch	85
ST	Intermittent	85
DT	Batch	85
DT	Intermittent	85

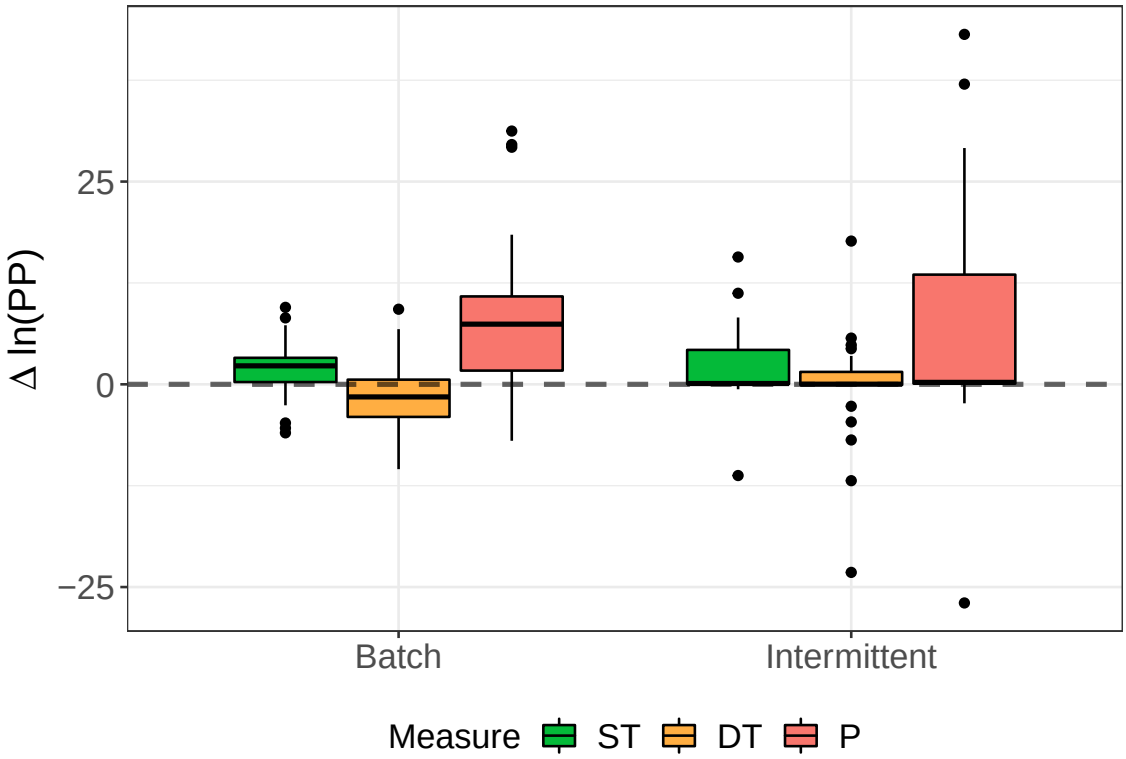
HR, 2 Groups:

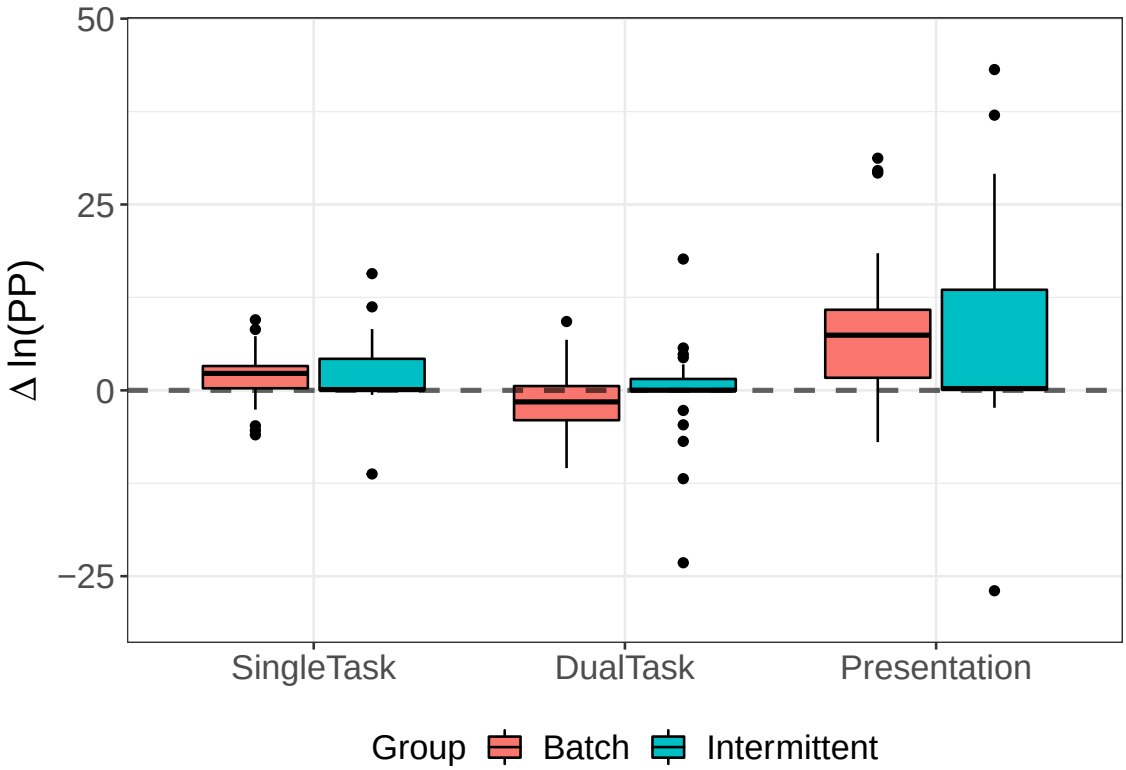
Stress Levels Across Activities

Our Linear Model:

$$\Delta\bar{HR} = 1 + Group + Activity + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: diff_df
##        AIC      BIC    logLik
##   1330.626 1353.501 -658.3129
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept) Residual
## StdDev:     5.23368 5.700189
##
## Fixed effects: HR ~ 1 + Group + Activity
##                       Value Std.Error  DF   t-value p-value
## (Intercept)        2.640692  1.359601 145  1.942255  0.0540
## GroupIntermittent -0.581863  1.675195  49 -0.347340  0.7298
## ActivityB         -2.467650  1.128806 145 -2.186072  0.0304
## ActivityDT        -3.104998  1.128806 145 -2.750694  0.0067
## ActivityP          5.370576  1.166202 145  4.605185  0.0000
##  Correlation:
##                   (Intr) GrpInt ActvtB ActvDT
## GroupIntermittent -0.604
## ActivityB         -0.415  0.000
## ActivityDT        -0.415  0.000  0.500
## ActivityP         -0.405  0.005  0.484  0.484
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -3.18318631 -0.44640882 -0.01677401  0.34204750  4.81193893
##
## Number of Observations: 199
## Number of Groups: 51
```


Δ ln(PP)
25
0
−25
Batch
Intermittent
Measure
ST
DT
P

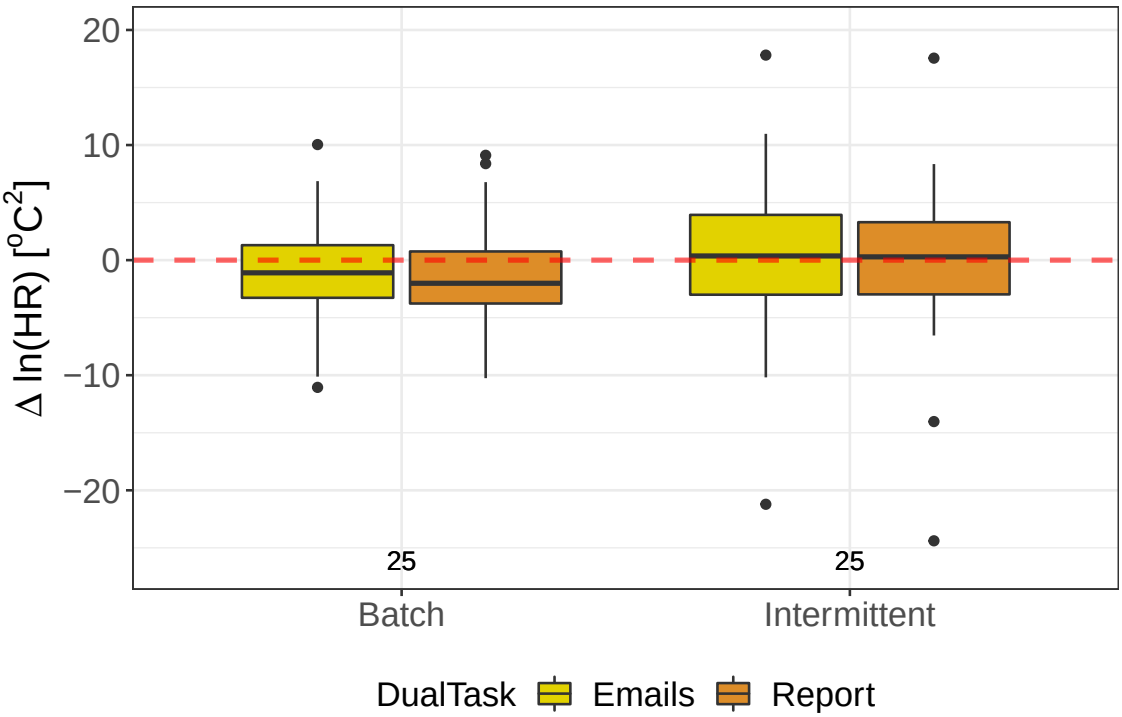

Δ ln(PP)
50
25
0
−25
SingleTask
DualTask
Presentation
Group
Batch
Intermittent

Stress Levels for Dual Task

Our Linear Model:

$$\Delta\bar{HR} = 1 + Group + DualTask + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: total_df
##        AIC      BIC    logLik
##   523.7818 536.6553 -256.8909
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept) Residual
## StdDev:    6.200024 1.203353
##
## Fixed effects: HR ~ 1 + Group + DualTask
##                         Value Std.Error DF    t-value p-value
## (Intercept)       -0.7471881 1.2573995 49 -0.5942328  0.5551
## GroupIntermittent  0.5808897 1.7700695 48  0.3281734  0.7442
## DualTaskReport    -0.3596849 0.2406705 49 -1.4945118  0.1415
##  Correlation:
##                   (Intr) GrpInt
## GroupIntermittent -0.704
## DualTaskReport    -0.096  0.000
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -2.00321037 -0.38970013  0.03545756  0.36712662  2.23869311
##
## Number of Observations: 100
## Number of Groups: 50
```




```
## Paired t-test
## For Batch, p = 0.7476 > 0.05
```

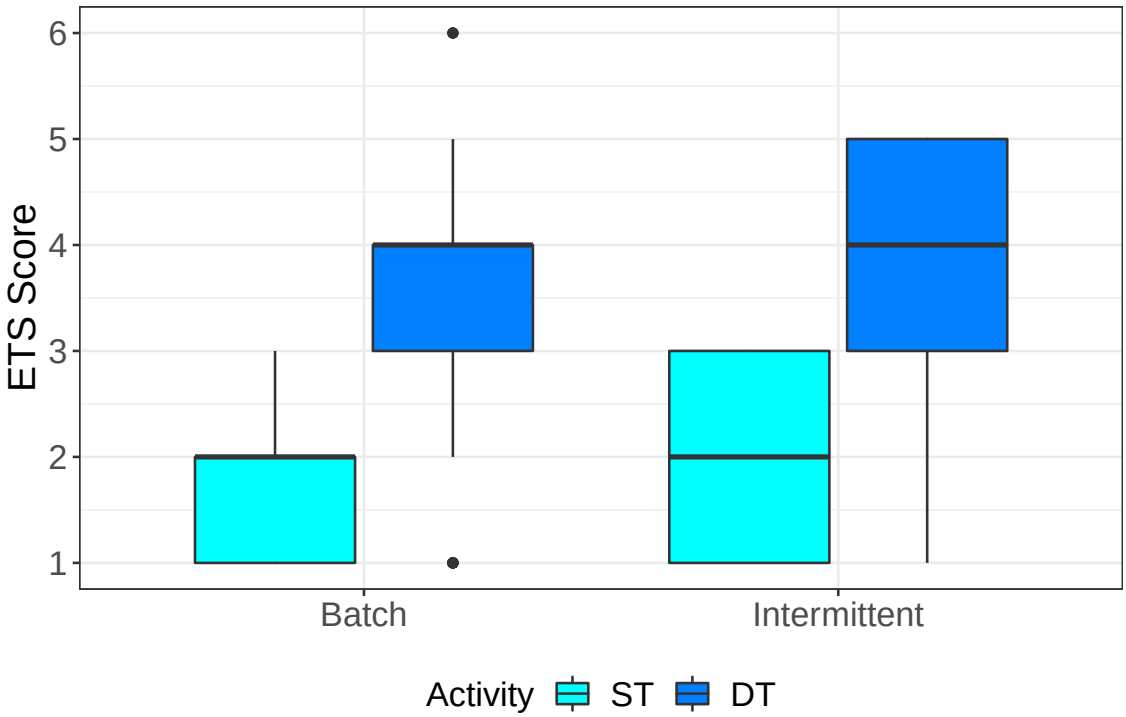
```
## Paired t-test
## For Intermittent, p = 0.0568 > 0.05
```

Linear Modelling for Writing Quality

Our Linear Model:

$$WritingQuality = 1 + Group + Activity + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: full_df
##        AIC      BIC    logLik
##   771.8609 790.9613 -380.9304
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.7856336 0.5990633
##
## Fixed effects: Score ~ 1 + Group + Activity
##                       Value  Std.Error  DF   t-value p-value
## (Intercept)       1.9469226 0.15680825 279 12.415945  0.0000
## GroupIntermittent 0.0396269 0.21379654  58  0.185349  0.8536
## ActivityDT        1.7176471 0.06497754 279 26.434473  0.0000
##  Correlation:
##                   (Intr) GrpInt
## GroupIntermittent -0.702
## ActivityDT        -0.207  0.000
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -2.46665263 -0.50243467 -0.02529764  0.54804118  2.07568494
##
## Number of Observations: 340
## Number of Groups: 60
```



Activity	Group	n
ST	Batch	85
ST	Intermittent	85
DT	Batch	85
DT	Intermittent	85

Let's Get to 10 $\star$ with Four Groups

Our Linear Model:

$$\Delta ln(\bar{PP}) = 1 + ETSScore + Group + Activity + 1|Subject$$

```
## Linear mixed-effects model fit by REML
##  Data: full_df
##         AIC       BIC   logLik
##   -86.94855 -64.91982 51.47427
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.1182905 0.1038826
##
## Fixed effects: PP ~ 1 + ETSScore + Group + Activity
##                   Value  Std.Error DF    t-value p-value
## (Intercept)  0.06872432 0.04674060 60  1.4703346  0.1467
## ETSScore     0.00320029 0.01384112 60  0.2312161  0.8179
## GroupIN     -0.00750620 0.05201431 56 -0.1443104  0.8858
## GroupBF     -0.00500505 0.05284561 56 -0.0947109  0.9249
## GroupIF      0.02822670 0.05203863 56  0.5424182  0.5897
## ActivityDT   0.00839524 0.03071282 60  0.2733463  0.7855
##  Correlation:
##             (Intr) ETSScr GropIN GropBF GropIF
## ETSScore    -0.526
## GroupIN     -0.575 -0.073
## GroupBF     -0.574 -0.056  0.547
## GroupIF     -0.591 -0.042  0.554  0.545
## ActivityDT  0.293 -0.791  0.058  0.044  0.033
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -4.24081031 -0.30272910 -0.02778946  0.31458685  2.37461629
##
## Number of Observations: 122
## Number of Groups: 60
```

Hey! Let's ANOVA!

Our ANOVA Model:

$$\Delta ln(\bar{PP}) = 1 + StressFactor + IntermittentFactor$$

```
##                     Df Sum Sq Mean Sq F value Pr(>F)
## StressFactor         1 0.0110 0.01104   0.297  0.588
## IntermittentFactor   1 0.0114 0.01136   0.305  0.583
## Residuals           58 2.1566 0.03718
```

```
##   Tukey multiple comparisons of means
##     95% family-wise confidence level
##
## Fit: aov(formula = PP ~ 1 + StressFactor + IntermittentFactor, data = diff_df, na.action = na.omi
##
## $StressFactor
##                 diff         lwr       upr     p adj
## High-Low 0.02693298 -0.07202824 0.1258942 0.5879926
##
## $IntermittentFactor
##                                       diff        lwr       upr     p adj
## Intermittent-Non-Intermittent -0.02728693 -0.1262482 0.0716743 0.5831096
```

Now a Linear Model Very Close to the ANOVA One Above:

Our Linear Model:

$$\Delta ln(\bar{PP}) = 1 + StressIndicator + IntermittencyIndicator + 1|Subjects$$

```
## Linear mixed-effects model fit by REML
##  Data: diff_df
##         AIC      BIC   logLik
##   -6.781258 3.520957 8.390629
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)   Residual
## StdDev:    0.180551 0.06770663
##
## Fixed effects: PP ~ 1 + StressFactor + IntermittentFactor
##                                       Value  Std.Error DF    t-value
## (Intercept)                        0.09723092 0.04503505 58  2.1590056
## StressFactorHigh                   0.02551780 0.04950442 58  0.5154651
## IntermittentFactorIntermittent -0.02736013 0.04950442 58 -0.5526804
##                                   p-value
## (Intercept)                        0.0350
## StressFactorHigh                   0.6082
## IntermittentFactorIntermittent     0.5826
##  Correlation:
##                                   (Intr) StrsFH
## StressFactorHigh                  -0.606
## IntermittentFactorIntermittent -0.606  0.052
##
## Standardized Within-Group Residuals:
##        Min         Q1        Med         Q3        Max
## -1.5182422 -0.1217303  0.0331390  0.2026768  0.7615316
##
## Number of Observations: 61
## Number of Groups: 61
```

Hey! Let's ANOVA 2: With Interaction Effects

Our ANOVA Model:

$$\Delta ln(\bar{PP}) = 1 + StressFactor + IntermittentFactor + StressFactor * IntermittentFactor$$

```
##                                 Df Sum Sq Mean Sq F value Pr(>F)
## StressFactor                     1 0.0110 0.01104   0.297  0.588
## IntermittentFactor               1 0.0114 0.01136   0.306  0.583
## StressFactor:IntermittentFactor  1 0.0385 0.03846   1.035  0.313
## Residuals                       57 2.1181 0.03716
```

```
##   Tukey multiple comparisons of means
##     95% family-wise confidence level
##
## Fit: aov(formula = PP ~ 1 + StressFactor * IntermittentFactor, data = diff_df, na.action = na.omi
##
## $StressFactor
##                diff        lwr       upr    p adj
## High-Low 0.02693298 -0.0720354 0.1259014 0.587917
##
## $IntermittentFactor
##                                      diff        lwr        upr     p adj
## Intermittent-Non-Intermittent -0.02728693 -0.1262553 0.07168145 0.5830335
##
## $`StressFactor:IntermittentFactor`
##                                                    diff        lwr
## High:Non-Intermittent-Low:Non-Intermittent -0.027654745 -0.2181462
## Low:Intermittent-Low:Non-Intermittent      -0.080532676 -0.2710241
## High:Intermittent-Low:Non-Intermittent     -0.007342932 -0.1978343
## Low:Intermittent-High:Non-Intermittent     -0.052877931 -0.2332474
## High:Intermittent-High:Non-Intermittent     0.020311813 -0.1600577
## High:Intermittent-Low:Intermittent          0.073189744 -0.1071797
##                                                 upr     p adj
## High:Non-Intermittent-Low:Non-Intermittent 0.1628367 0.9805230
## Low:Intermittent-Low:Non-Intermittent      0.1099587 0.6795273
## High:Intermittent-Low:Non-Intermittent     0.1831485 0.9996153
## Low:Intermittent-High:Non-Intermittent     0.1274916 0.8650466
## High:Intermittent-High:Non-Intermittent    0.2006813 0.9906985
## High:Intermittent-Low:Intermittent         0.2535592 0.7067087
```