Advanced Analysis

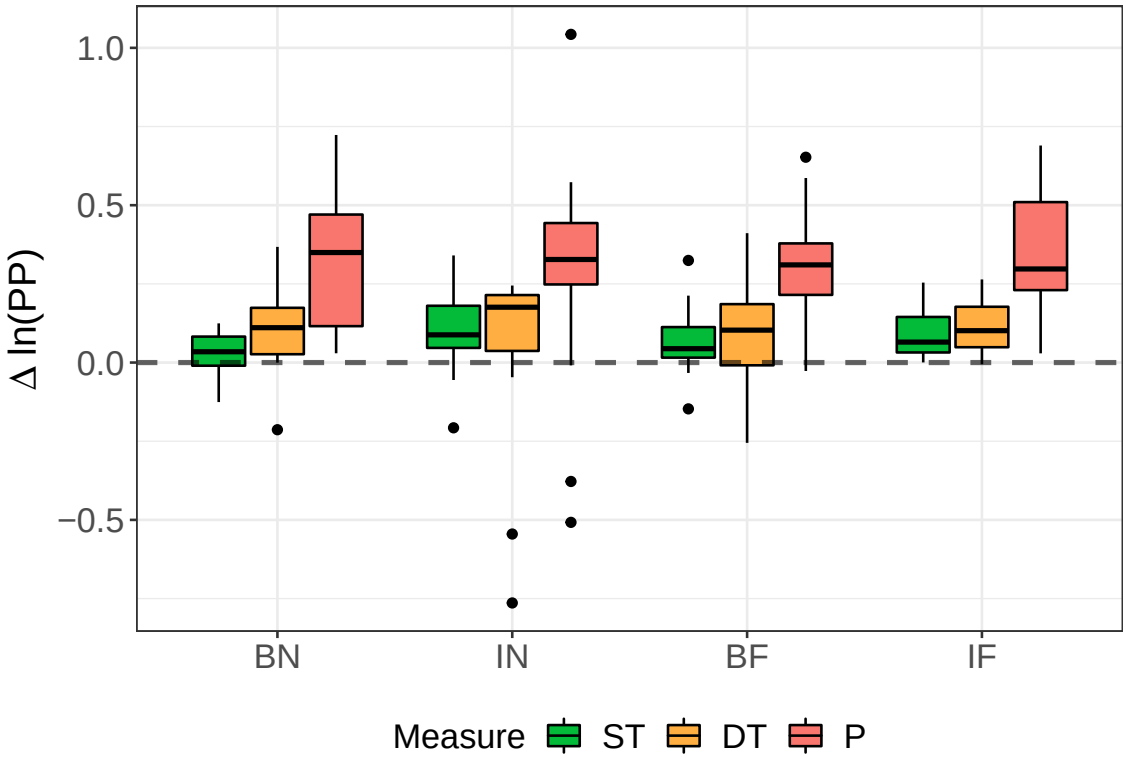
PP, 4 Groups:

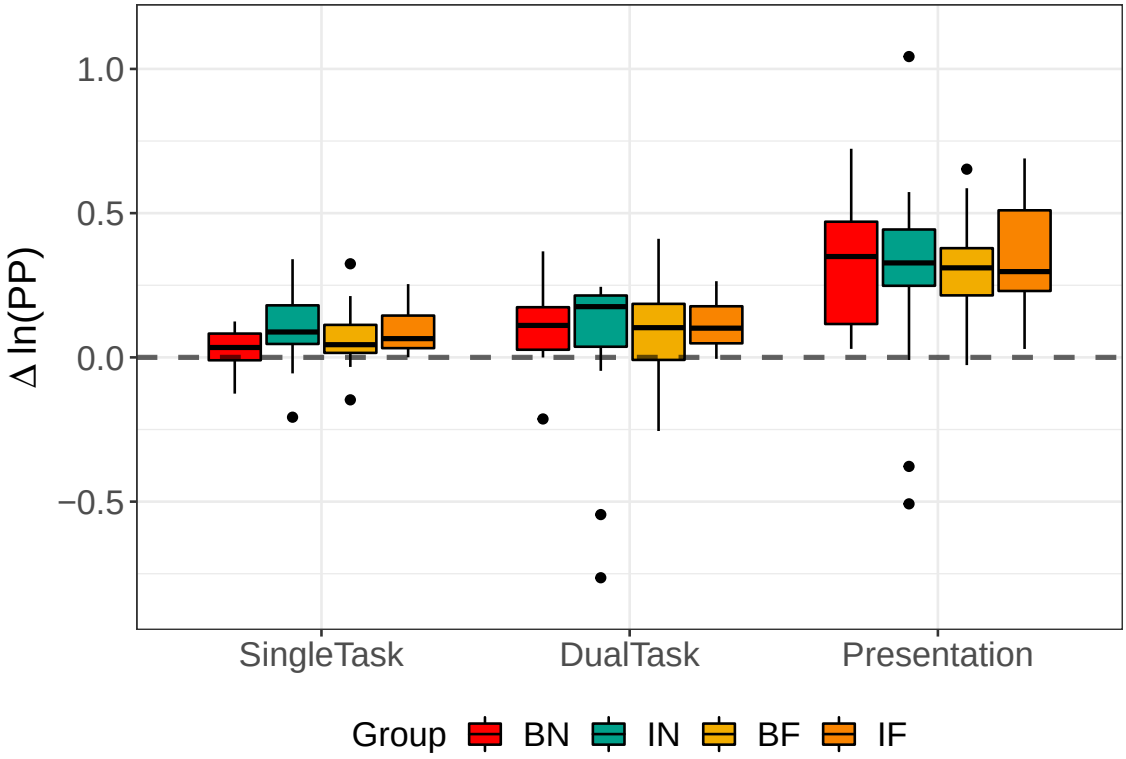
Stress Levels Across Activities

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
##   -150.9245 -119.9817 84.46223
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.1435299 0.1269264
##
## Fixed effects: PP ~ 1 + Group + Activity
##                   Value  Std.Error  DF   t-value p-value
## (Intercept)  0.03123336 0.04754120 174  0.656975  0.5121
## GroupIN      0.03959086 0.05862947  56  0.675272  0.5023
## GroupBF      0.04358168 0.06085467  56  0.716160  0.4769
## GroupIF      0.07475329 0.06085467  56  1.228390  0.2244
## ActivityB   -0.04700478 0.02317349 174 -2.028386  0.0440
## ActivityDT   0.00965452 0.02317349 174  0.416619  0.6775
## ActivityP    0.24165228 0.02355694 174 10.258219  0.0000
##  Correlation:
##            (Intr) GropIN GropBF GropIF ActvtB ActvDT
## GroupIN    -0.740
## GroupBF    -0.712  0.578
## GroupIF    -0.712  0.578  0.557
## ActivityB  -0.244  0.000  0.000  0.000
## ActivityDT -0.244  0.000  0.000  0.000  0.500
## ActivityP  -0.237  0.002 -0.005 -0.005  0.492  0.492
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -3.62186699 -0.39719073 -0.06878317  0.44239770  4.22642320
##
## Number of Observations: 237
## Number of Groups: 60
```


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

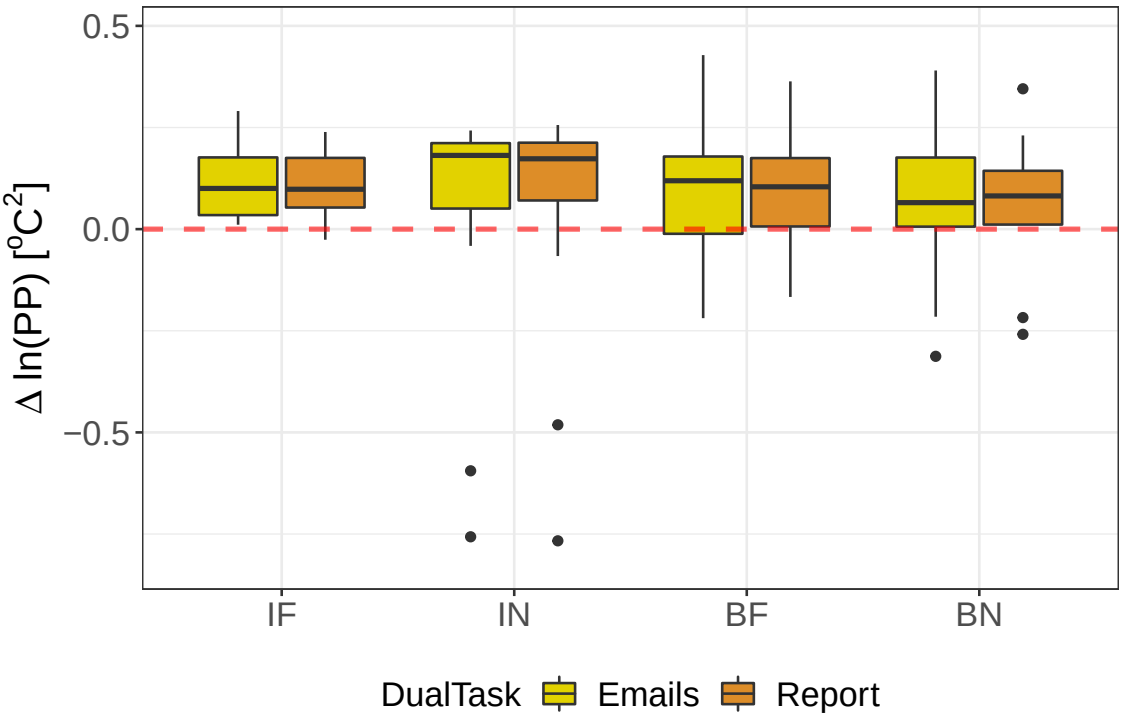

1.0
0.5
0.0
−0.5
Δ ln(PP)
SingleTask
DualTask
Presentation
Group
BN
IN
BF
IF

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
##   -218.7157 -199.624 116.3579
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.1911576 0.0252267
##
## Fixed effects: PP ~ 1 + Group + DualTask
##                     Value  Std.Error DF   t-value p-value
## (Intercept)    0.06173848 0.05547082 58 1.1129902  0.2703
## GroupIN        0.00010137 0.07154974 55 0.0014168  0.9989
## GroupBF        0.03217941 0.07552771 55 0.4260610  0.6717
## GroupIF        0.04922469 0.07435667 55 0.6620077  0.5107
## DualTaskReport 0.00193656 0.00464461 58 0.4169470  0.6783
##  Correlation:
##                (Intr) GropIN GropBF GropIF
## GroupIN        -0.774
## GroupBF        -0.733  0.568
## GroupIF        -0.745  0.577  0.547
## DualTaskReport -0.042  0.000  0.000  0.000
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -2.41064783 -0.40223859 -0.01642899  0.35676171  1.99954999
##
## Number of Observations: 118
## Number of Groups: 59
```



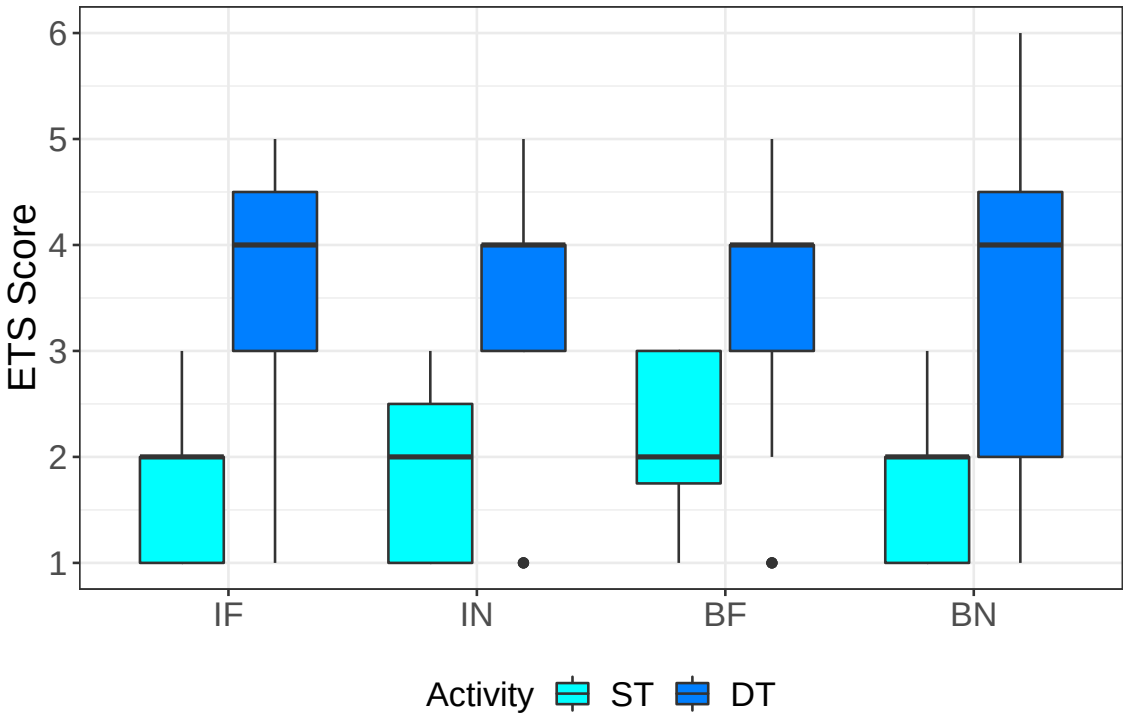

```
## Paired t-test
## For IF, p = 0.9656 > 0.05

## Paired t-test
## For IN, p = 0.5344 > 0.05

## Paired t-test
## For BF, p = 0.9283 > 0.05

## Paired t-test
## For BN, p = 0.7877 > 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
##   737.5097 763.6431 -361.7548
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept) Residual
## StdDev:   0.7966704  0.61909
##
## Fixed effects: Score ~ 1 + Group + Activity
##                 Value Std.Error  DF   t-value p-value
## (Intercept) 1.7321244 0.2554118 256  6.781693  0.0000
## GroupIN     0.2392640 0.3253733  53  0.735352  0.4654
## GroupBF     0.2449738 0.3383328  53  0.724061  0.4722
## GroupIF     0.1507651 0.3341128  53  0.451240  0.6537
## ActivityDT  1.7070064 0.0698745 256 24.429592  0.0000
##  Correlation:
##             (Intr) GropIN GropBF GropIF
## GroupIN    -0.770
## GroupBF    -0.741  0.582
## GroupIF    -0.750  0.589  0.566
## ActivityDT -0.137  0.000  0.000  0.000
##
## Standardized Within-Group Residuals:
##          Min           Q1          Med           Q3          Max
## -2.381972717 -0.472130565 -0.004067653  0.532609215  2.025925302
##
## Number of Observations: 314
## Number of Groups: 57
```



Activity	Group	n
ST	BN	31
ST	IN	47
ST	BF	40
ST	IF	39
DT	BN	31
DT	IN	47
DT	BF	40
DT	IF	39

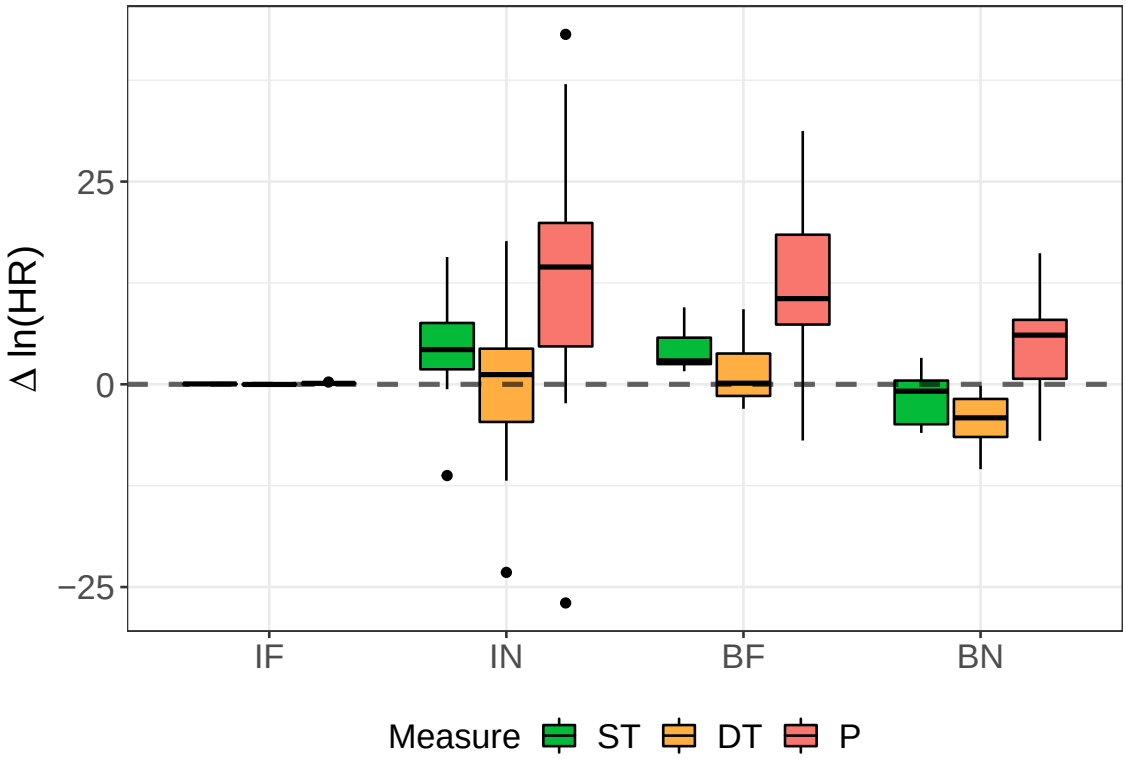
HR, 4 Groups:

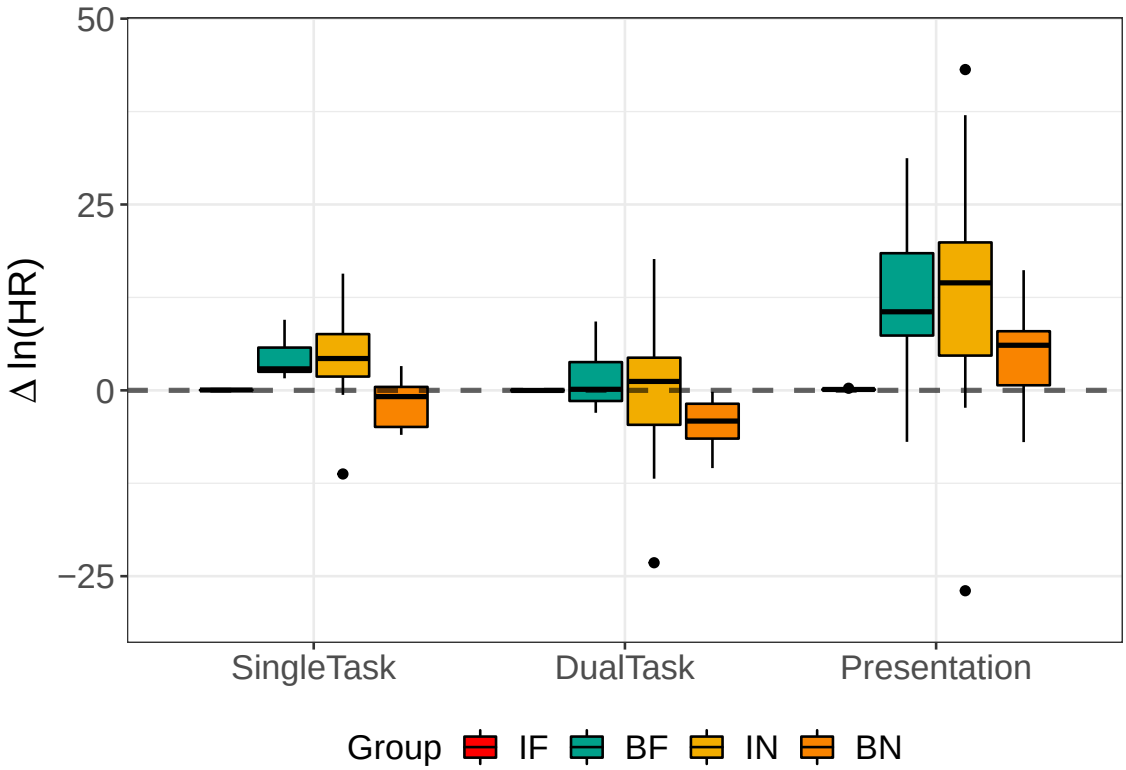
Stress Levels Across Activities

Our Linear Model:

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

```
## Linear mixed-effects model fit by REML
##  Data: diff_df
##        AIC      BIC    logLik
##   1257.591 1286.427 -619.7954
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept) Residual
## StdDev:    4.841465 5.783267
##
## Fixed effects: HR ~ 1 + Group + Activity
##                 Value Std.Error  DF   t-value p-value
## (Intercept) -0.677878  1.931551 137 -0.350950  0.7262
## GroupIN      4.260478  2.321139  45  1.835512  0.0730
## GroupBF      6.043981  2.349008  45  2.572993  0.0135
## GroupIF      0.804433  2.537471  45  0.317022  0.7527
## ActivityB   -2.438127  1.175862 137 -2.073480  0.0400
## ActivityDT  -3.254193  1.168396 137 -2.785179  0.0061
## ActivityP    6.082290  1.217420 137  4.996049  0.0000
##  Correlation:
##             (Intr) GropIN GropBF GropIF ActvtB ActvDT
## GroupIN     -0.721
## GroupBF     -0.711  0.593
## GroupIF     -0.658  0.549  0.542
## ActivityB   -0.303  0.005  0.000  0.000
## ActivityDT -0.302  0.000  0.000  0.000  0.497
## ActivityP   -0.282 -0.006 -0.011 -0.008  0.476  0.480
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -3.43550274 -0.46645616  0.03414297  0.41278914  4.63294641
##
## Number of Observations: 189
## Number of Groups: 49
```


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

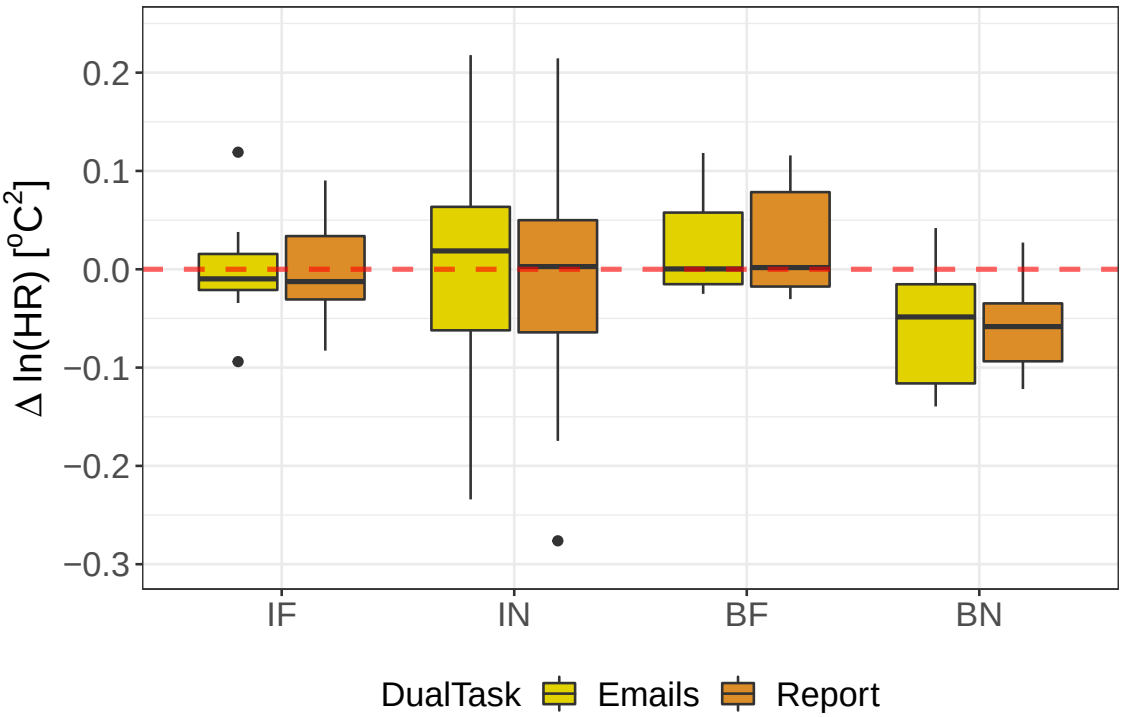

Δ ln(HR)
50
25
0
−25
SingleTask
DualTask
Presentation
Group
IF
BF
IN
BN

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
##   -300.4569 -282.8809 157.2285
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)   Residual
## StdDev:   0.0742646 0.01558454
##
## Fixed effects: HR ~ 1 + Group + DualTask
##                       Value  Std.Error DF   t-value p-value
## (Intercept)    -0.05541103 0.02379489 47 -2.328694  0.0242
## GroupIN         0.05243390 0.03065037 44  1.710711  0.0942
## GroupBF         0.08190075 0.03157937 44  2.593489  0.0129
## GroupIF         0.05652590 0.03357579 44  1.683531  0.0994
## DualTaskReport -0.00407769 0.00318118 47 -1.281817  0.2062
##  Correlation:
##                (Intr) GropIN GropBF GropIF
## GroupIN        -0.773
## GroupBF        -0.750  0.582
## GroupIF        -0.706  0.548  0.532
## DualTaskReport -0.067  0.000  0.000  0.000
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -1.81996706 -0.37641399  0.02682264  0.34551833  1.98874408
##
## Number of Observations: 96
## Number of Groups: 48
```



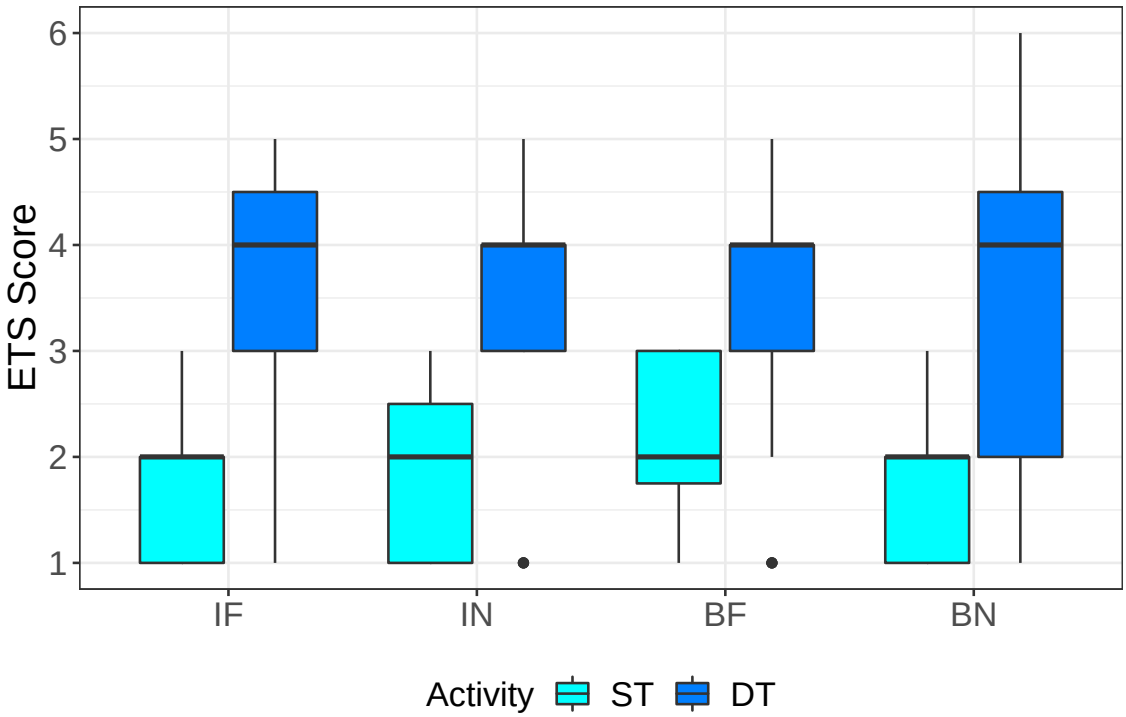

```
## Paired t-test
## For IF, p = 0.9405 > 0.05

## Paired t-test
## For IN, p = 0.0656 > 0.05

## Paired t-test
## For BF, p = 0.9901 > 0.05

## Paired t-test
## For BN, p = 0.7149 > 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
##   737.5097 763.6431 -361.7548
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept) Residual
## StdDev:   0.7966704  0.61909
##
## Fixed effects: Score ~ 1 + Group + Activity
##                 Value Std.Error  DF   t-value p-value
## (Intercept) 1.7321244 0.2554118 256  6.781693  0.0000
## GroupIN     0.2392640 0.3253733  53  0.735352  0.4654
## GroupBF     0.2449738 0.3383328  53  0.724061  0.4722
## GroupIF     0.1507651 0.3341128  53  0.451240  0.6537
## ActivityDT  1.7070064 0.0698745 256 24.429592  0.0000
##  Correlation:
##             (Intr) GropIN GropBF GropIF
## GroupIN    -0.770
## GroupBF    -0.741  0.582
## GroupIF    -0.750  0.589  0.566
## ActivityDT -0.137  0.000  0.000  0.000
##
## Standardized Within-Group Residuals:
##          Min           Q1          Med           Q3          Max
## -2.381972717 -0.472130565 -0.004067653  0.532609215  2.025925302
##
## Number of Observations: 314
## Number of Groups: 57
```



Activity	Group	n
ST	BN	31
ST	IN	47
ST	BF	40
ST	IF	39
DT	BN	31
DT	IN	47
DT	BF	40
DT	IF	39

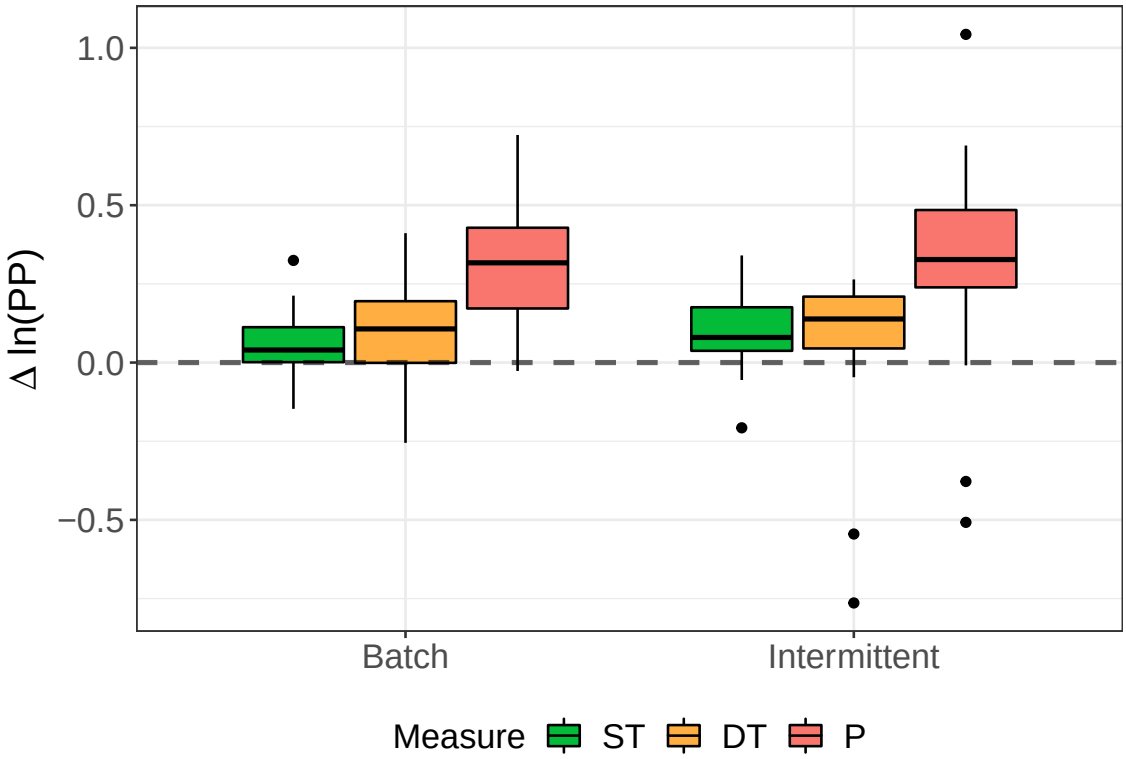
PP, 2 Groups:

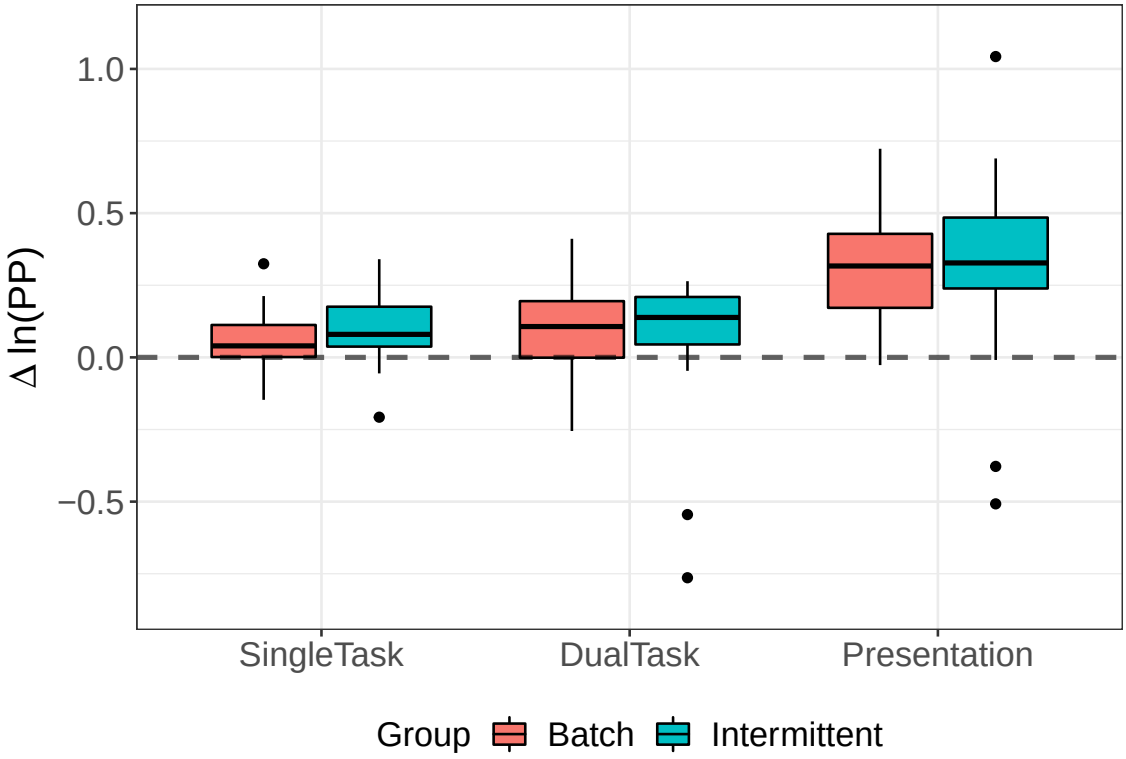
Stress Levels Across Activities

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
##   -161.7385 -137.6114 87.86927
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.1418716 0.1269382
##
## Fixed effects: PP ~ 1 + Group + Activity
##                         Value  Std.Error  DF   t-value p-value
## (Intercept)        0.05545193 0.03312582 174  1.673979  0.0959
## GroupIntermittent  0.03134988 0.04038270  58  0.776320  0.4407
## ActivityB         -0.04700478 0.02317565 174 -2.028197  0.0441
## ActivityDT         0.00965452 0.02317565 174  0.416580  0.6775
## ActivityP          0.24187460 0.02355773 174 10.267312  0.0000
##  Correlation:
##                   (Intr) GrpInt ActvtB ActvDT
## GroupIntermittent -0.670
## ActivityB         -0.350  0.000
## ActivityDT        -0.350  0.000  0.500
## ActivityP         -0.346  0.002  0.492  0.492
##
## Standardized Within-Group Residuals:
##        Min         Q1        Med         Q3        Max
## -3.6548748 -0.3862613 -0.0615164  0.4178499  4.2095527
##
## Number of Observations: 237
## Number of Groups: 60
```


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

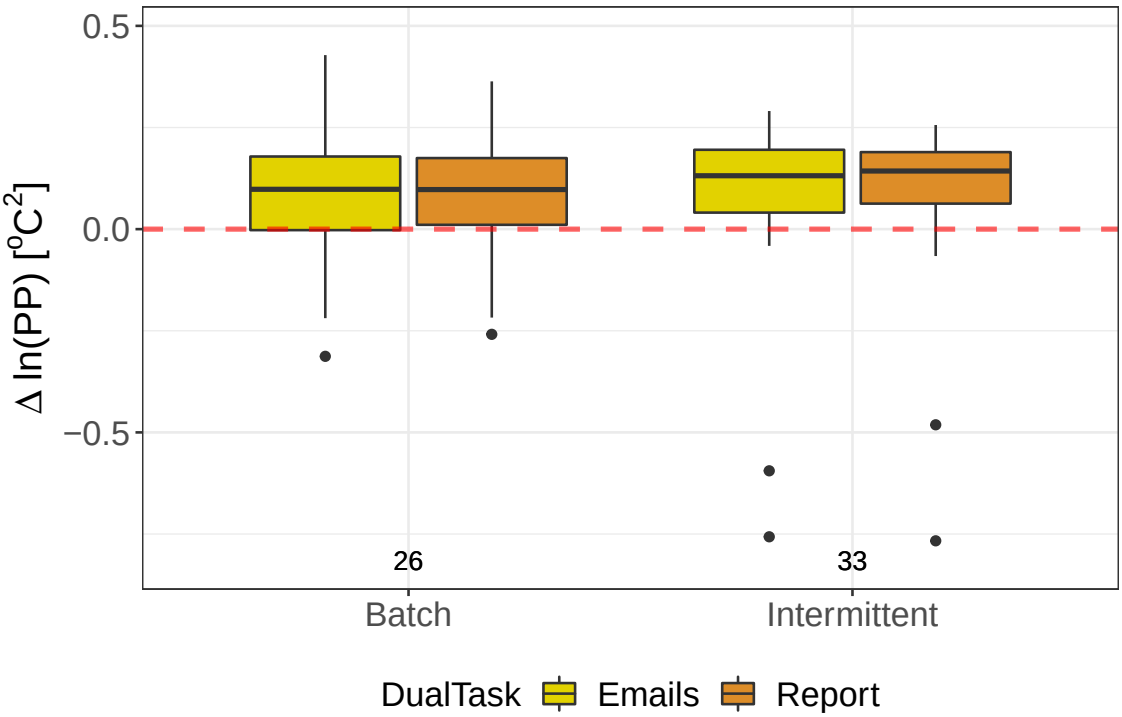

1.0
0.5
0.0
−0.5
Δ ln(PP)
SingleTask
DualTask
Presentation
Group
Batch
Intermittent

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
##   -228.9065 -215.1818 119.4533
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)   Residual
## StdDev:   0.1889753 0.02522671
##
## Fixed effects: PP ~ 1 + Group + DualTask
##                         Value  Std.Error DF   t-value p-value
## (Intercept)       0.07906585 0.03729821 58 2.1198295  0.0383
## GroupIntermittent 0.00510278 0.04977527 57 0.1025163  0.9187
## DualTaskReport    0.00193656 0.00464461 58 0.4169469  0.6783
##  Correlation:
##                   (Intr) GrpInt
## GroupIntermittent -0.746
## DualTaskReport    -0.062  0.000
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -2.42319674 -0.39591074 -0.02380016  0.36113803  1.98699965
##
## Number of Observations: 118
## Number of Groups: 59
```



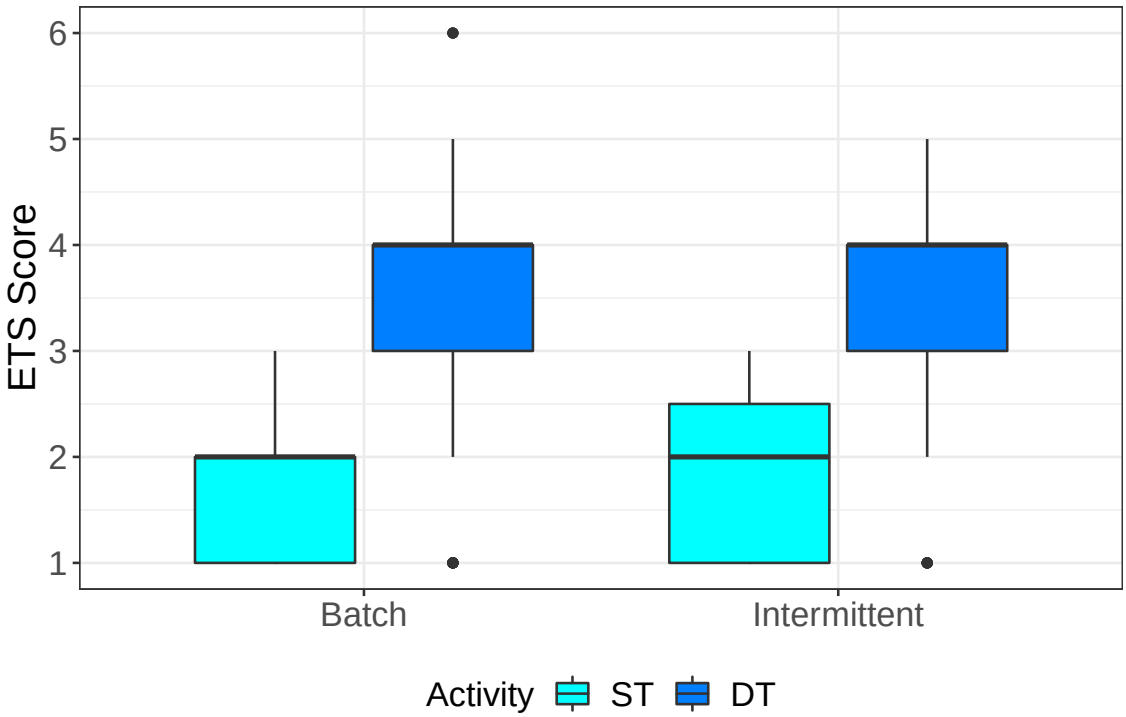

```
## Paired t-test
## For Batch, p = 0.9411 > 0.05

## Paired t-test
## For Intermittent, p = 0.5758 > 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
##   733.2329 751.9319 -361.6165
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.7859882 0.6190207
##
## Fixed effects: Score ~ 1 + Group + Activity
##                       Value  Std.Error  DF   t-value p-value
## (Intercept)       1.8767558 0.16100340 256 11.656622  0.0000
## GroupIntermittent 0.0520014 0.22048697  55  0.235848  0.8144
## ActivityDT        1.7070064 0.06986672 256 24.432323  0.0000
##  Correlation:
##                   (Intr) GrpInt
## GroupIntermittent -0.696
## ActivityDT        -0.217  0.000
##
## Standardized Within-Group Residuals:
##          Min           Q1          Med           Q3          Max
## -2.380600057 -0.462434685 -0.008520332  0.528346784  2.000316882
##
## Number of Observations: 314
## Number of Groups: 57
```



Activity	Group	n
ST	Batch	78
ST	Intermittent	79
DT	Batch	78
DT	Intermittent	79

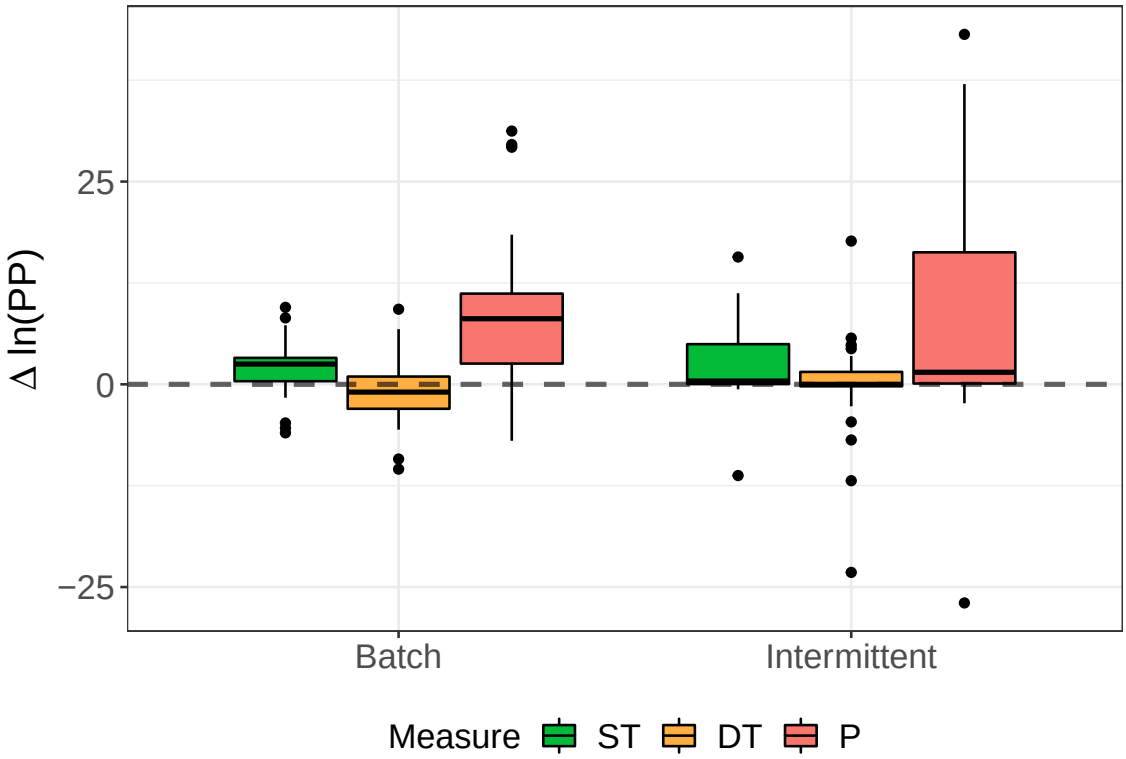
HR, 2 Groups:

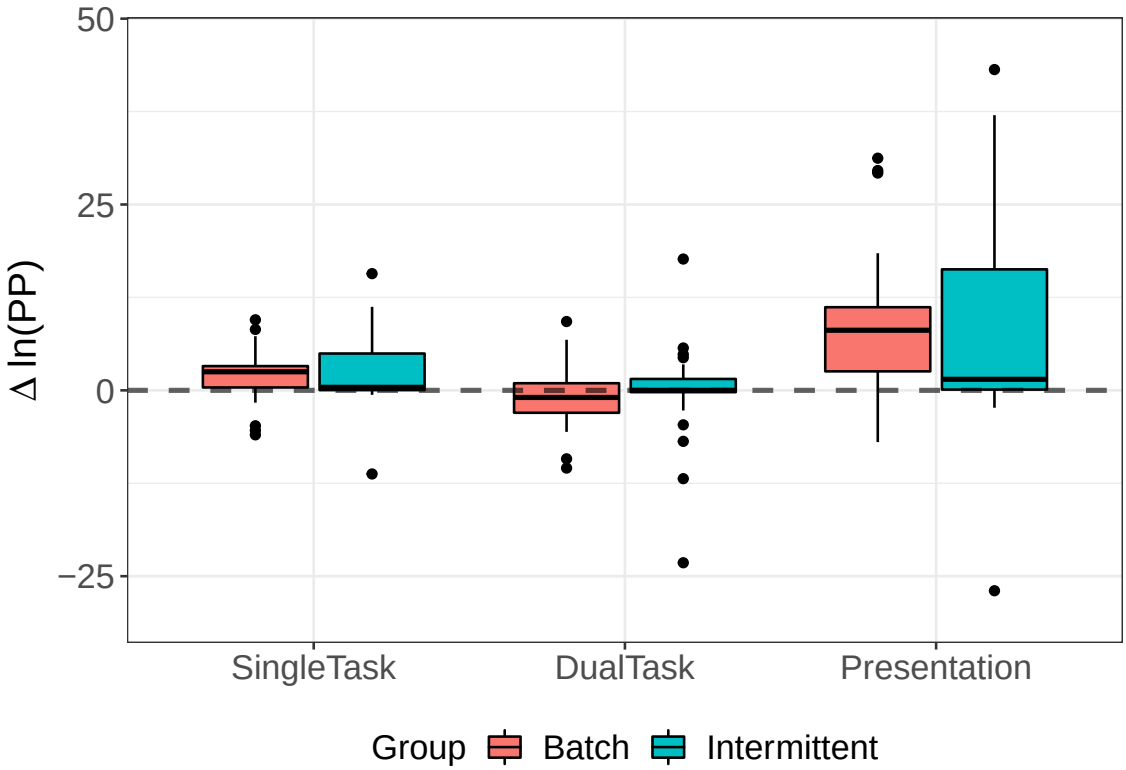
Stress Levels Across Activities

Our Linear Model:

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

```
## Linear mixed-effects model fit by REML
##  Data: diff_df
##        AIC      BIC    logLik
##   1269.039 1291.544 -627.5195
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept) Residual
## StdDev:    5.304679 5.782853
##
## Fixed effects: HR ~ 1 + Group + Activity
##                       Value Std.Error  DF   t-value p-value
## (Intercept)        2.858349  1.428502 137  2.000941  0.0474
## GroupIntermittent -0.668315  1.735306  47 -0.385128  0.7019
## ActivityB         -2.443897  1.175838 137 -2.078430  0.0395
## ActivityDT        -3.254193  1.168313 137 -2.785379  0.0061
## ActivityP          6.110504  1.217761 137  5.017821  0.0000
##  Correlation:
##                   (Intr) GrpInt ActvtB ActvDT
## GroupIntermittent -0.620
## ActivityB         -0.409  0.004
## ActivityDT        -0.409  0.000  0.497
## ActivityP         -0.392 -0.001  0.476  0.480
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -3.25153958 -0.42325300 -0.01768185  0.34722672  4.63109134
##
## Number of Observations: 189
## Number of Groups: 49
```


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

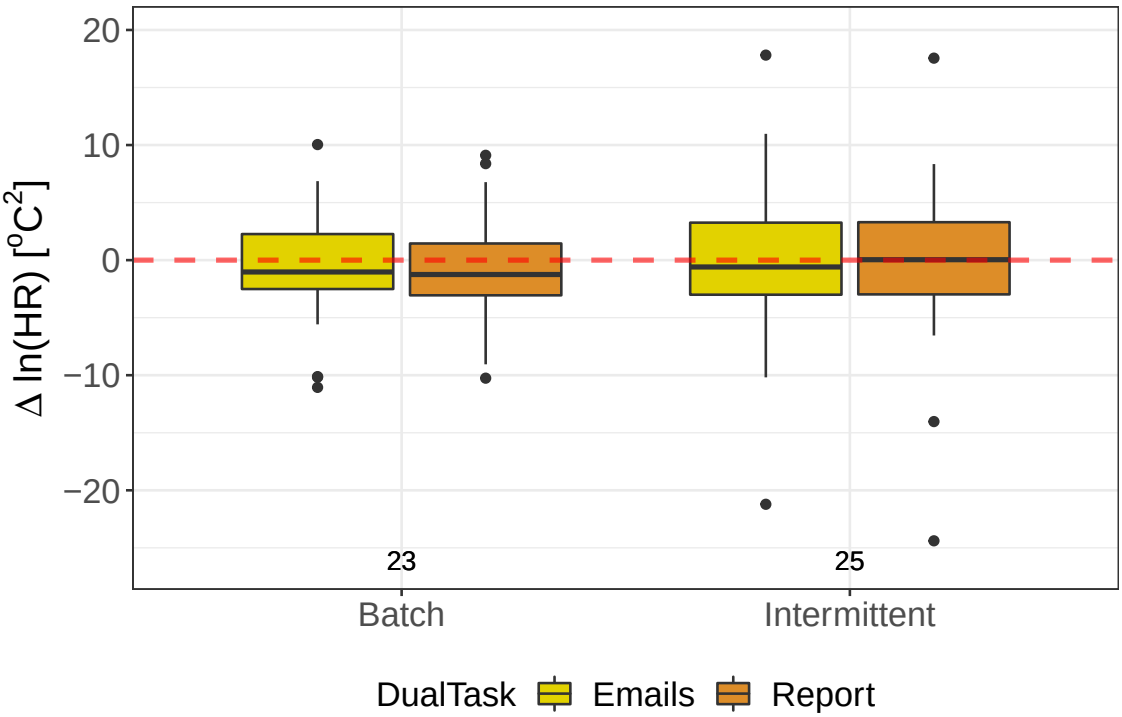

Δ ln(PP)
50
25
0
−25
SingleTask
DualTask
Presentation
Group
Batch
Intermittent

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
##   504.5318 517.1948 -247.2659
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept) Residual
## StdDev:    6.375872 1.192841
##
## Fixed effects: HR ~ 1 + Group + DualTask
##                        Value Std.Error DF    t-value p-value
## (Intercept)       -0.7631232 1.3465588 47 -0.5667211  0.5736
## GroupIntermittent  0.4461128 1.8582051 46  0.2400773  0.8113
## DualTaskReport    -0.2818199 0.2434876 47 -1.1574301  0.2529
##  Correlation:
##                   (Intr) GrpInt
## GroupIntermittent -0.719
## DualTaskReport    -0.090  0.000
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -1.99682665 -0.38460602  0.01782001  0.38127970  2.21718036
##
## Number of Observations: 96
## Number of Groups: 48
```



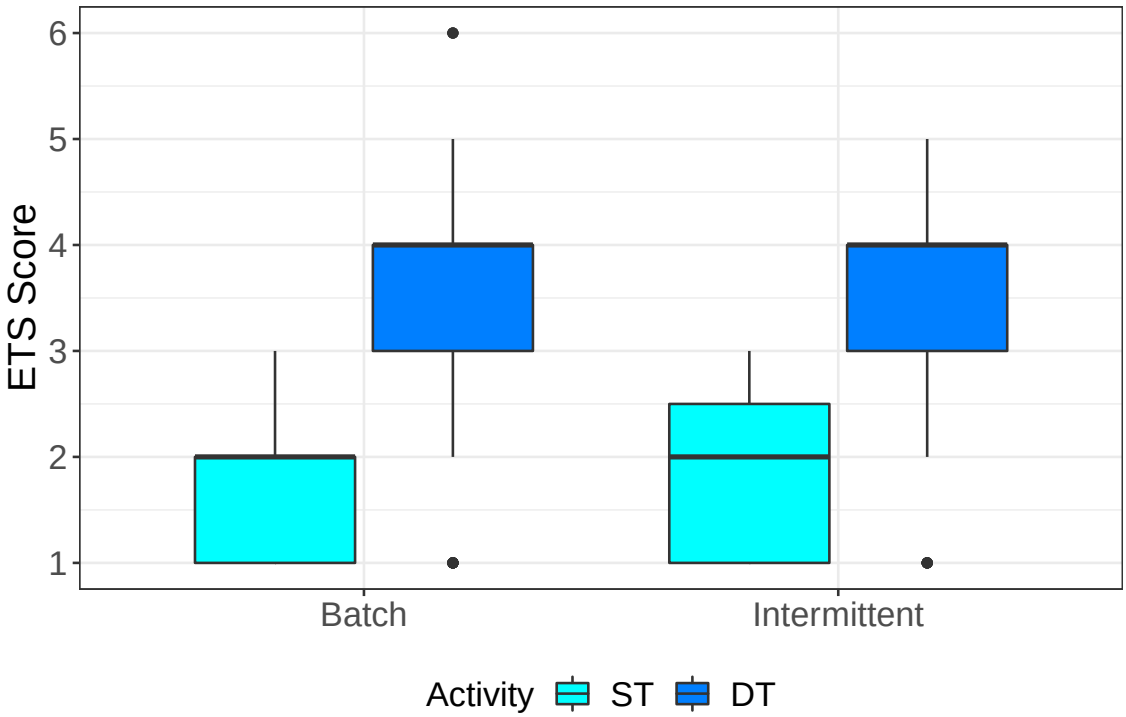

```
## Paired t-test
## For Batch, p = 0.8256 > 0.05

## Paired t-test
## For Intermittent, p = 0.1234 > 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
##   733.2329 751.9319 -361.6165
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.7859882 0.6190207
##
## Fixed effects: Score ~ 1 + Group + Activity
##                       Value  Std.Error  DF   t-value p-value
## (Intercept)       1.8767558 0.16100340 256 11.656622  0.0000
## GroupIntermittent 0.0520014 0.22048697  55  0.235848  0.8144
## ActivityDT        1.7070064 0.06986672 256 24.432323  0.0000
##  Correlation:
##                   (Intr) GrpInt
## GroupIntermittent -0.696
## ActivityDT        -0.217  0.000
##
## Standardized Within-Group Residuals:
##          Min           Q1          Med           Q3          Max
## -2.380600057 -0.462434685 -0.008520332  0.528346784  2.000316882
##
## Number of Observations: 314
## Number of Groups: 57
```



Activity	Group	n
ST	Batch	78
ST	Intermittent	79
DT	Batch	78
DT	Intermittent	79

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
##   -78.02772 -56.57067 47.01386
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)  Residual
## StdDev:   0.1238458 0.1013363
##
## Fixed effects: PP ~ 1 + ETSScore + Group + Activity
##                   Value  Std.Error DF    t-value p-value
## (Intercept)  0.02372209 0.05021268 55  0.4724322  0.6385
## ETSScore    -0.00977965 0.01393294 55 -0.7019083  0.4857
## GroupIN      0.07795969 0.05546058 53  1.4056776  0.1657
## GroupBF      0.07395298 0.05773855 53  1.2808249  0.2058
## GroupIF      0.09683412 0.05683199 53  1.7038663  0.0943
## ActivityDT   0.02197206 0.03094858 55  0.7099538  0.4807
##  Correlation:
##             (Intr) ETSScr GropIN GropBF GropIF
## ETSScore    -0.476
## GroupIN     -0.641 -0.058
## GroupBF     -0.615 -0.056  0.584
## GroupIF     -0.636 -0.035  0.593  0.569
## ActivityDT  0.260 -0.790  0.046  0.044  0.028
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -4.20226524 -0.27713895  0.01481335  0.36468341  2.13634539
##
## Number of Observations: 114
## Number of Groups: 57
```

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 0.0199 0.01993   0.541  0.465
## IntermittentFactor  1 0.0021 0.00211   0.057  0.812
## Residuals          57 2.1010 0.03686
```

```
##   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 0.03645498 -0.06280896 0.1357189 0.4651042
##
## $IntermittentFactor
##                                     diff         lwr       upr     p adj
## Intermittent-Non-Intermittent 0.0118666 -0.08789741 0.1116306 0.8125905
```

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
##   -6.888038 3.327218 8.444019
##
## Random effects:
##  Formula: ~1 | Subject
##         (Intercept)   Residual
## StdDev:   0.1797631 0.06741118
##
## Fixed effects: PP ~ 1 + StressFactor + IntermittentFactor
##                                     Value  Std.Error DF   t-value p-value
## (Intercept)                    0.05692877 0.04616607 57 1.2331302  0.2226
## StressFactorHigh               0.03765375 0.04982313 57 0.7557484  0.4529
## IntermittentFactorIntermittent 0.01198769 0.05007413 57 0.2393988  0.8117
##  Correlation:
##                                (Intr) StrsFH
## StressFactorHigh               -0.600
## IntermittentFactorIntermittent -0.651  0.101
##
## Standardized Within-Group Residuals:
##         Min          Q1         Med          Q3         Max
## -1.52315090 -0.12901408  0.06143638  0.21094408  0.57887938
##
## Number of Observations: 60
## Number of Groups: 60
```

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 0.0199 0.01993   0.532  0.469
## IntermittentFactor               1 0.0021 0.00211   0.056  0.813
## StressFactor:IntermittentFactor  1 0.0028 0.00284   0.076  0.784
## Residuals                       56 2.0981 0.03747
```

```
##   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 0.03645498 -0.0636623 0.1365723 0.4687814
##
## $IntermittentFactor
##                                     diff         lwr       upr     p adj
## Intermittent-Non-Intermittent 0.0118666 -0.08875506 0.1124883 0.8141023
##
## $`StressFactor:IntermittentFactor`
##                                                    diff        lwr
## High:Non-Intermittent-Low:Non-Intermittent  0.022326874 -0.1761760
## Low:Intermittent-Low:Non-Intermittent      -0.002203866 -0.1932133
## High:Intermittent-Low:Non-Intermittent      0.047938455 -0.1505644
## Low:Intermittent-High:Non-Intermittent     -0.024530740 -0.2037135
## High:Intermittent-High:Non-Intermittent     0.025611581 -0.1615387
## High:Intermittent-Low:Intermittent          0.050142321 -0.1290404
##                                                   upr     p adj
## High:Non-Intermittent-Low:Non-Intermittent 0.2208297 0.9907150
## Low:Intermittent-Low:Non-Intermittent      0.1888056 0.9999896
## High:Intermittent-Low:Non-Intermittent     0.2464413 0.9187587
## Low:Intermittent-High:Non-Intermittent     0.1546520 0.9835337
## High:Intermittent-High:Non-Intermittent    0.2127618 0.9835522
## High:Intermittent-Low:Intermittent         0.2293251 0.8800917
```