

Hypothesis Testing for NSF Office Stress Project - Reduced Sensor Set

Below are the test results for each of the Conditions that had $n \geq 7$ subjects. Statistical testing can have three different possible outcomes: the data is already normal (t-test), the logarithm of the data is normal (t-test with log data), or the data is NOT normal (Wilcoxon test).

For notation, let:

WB-RB = Writing Baseline - Resting Baseline

SC-RB = Stress Condition - Resting Baseline

SC-WB = Stress Condition - Writing Baseline

DT-RB = Dual Task - Resting Baseline

DT-WB = Dual Task - Writing Baseline

DT-SC = Dual Task - Stress Condition

P-RB = Presentation - Resting Baseline

P-WB = Presentation - Writing Baseline

P-SC = Presentation - Stress Condition

P-DT = Presentation - Dual Task

For each of the graphs, let:

* = $0.01 < p \leq 0.05$

** = $0.001 < p \leq 0.01$

*** = $p \leq 0.001$

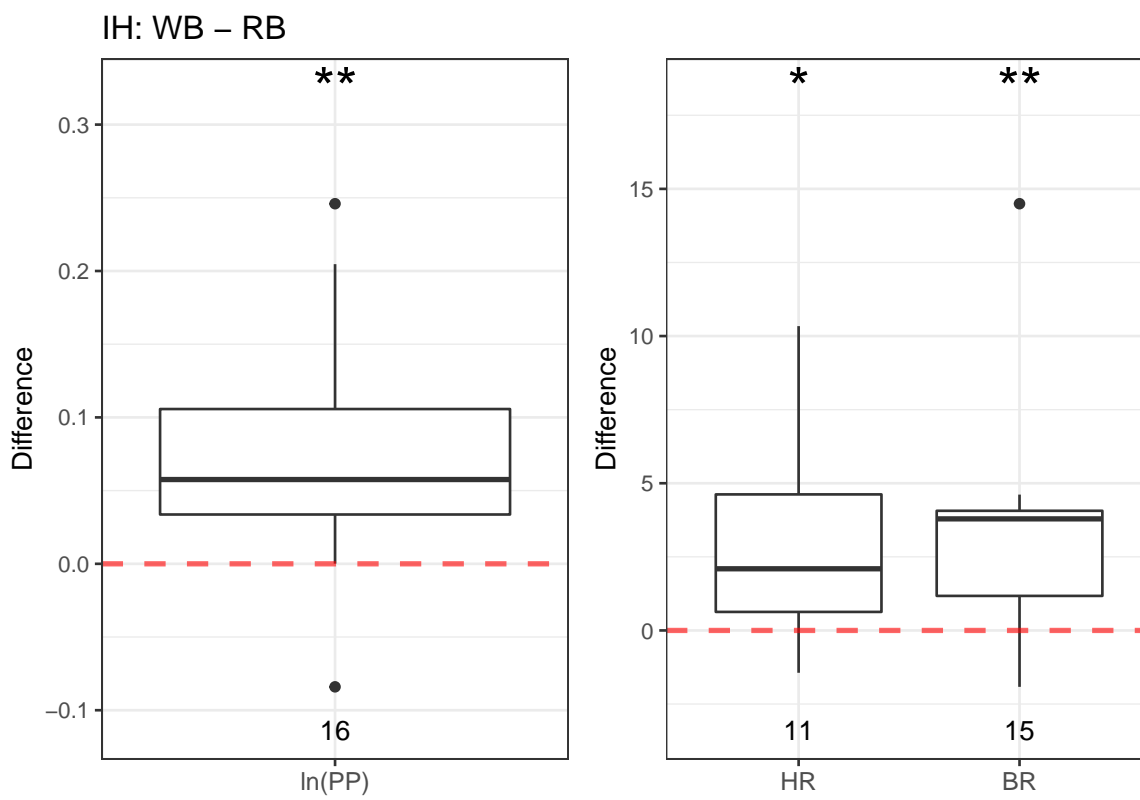
? = Did not run statistical test ($n < 7$)

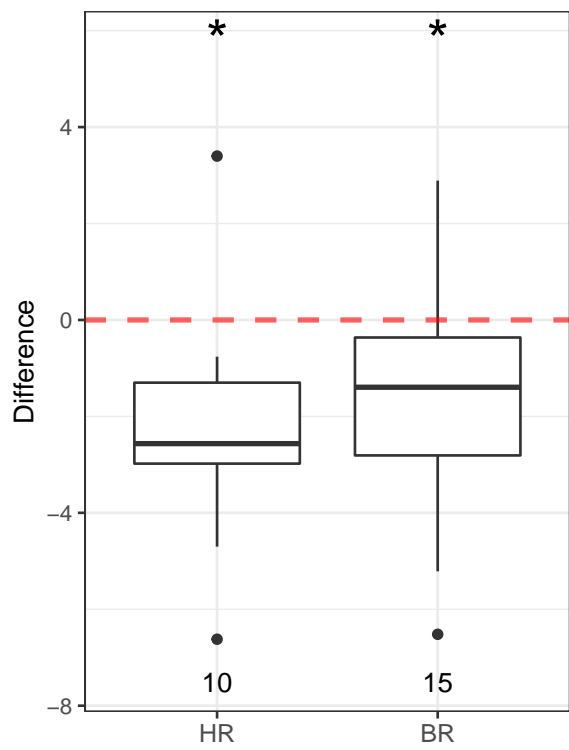
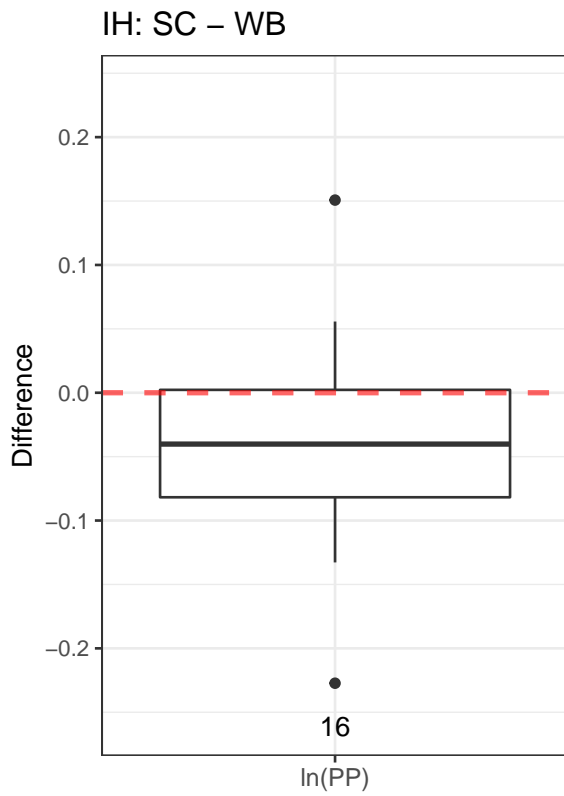
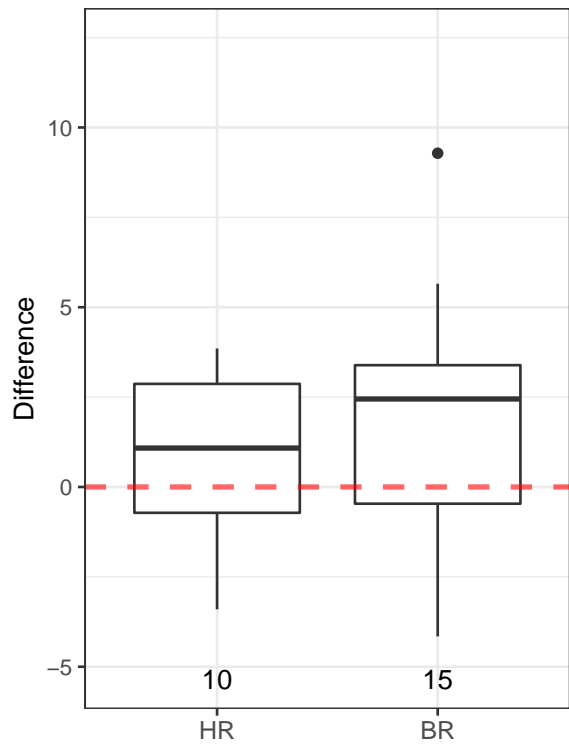
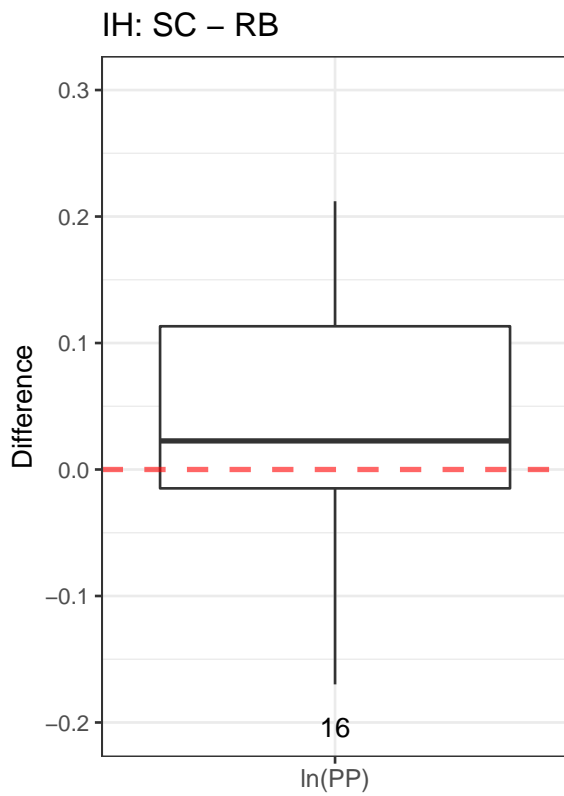
Differences in **Reduced Sensor Set**:

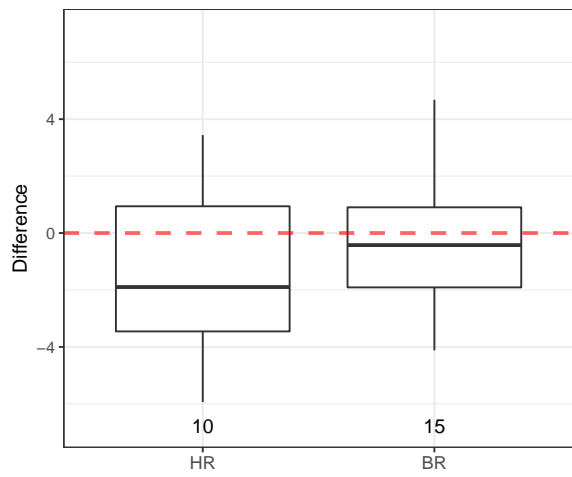
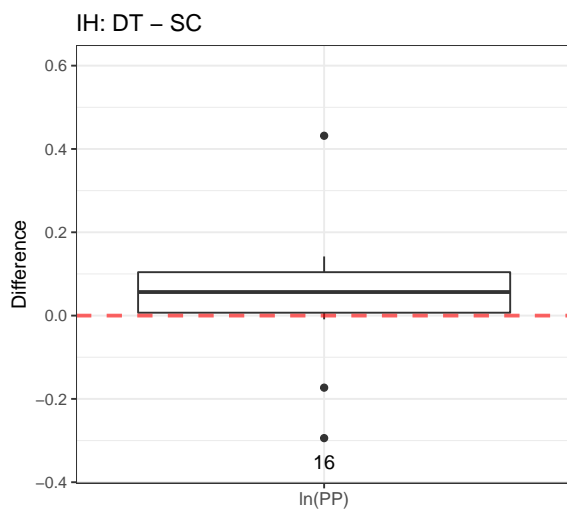
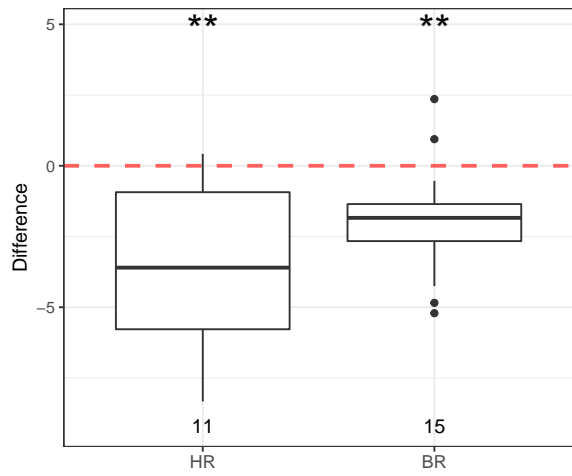
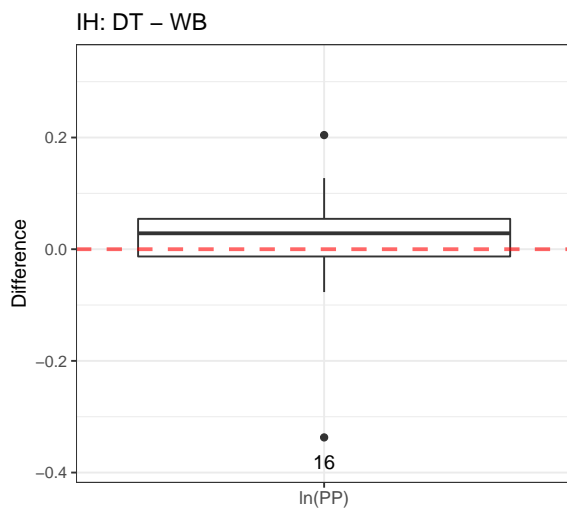
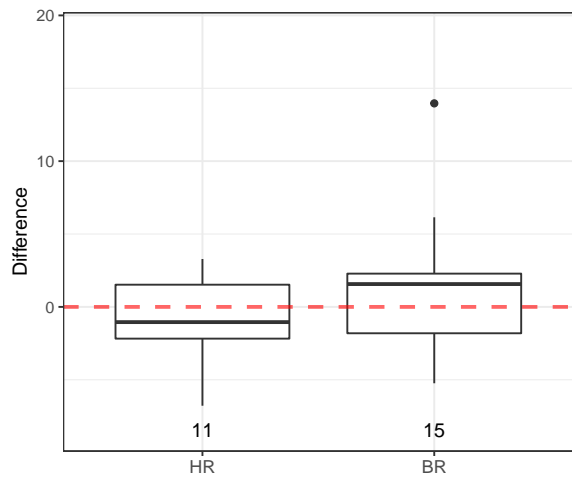
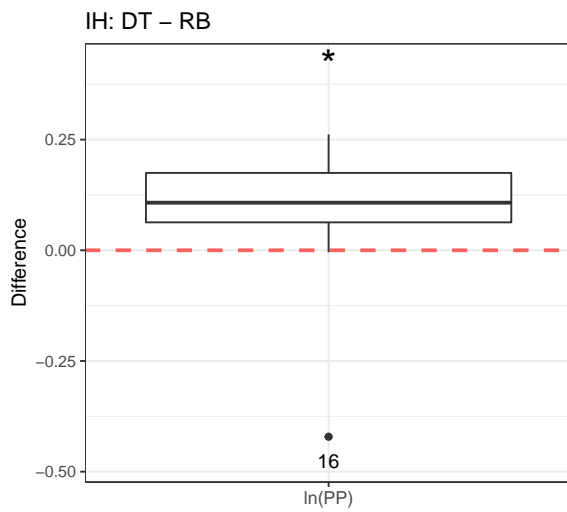
- Signals for D.EDA, N.EDA, D.HR, and N.HR and removed completely.
- **Breathing Rate** (BR) measurements for the **Presentation** session are removed completely.
- Easier on the eyes.

Intermittent-High (IH)

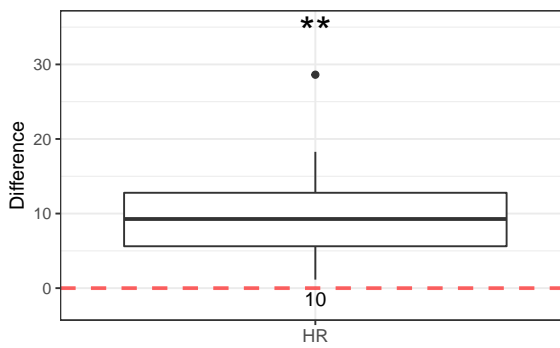
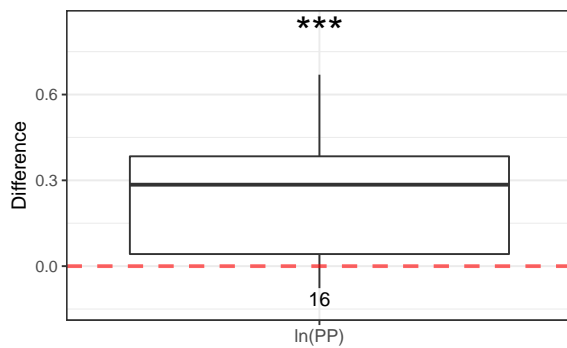
Sensor Channels per Session



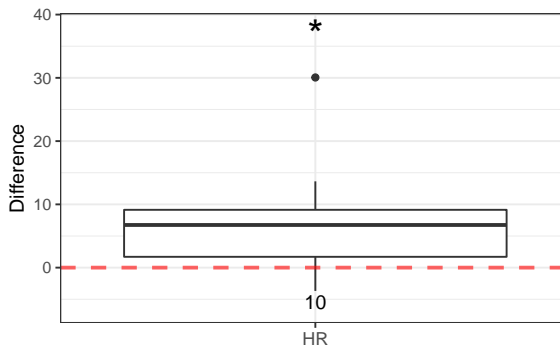
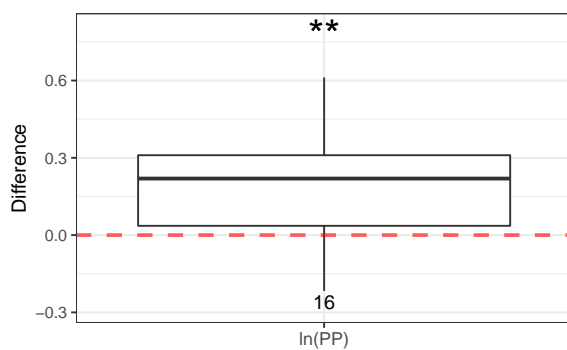




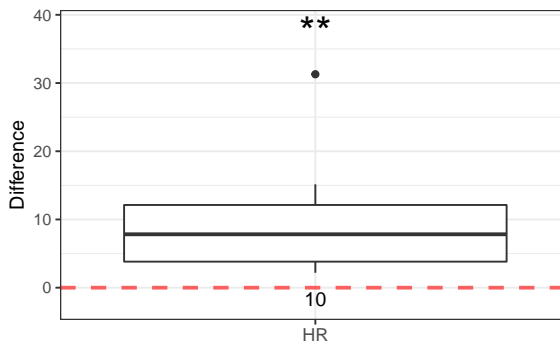
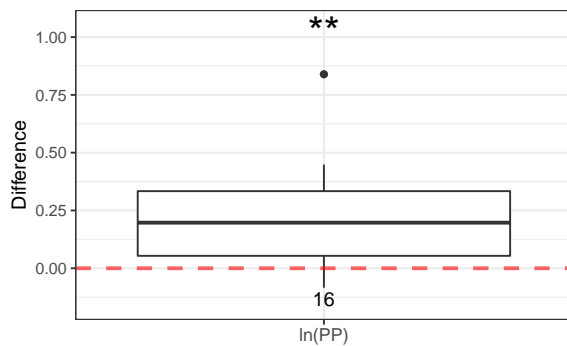
IH: P – RB



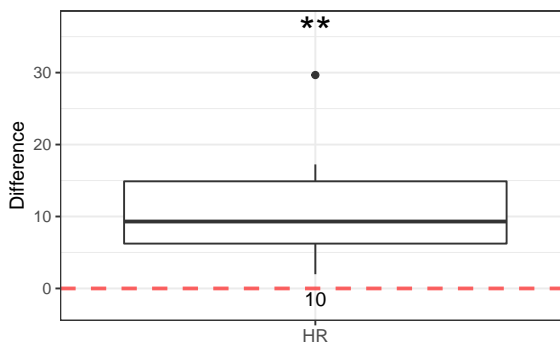
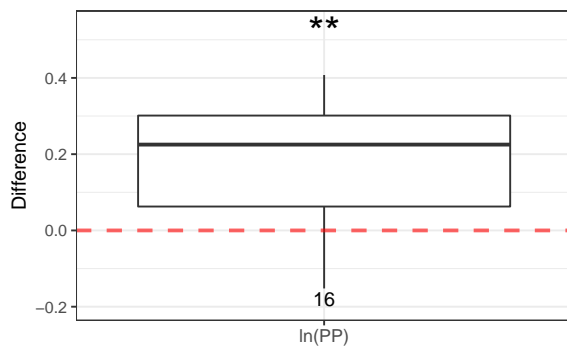
IH: P – WB



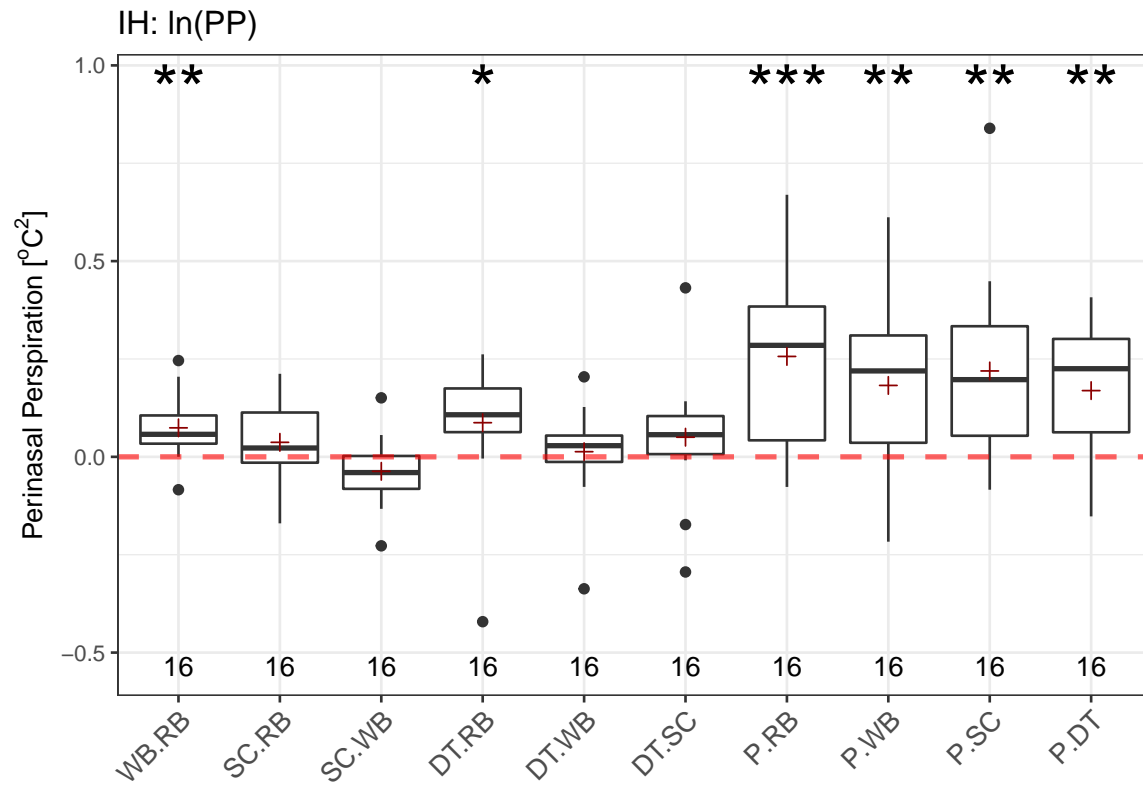
IH: P – SC



IH: P – DT

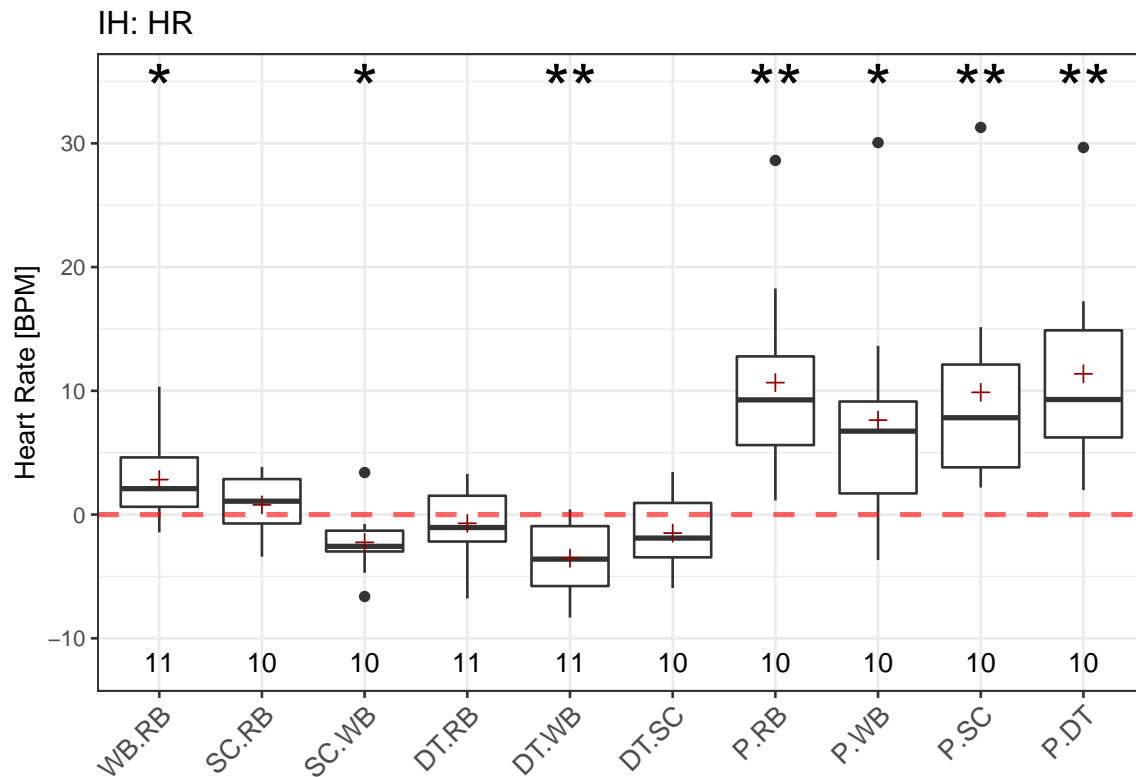


Sensor Channel across Session



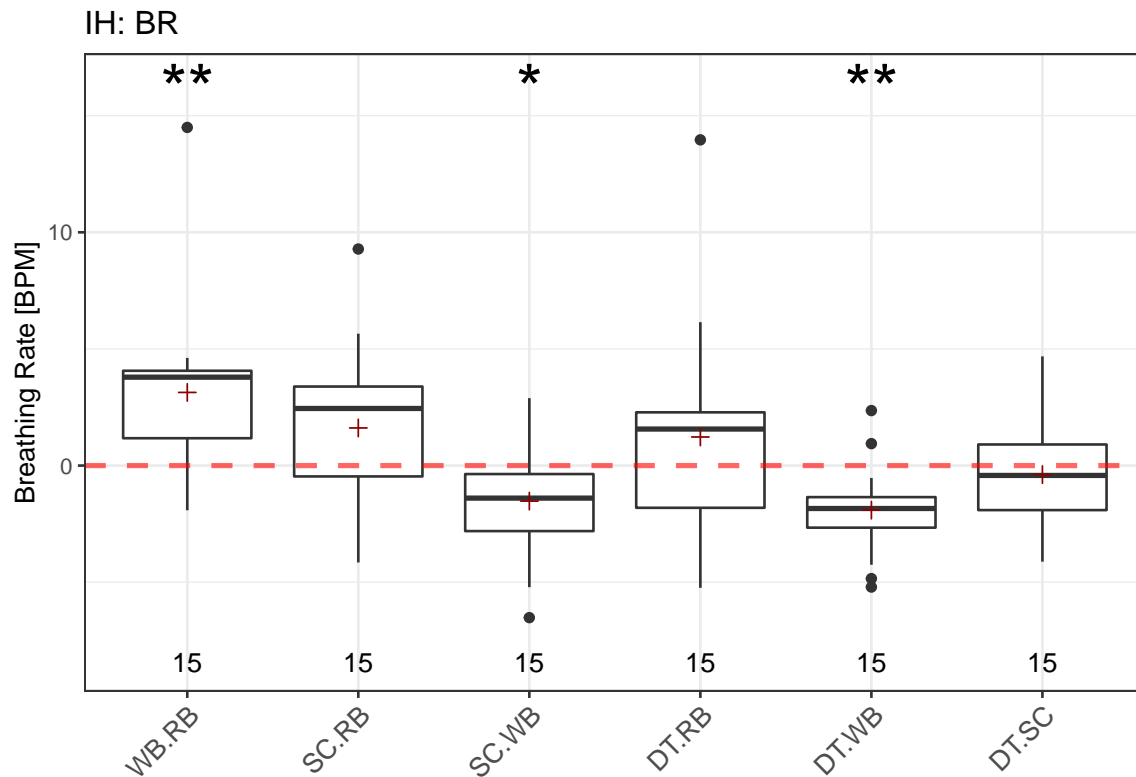
```
## In the following tests, we applied ln(PP).
##
## Writing Baseline - Resting Baseline
## t-test p = 0.0025 < 0.01 **
##
## Stress Condition - Resting Baseline
## t-test p = 0.1711 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.0994 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.0395 < 0.05 *
##
## Dual Task - Writing Baseline
## t-test p = 0.6591 > 0.05
##
## Dual Task - Stress Condition
## t-test p = 0.2055 > 0.05
##
## Presentation - Resting Baseline
## t-test p = 2e-04 < 0.001 ***
##
```

```
## Presentation - Writing Baseline
## t-test p = 0.003 < 0.01  **
##
## Presentation - Stress Condition
## t-test p = 0.002 < 0.01  **
##
## Presentation - Dual Task
## t-test p = 0.0024 < 0.01  **
```

```
## Writing Baseline - Resting Baseline
## t-test p = 0.0188 < 0.05  *
##
## Stress Condition - Resting Baseline
## t-test p = 0.3553 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.0243 < 0.05  *
##
## Dual Task - Resting Baseline
## t-test p = 0.4335 > 0.05
##
## Dual Task - Writing Baseline
## t-test p = 0.0036 < 0.01  **
##
## Dual Task - Stress Condition
## t-test p = 0.1614 > 0.05
##
## Presentation - Resting Baseline
## t-test p = 0.0024 < 0.01  **
##
## Presentation - Writing Baseline
## t-test p = 0.0289 < 0.05  *
##
## Presentation - Stress Condition
```

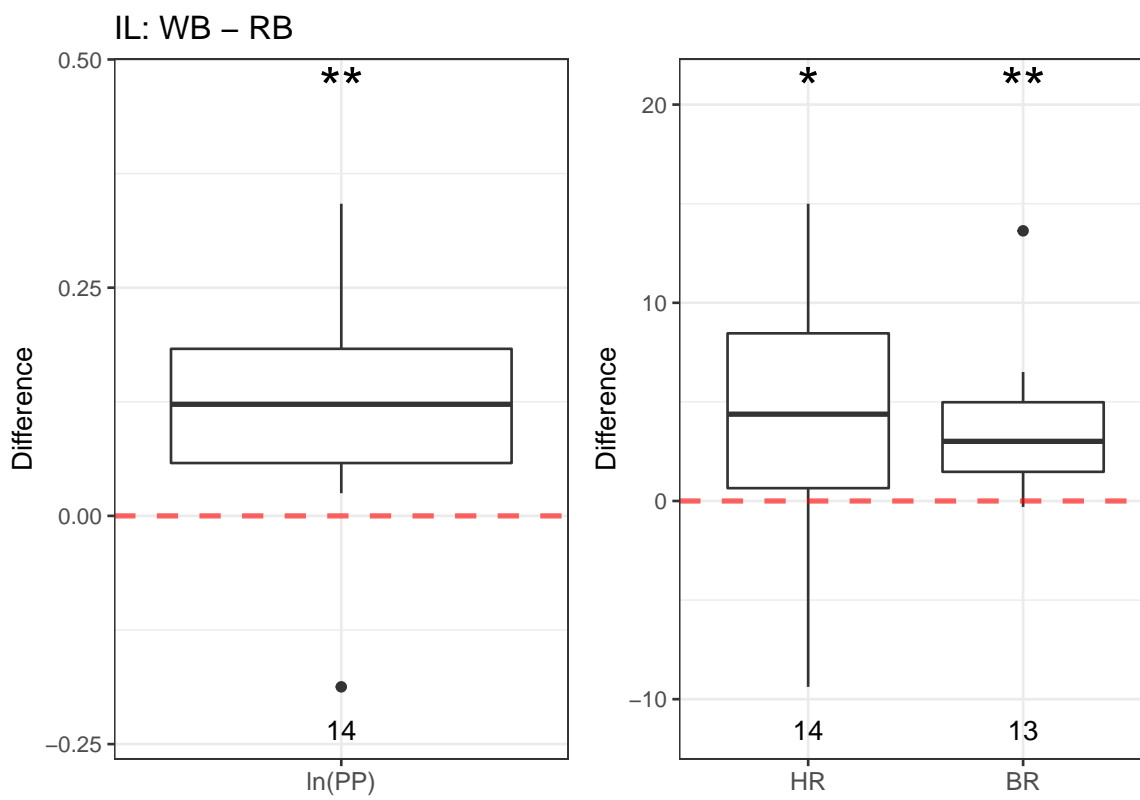
```
## t-test p = 0.0063 < 0.01 **  
##  
## Presentation - Dual Task  
## t-test p = 0.0015 < 0.01 **
```

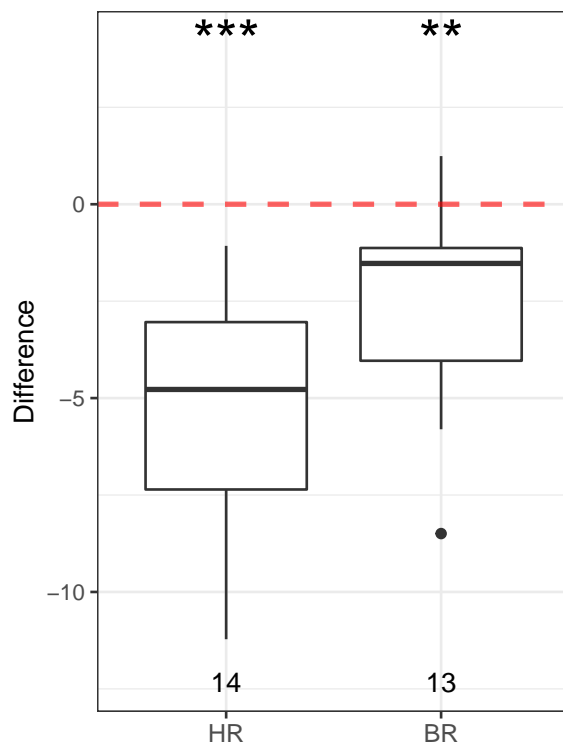
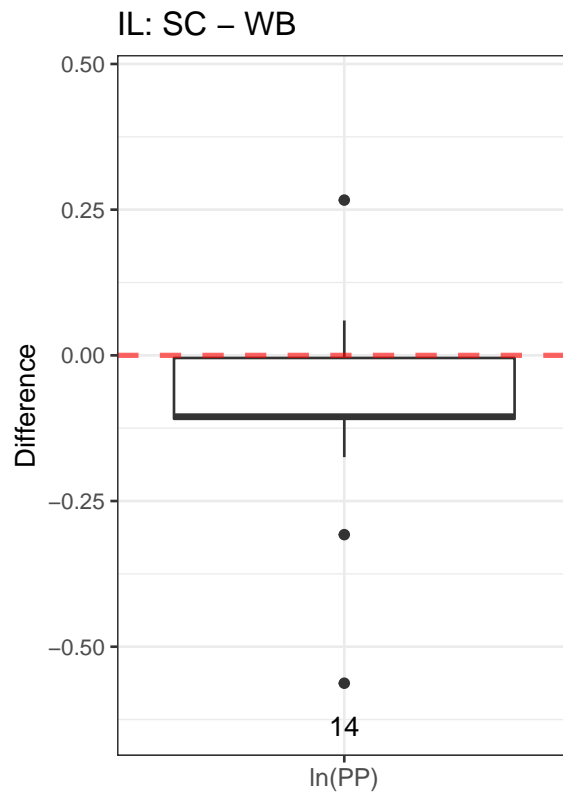
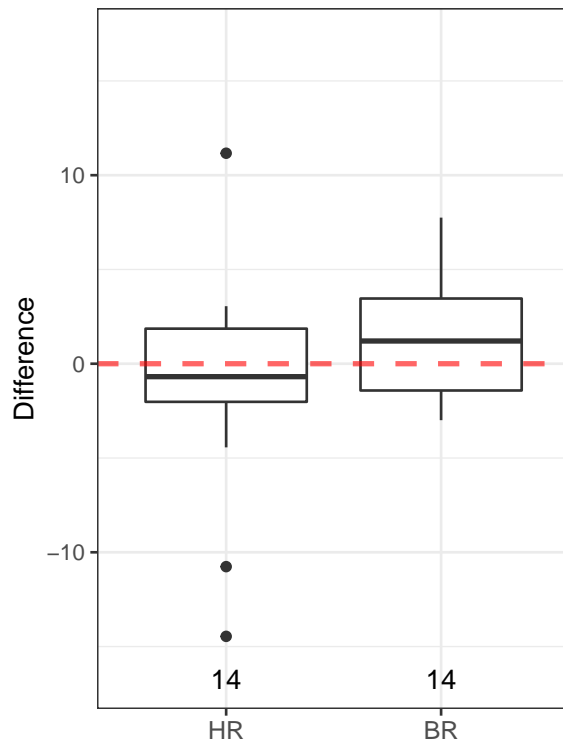
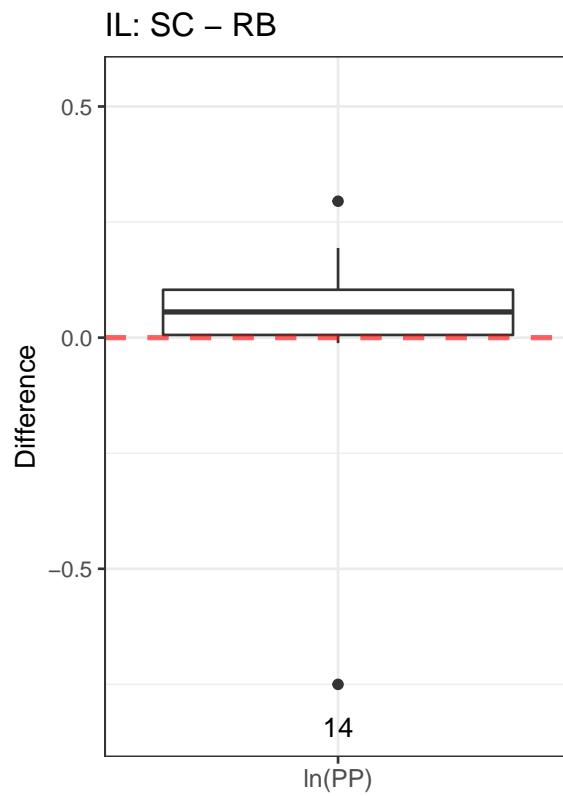


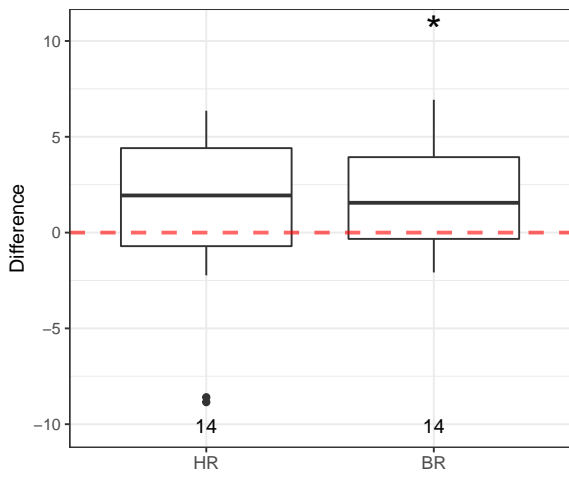
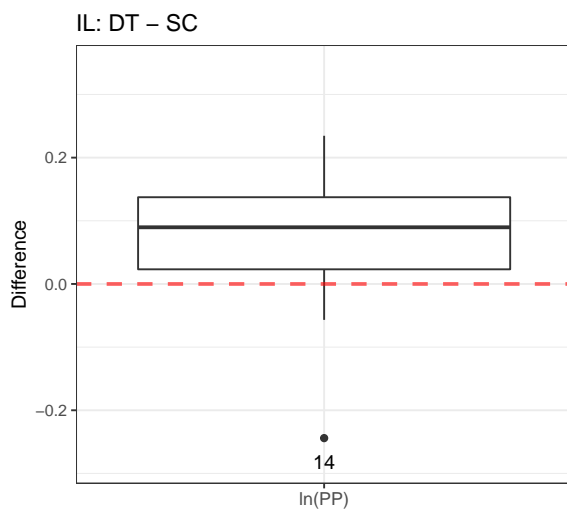
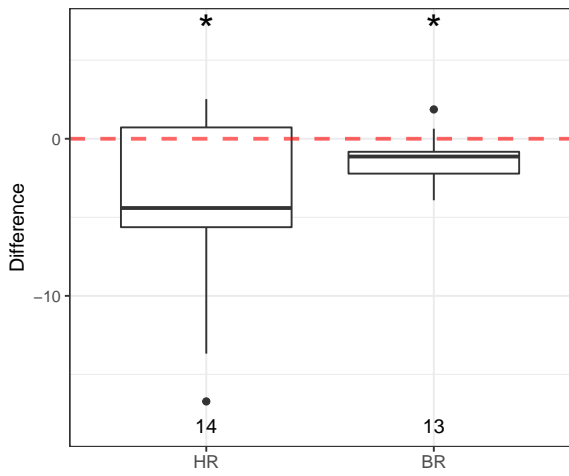
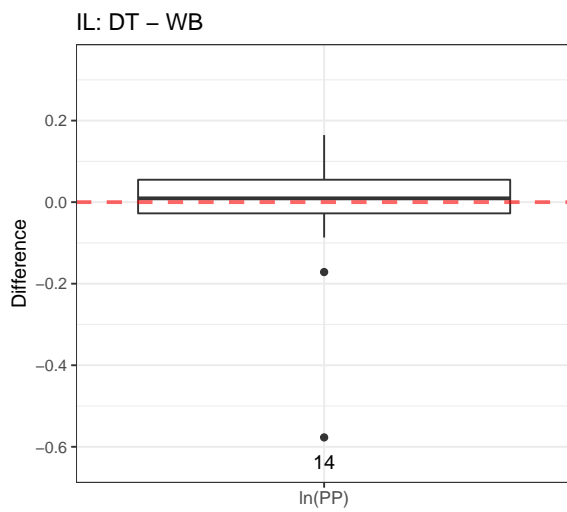
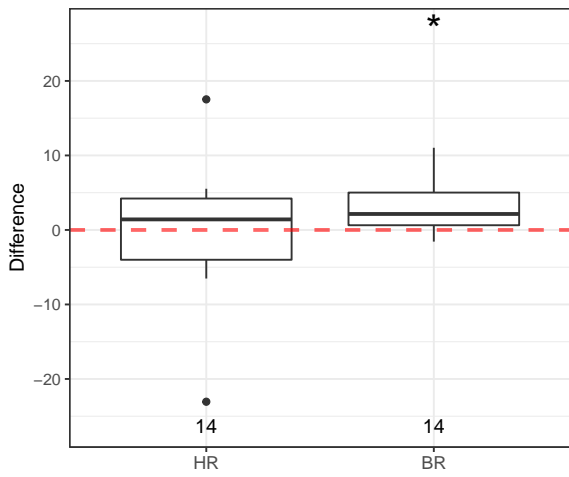
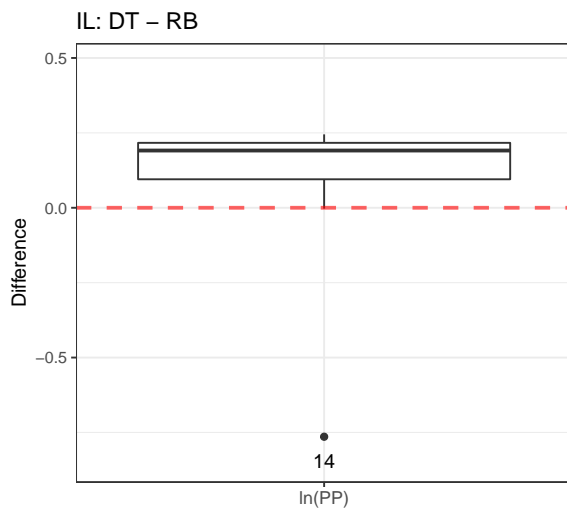
```
## Writing Baseline - Resting Baseline
## t-test p = 0.0075 < 0.01  **
##
## Stress Condition - Resting Baseline
## t-test p = 0.1189 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.0318 < 0.05  *
##
## Dual Task - Resting Baseline
## t-test p = 0.3323 > 0.05
##
## Dual Task - Writing Baseline
## t-test p = 0.0023 < 0.01  **
##
## Dual Task - Stress Condition
## t-test p = 0.5106 > 0.05
```

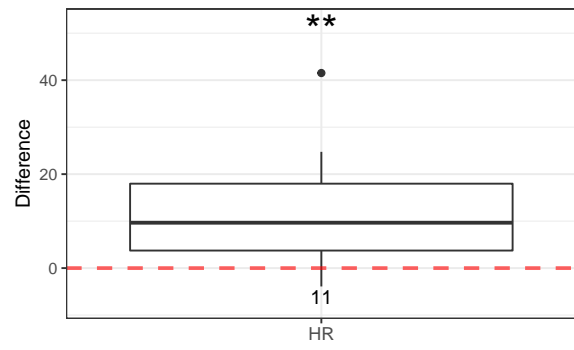
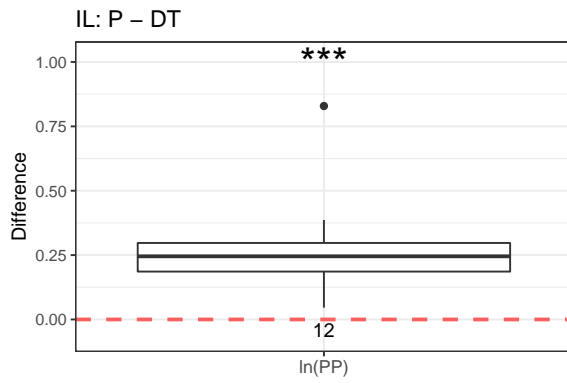
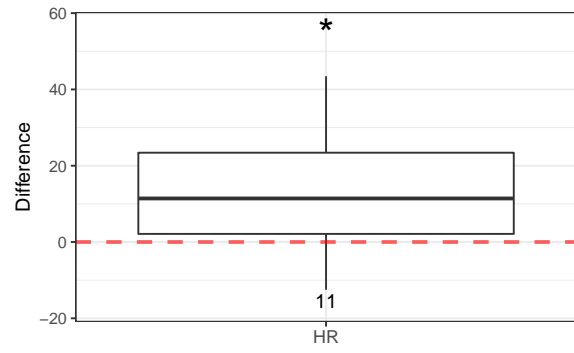
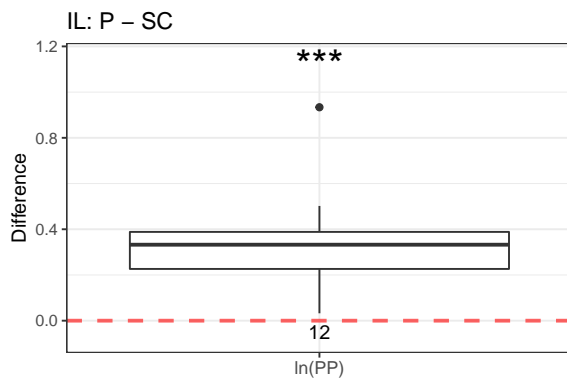
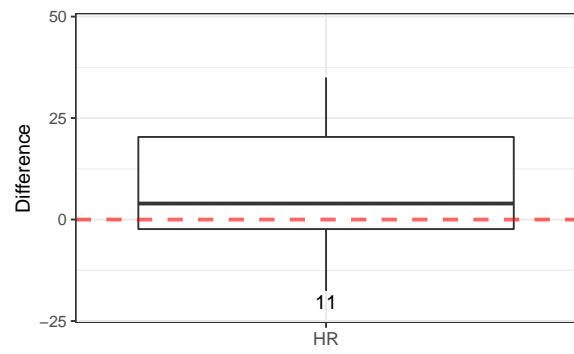
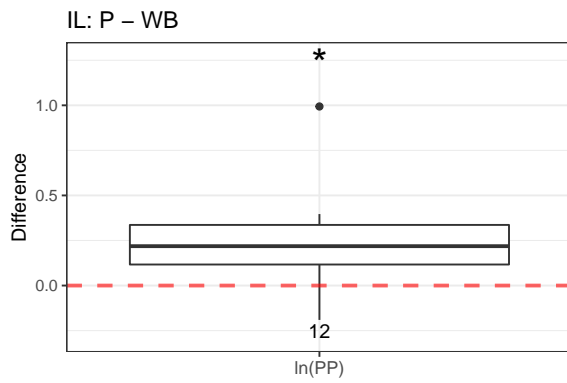
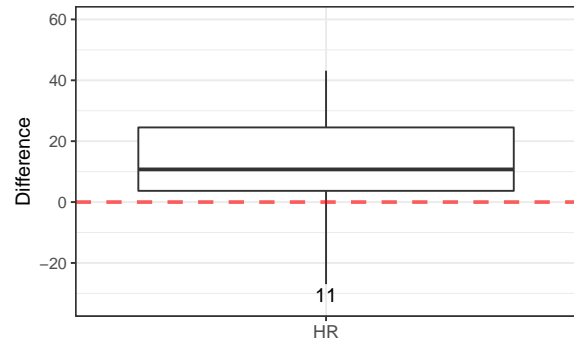
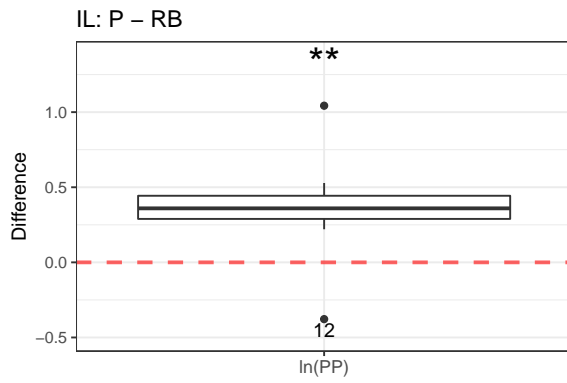

Intermittent-Low (IL)

Sensor Channels per Session

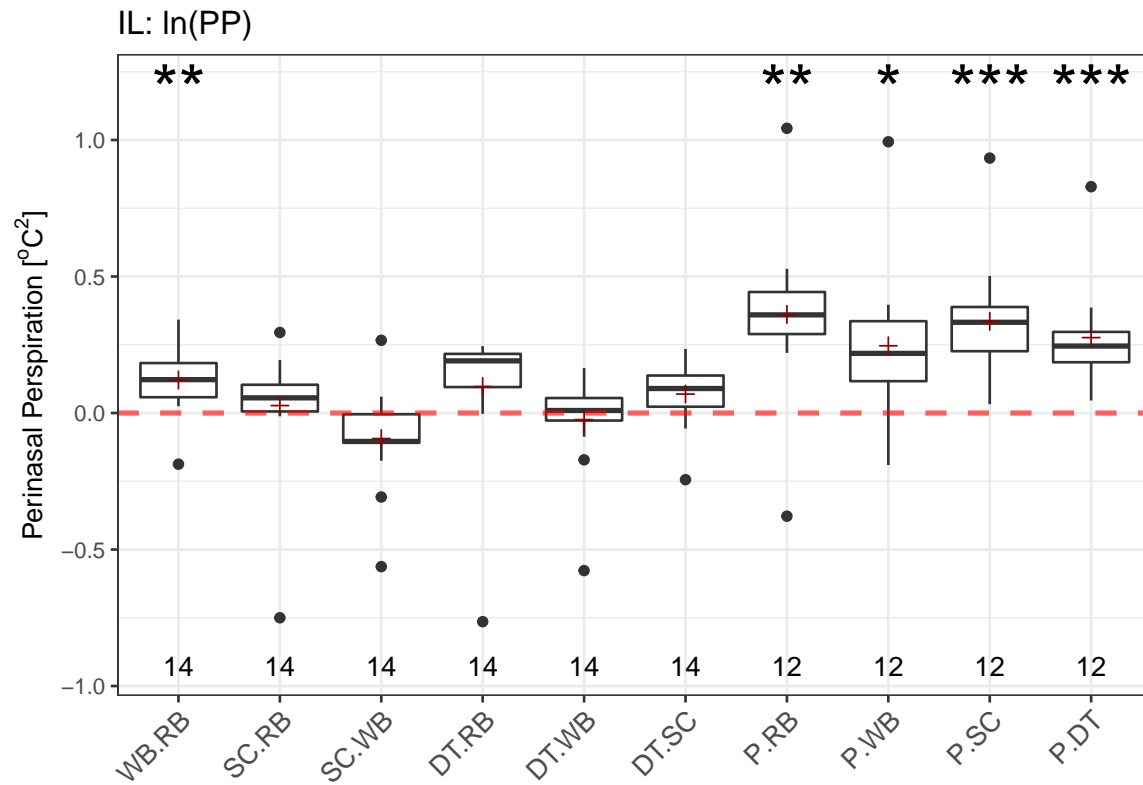






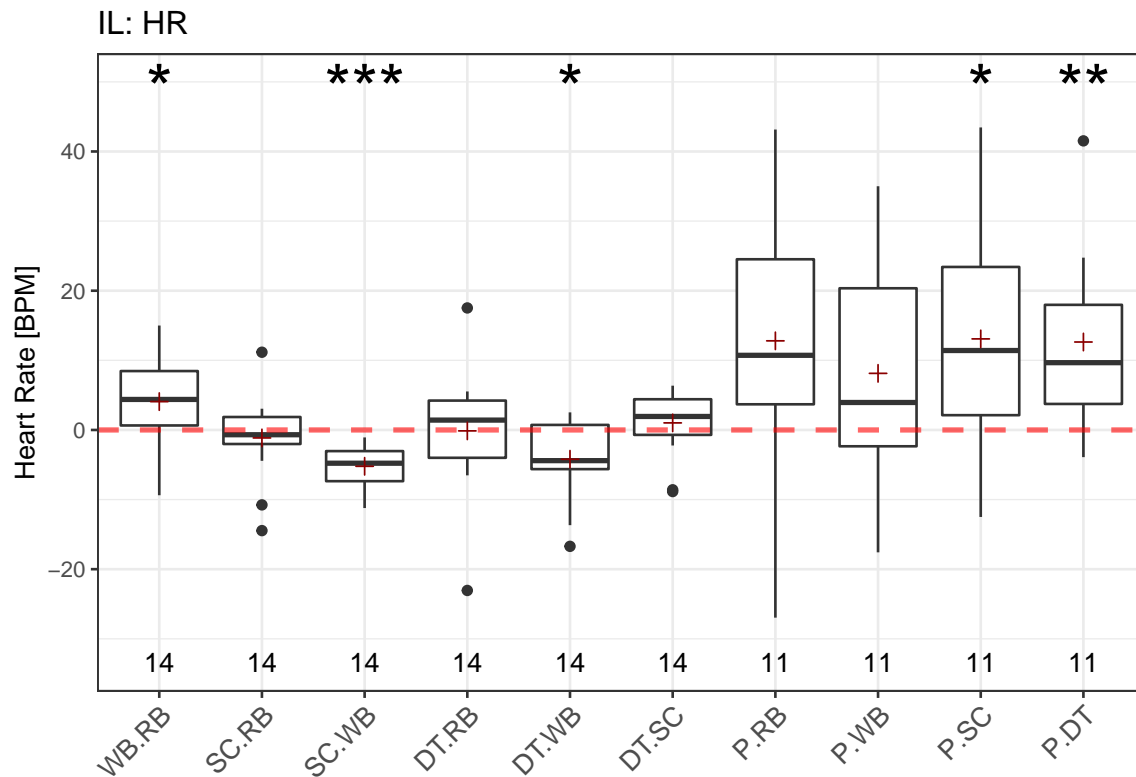


Sensor Channel across Session



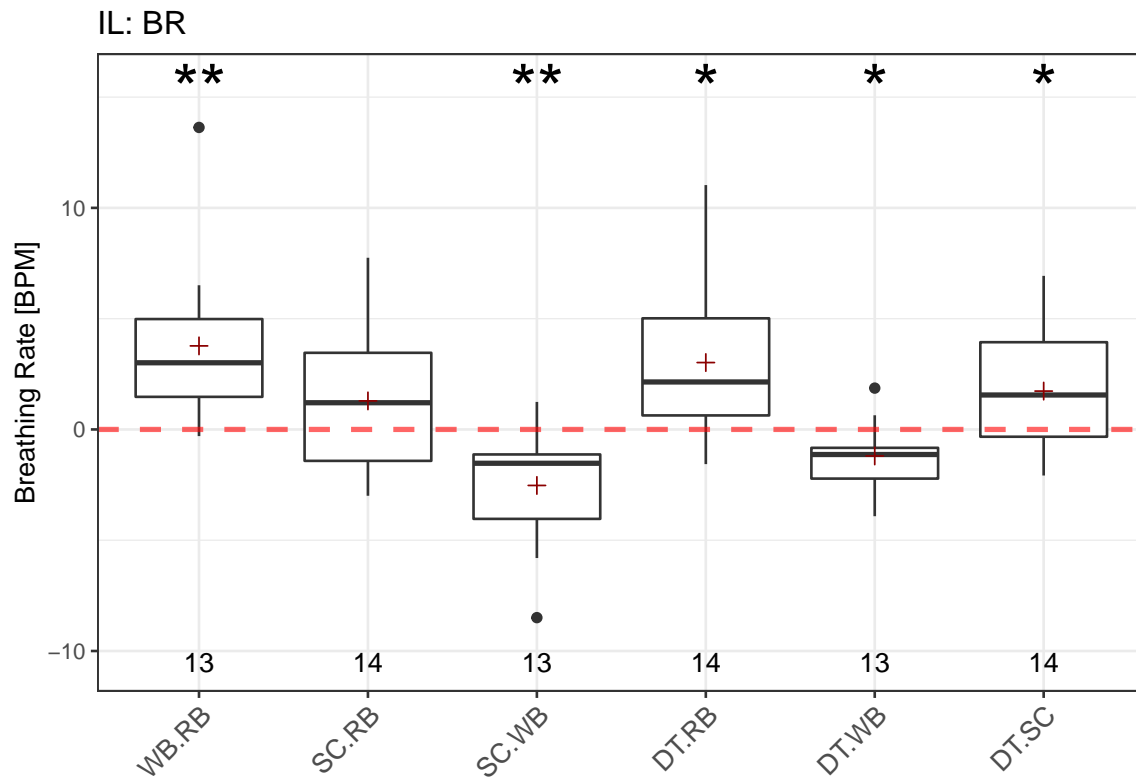
```
## Writing Baseline - Resting Baseline
## t-test p = 0.0038 < 0.01 **
##
## Stress Condition - Resting Baseline
## t-test p = 0.6777 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.0839 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.1857 > 0.05
##
## Dual Task - Writing Baseline
## t-test p = 0.6271 > 0.05
##
## Dual Task - Stress Condition
## t-test p = 0.0549 > 0.05
##
## Presentation - Resting Baseline
## t-test p = 0.0023 < 0.01 **
##
## Presentation - Writing Baseline
## t-test p = 0.0135 < 0.05 *
```

```
##  
## Presentation - Stress Condition  
## t-test p = 4e-04 < 0.001 ***  
##  
## Presentation - Dual Task  
## t-test p = 6e-04 < 0.001 ***
```



```
## Writing Baseline - Resting Baseline
## t-test p = 0.0318 < 0.05  *
##
## Stress Condition - Resting Baseline
## t-test p = 0.4931 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0 < 0.001  ***
##
## Dual Task - Resting Baseline
## t-test p = 0.9564 > 0.05
##
## Dual Task - Writing Baseline
## t-test p = 0.0154 < 0.05  *
##
## Dual Task - Stress Condition
## t-test p = 0.4432 > 0.05
##
## Presentation - Resting Baseline
## t-test p = 0.0552 > 0.05
##
## Presentation - Writing Baseline
## t-test p = 0.1202 > 0.05
##
## Presentation - Stress Condition
```

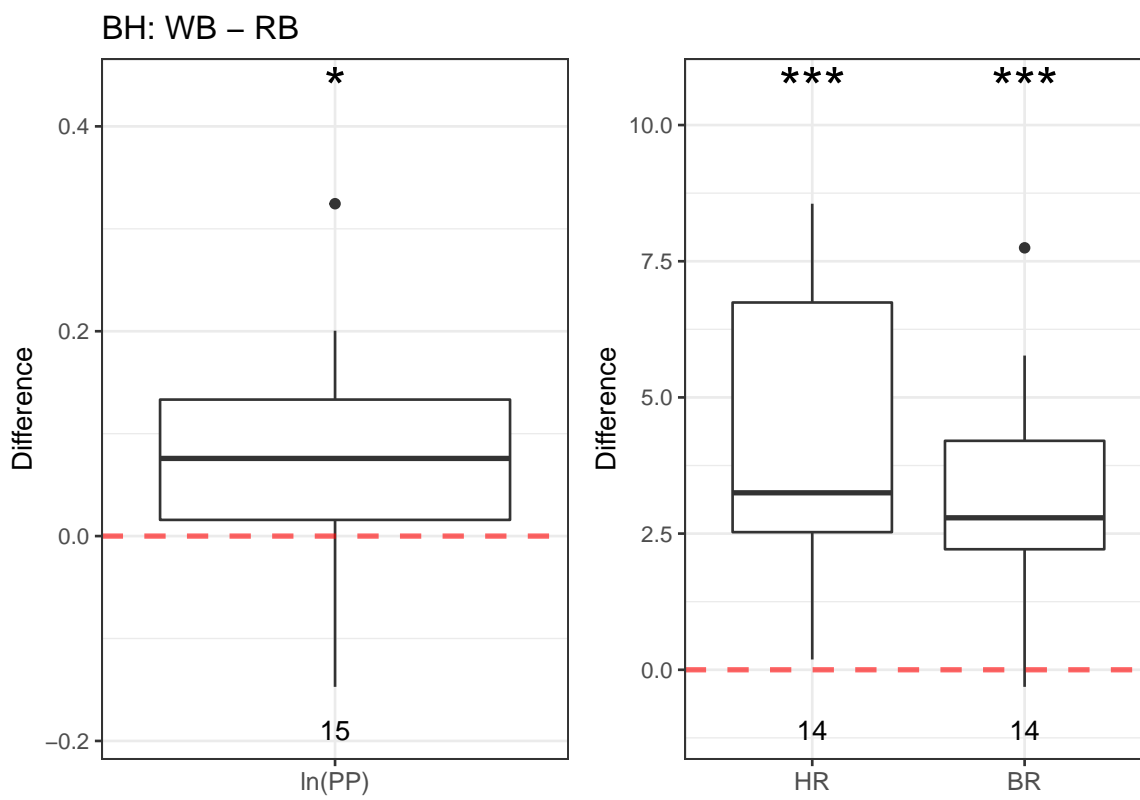
```
## t-test p = 0.0209 < 0.05  *  
##  
## Presentation - Dual Task  
## t-test p = 0.0094 < 0.01  **
```

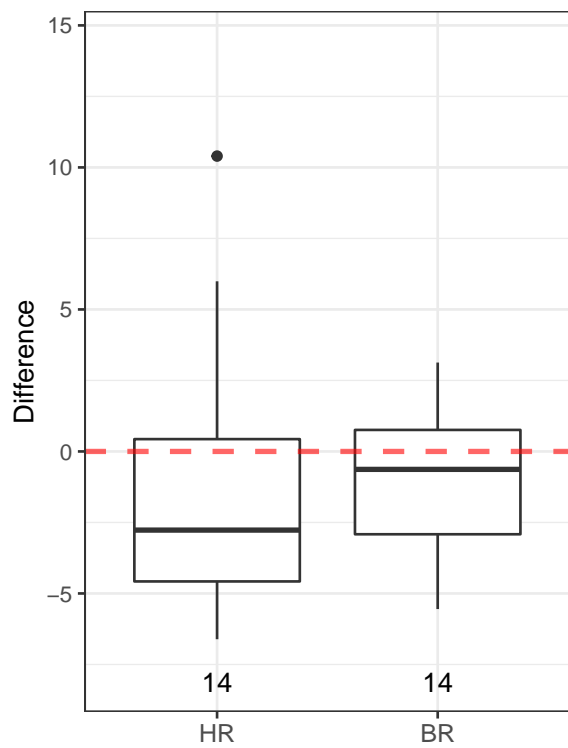
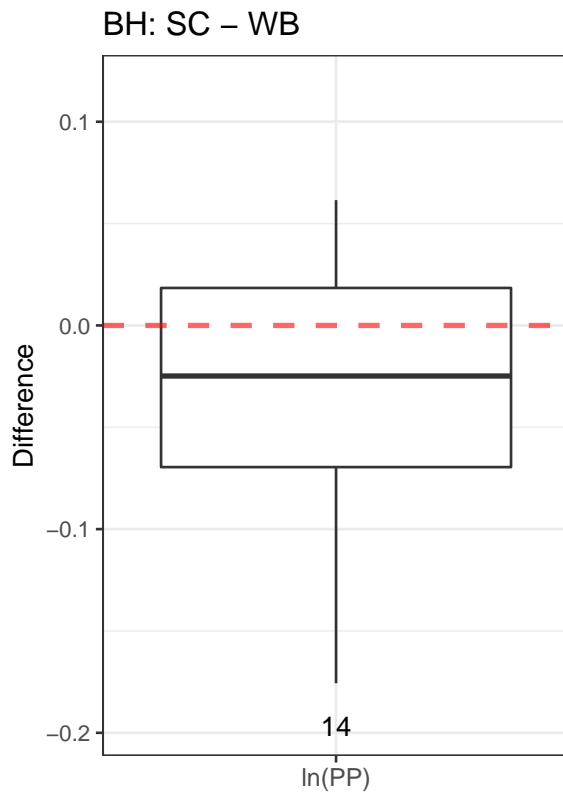
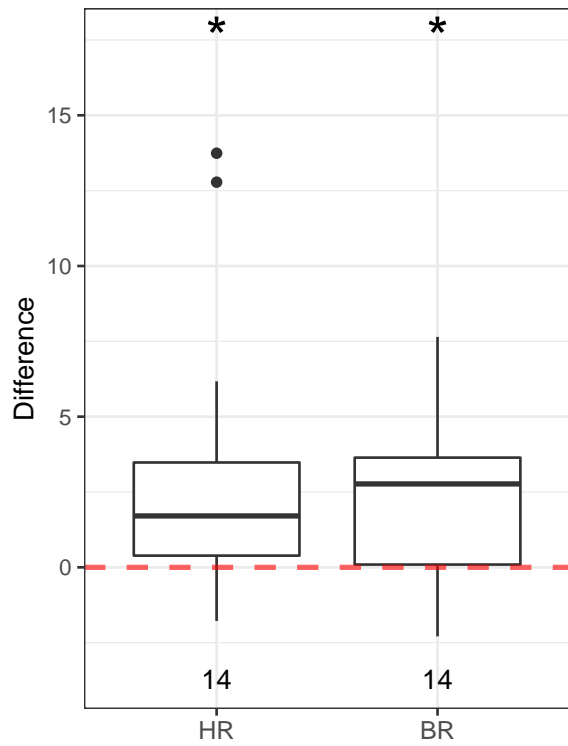
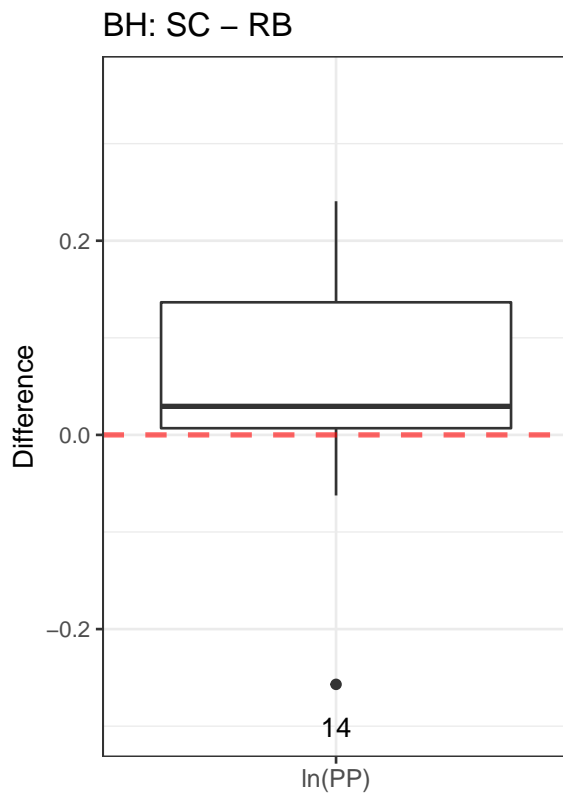


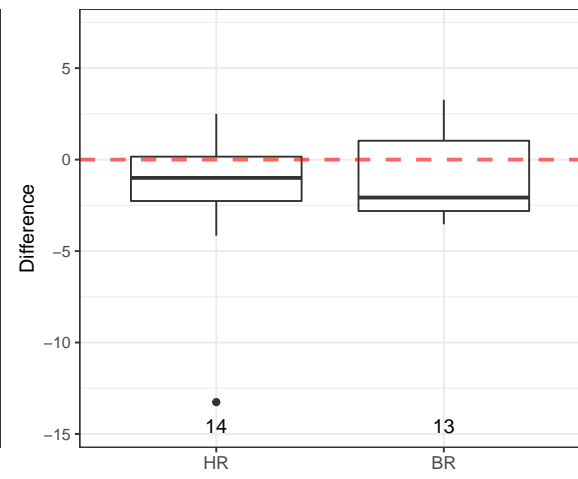
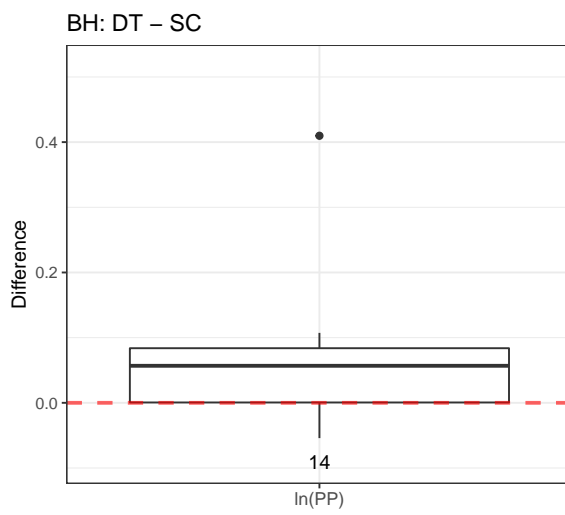
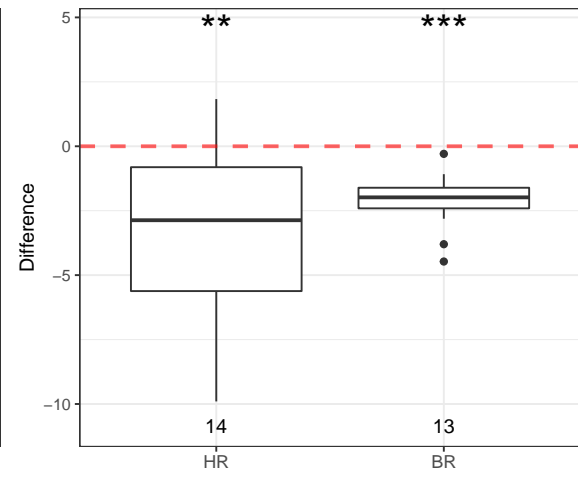
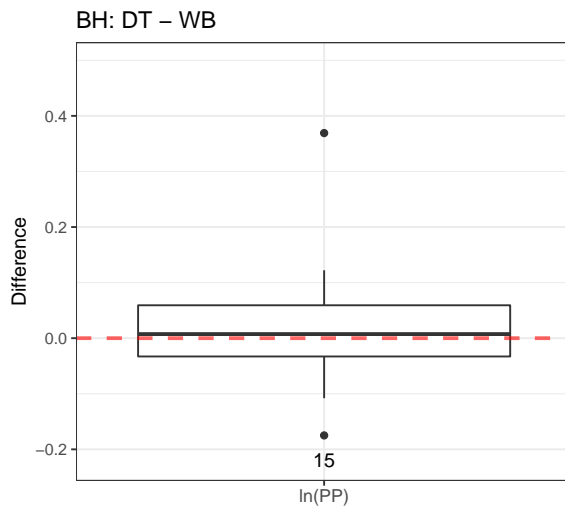
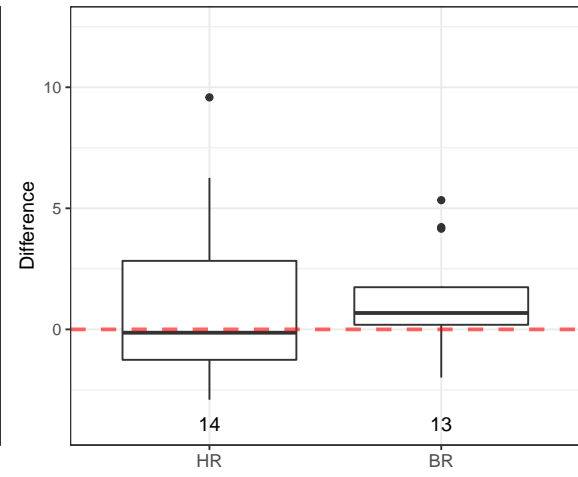
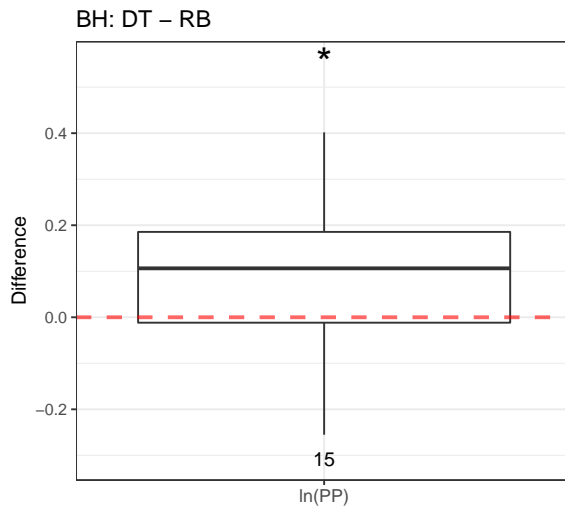
```
## Writing Baseline - Resting Baseline
## t-test p = 0.0029 < 0.01 **
##
## Stress Condition - Resting Baseline
## t-test p = 0.1716 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.0057 < 0.01 **
##
## Dual Task - Resting Baseline
## t-test p = 0.011 < 0.05 *
##
## Dual Task - Writing Baseline
## t-test p = 0.0141 < 0.05 *
##
## Dual Task - Stress Condition
## t-test p = 0.0397 < 0.05 *
```

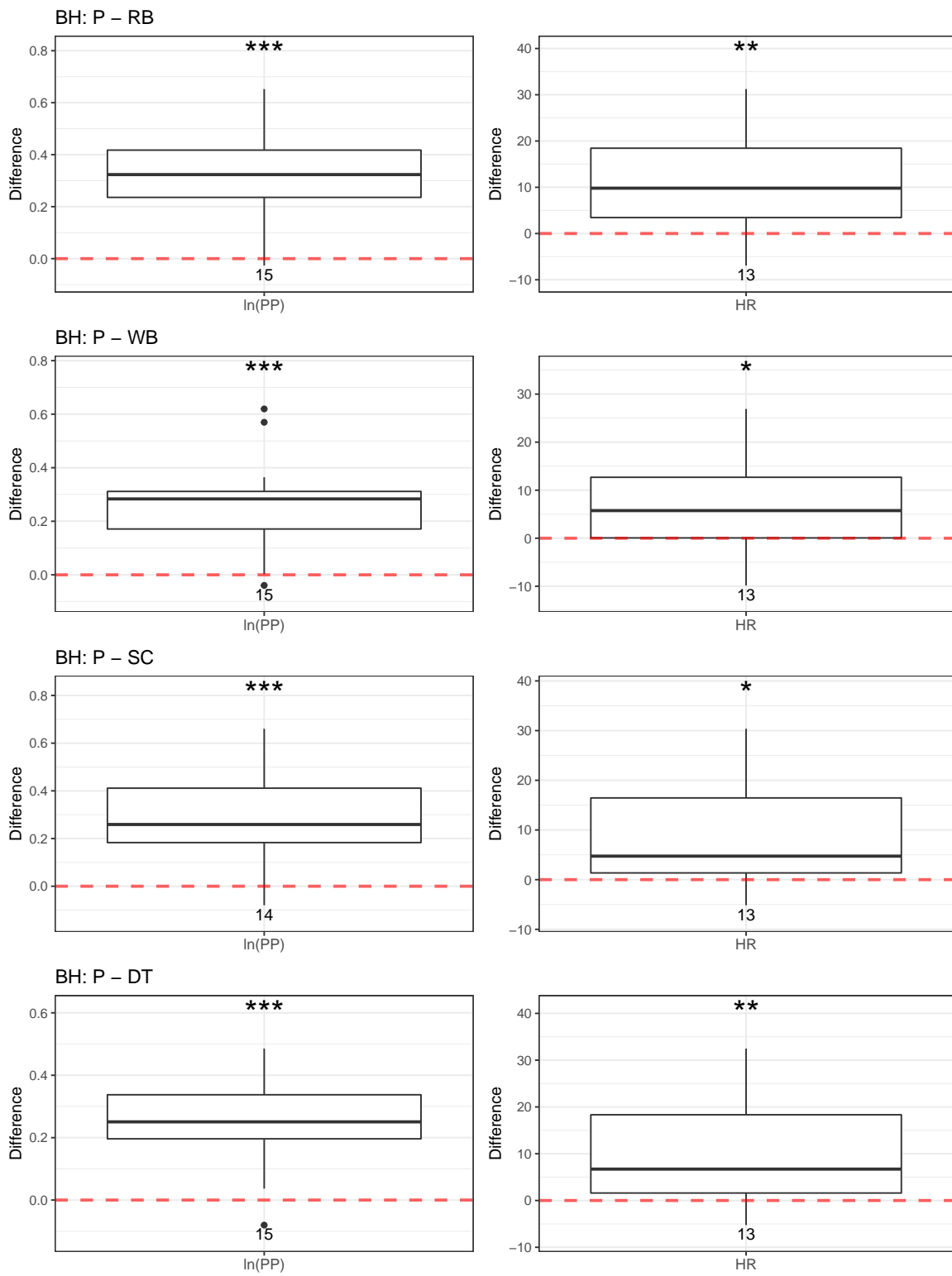

Batch-High (BH)

Sensor Channels per Session

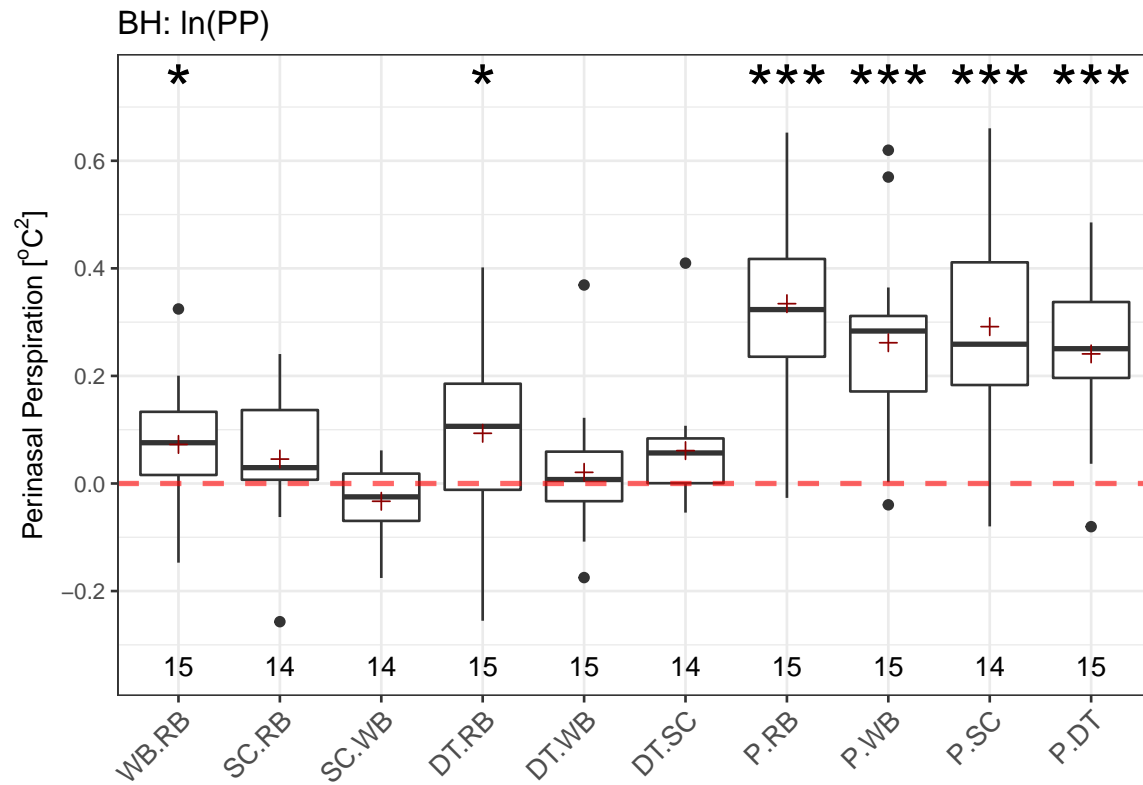






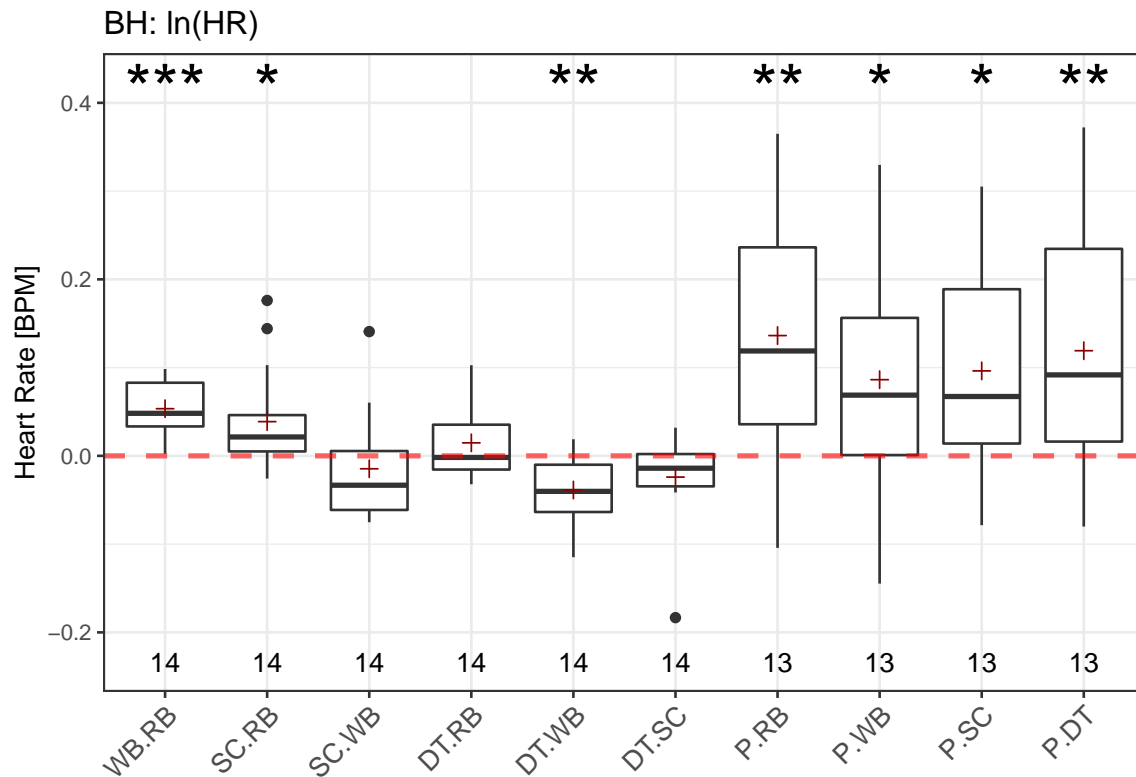


Sensor Channel across Session



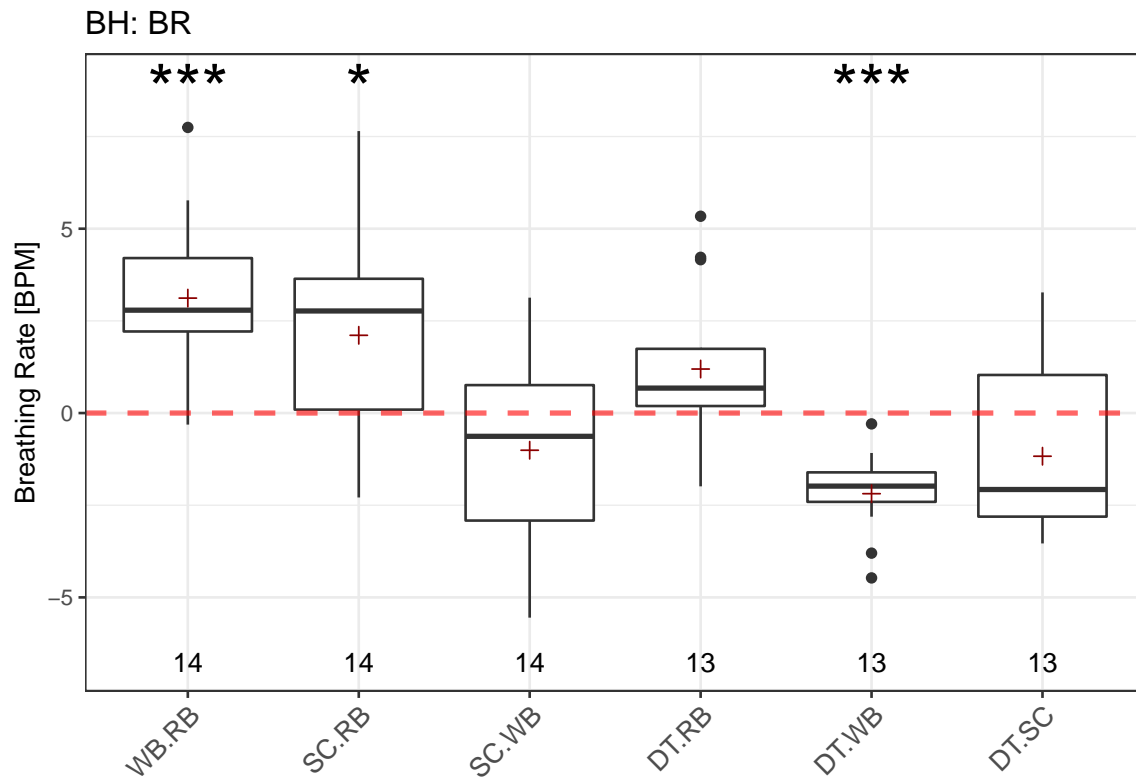
```
## Writing Baseline - Resting Baseline
## t-test p = 0.0219 < 0.05  *
##
## Stress Condition - Resting Baseline
## t-test p = 0.1778 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.0974 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.0363 < 0.05  *
##
## Dual Task - Writing Baseline
## t-test p = 0.526 > 0.05
##
## Dual Task - Stress Condition
## t-test p = 0.063 > 0.05
##
## Presentation - Resting Baseline
## t-test p = 0 < 0.001  ***
##
## Presentation - Writing Baseline
## t-test p = 1e-04 < 0.001  ***
```

```
##  
## Presentation - Stress Condition  
## t-test p = 1e-04 < 0.001 ***  
##  
## Presentation - Dual Task  
## t-test p = 0 < 0.001 ***
```



```
## Writing Baseline - Resting Baseline
## Transformed t-test p = 0 < 0.001 ***
##
## Stress Condition - Resting Baseline
## Transformed t-test p = 0.0327 < 0.05 *
##
## StressCondition - Writing Baseline
## Transformed t-test p = 0.3941 > 0.05
##
## Dual Task - Resting Baseline
## Transformed t-test p = 0.2172 > 0.05
##
## Dual Task - Writing Baseline
## Transformed t-test p = 0.0025 < 0.01 **
##
## Dual Task - Stress Condition
## Transformed t-test p = 0.0971 > 0.05
##
## Presentation - Resting Baseline
## Transformed t-test p = 0.0048 < 0.01 **
##
## Presentation - Writing Baseline
## Transformed t-test p = 0.0411 < 0.05 *
##
## Presentation - Stress Condition
```

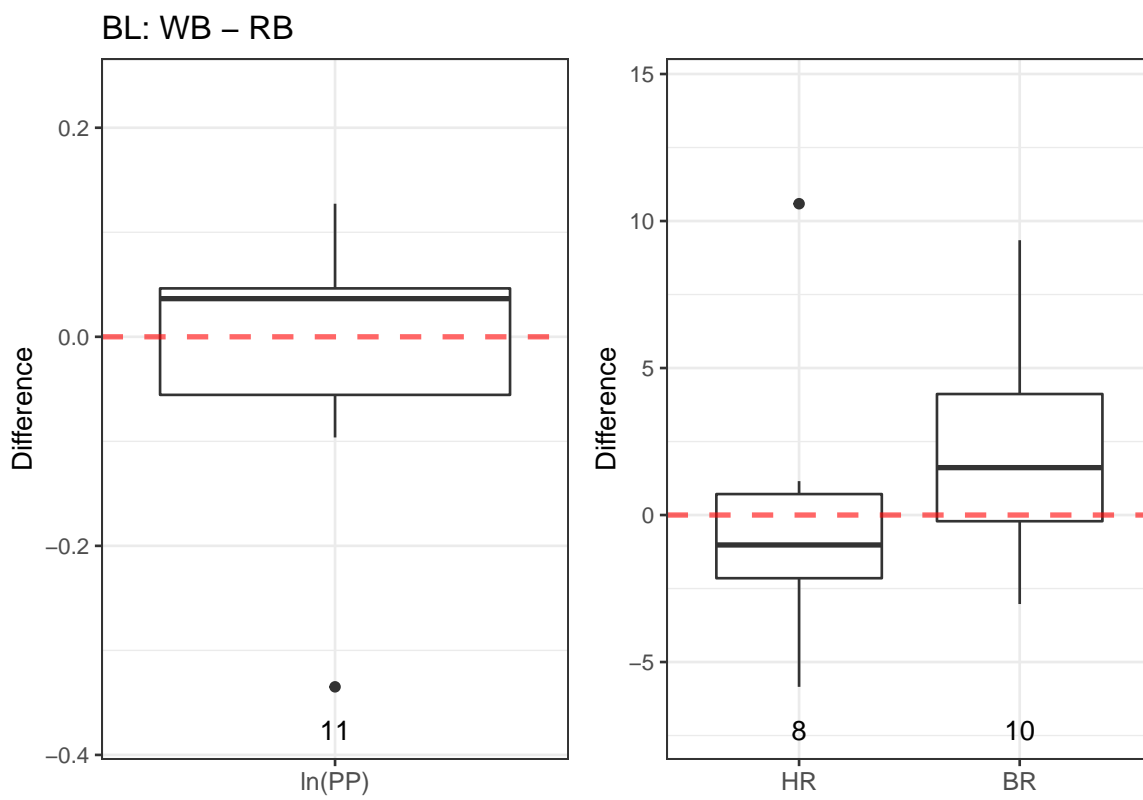
```
## Transformed t-test p = 0.0162 < 0.05  *  
##  
## Presentation - Dual Task  
## Transformed t-test p = 0.0095 < 0.01  **
```

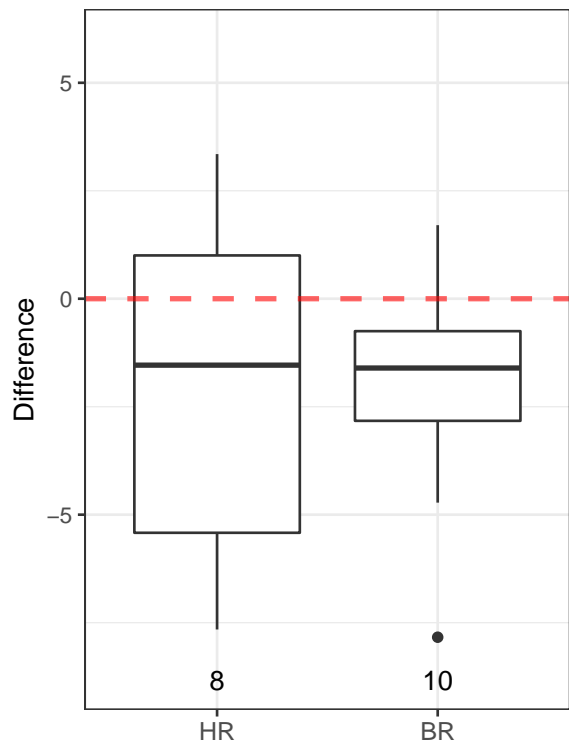
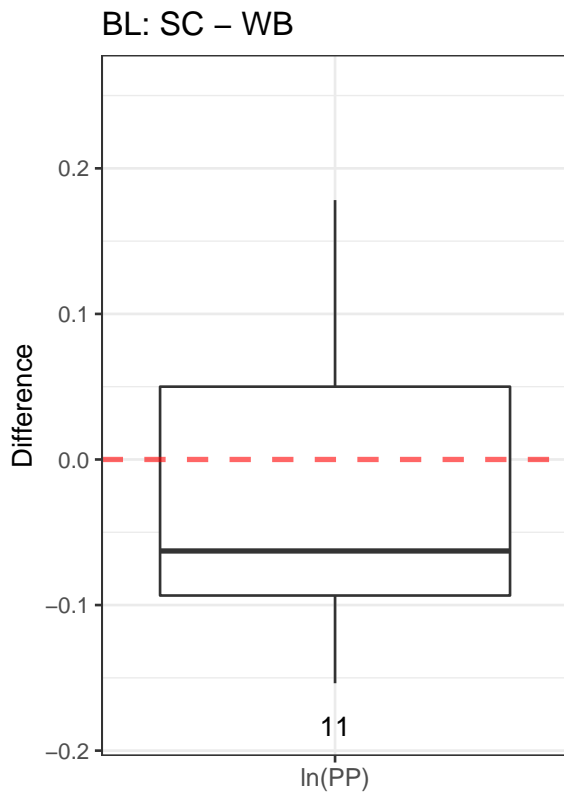
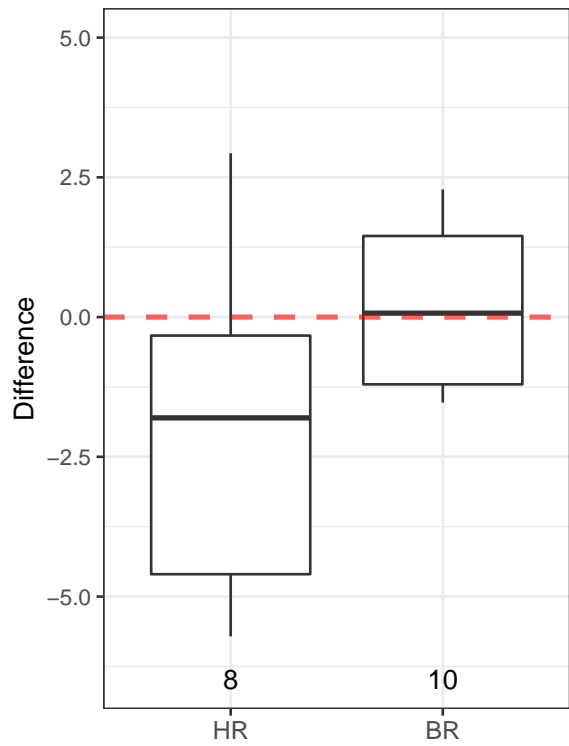
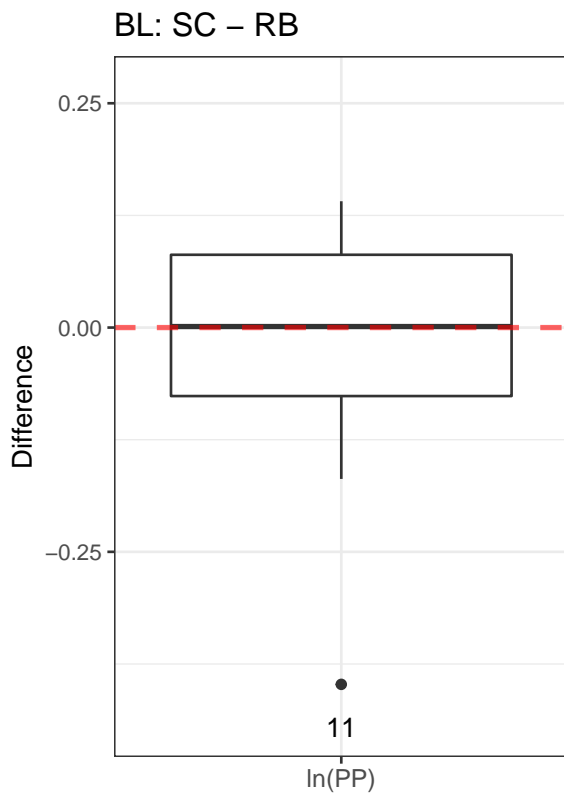



```
## Writing Baseline - Resting Baseline
## t-test p = 1e-04 < 0.001 ***
##
## Stress Condition - Resting Baseline
## t-test p = 0.0167 < 0.05 *
##
## StressCondition - Writing Baseline
## t-test p = 0.1543 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.0745 > 0.05
##
## Dual Task - Writing Baseline
## t-test p = 0 < 0.001 ***
##
## Dual Task - Stress Condition
## t-test p = 0.1009 > 0.05
```

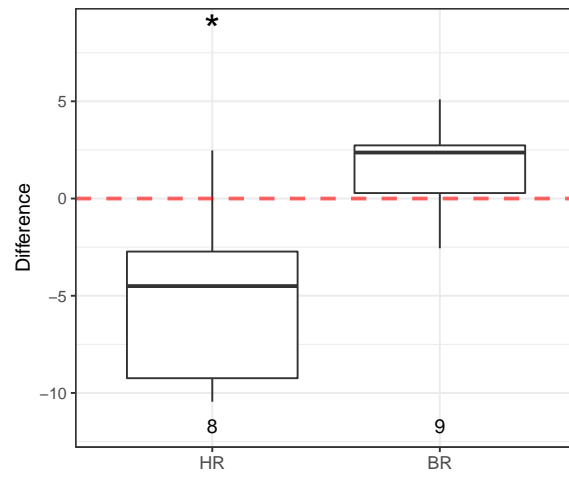
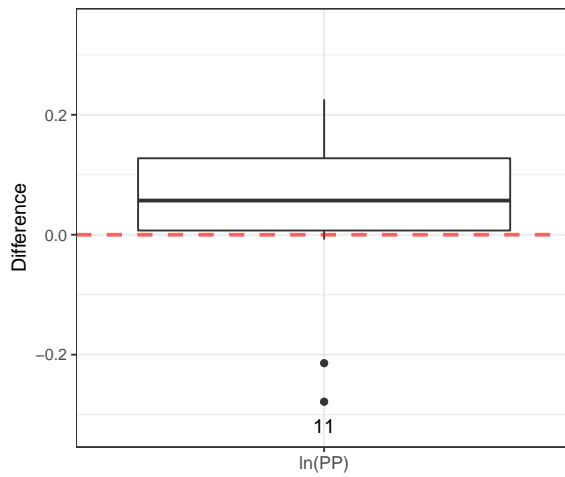

Batch-Low (BL)

Sensor Channels per Session

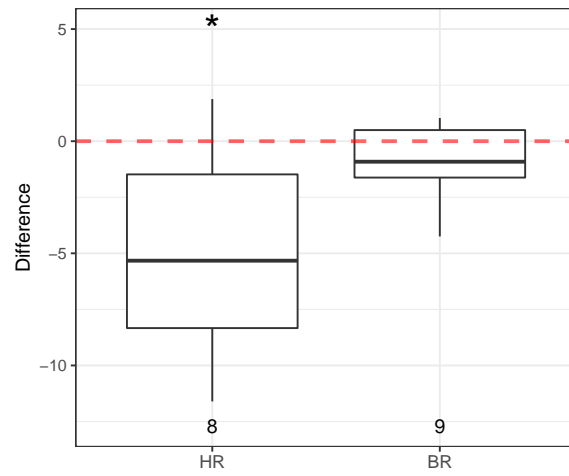
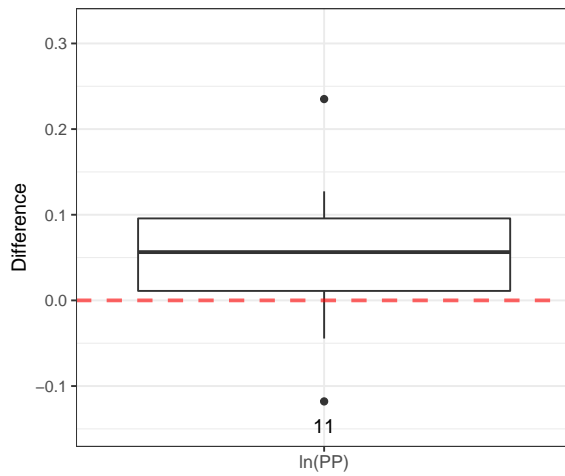




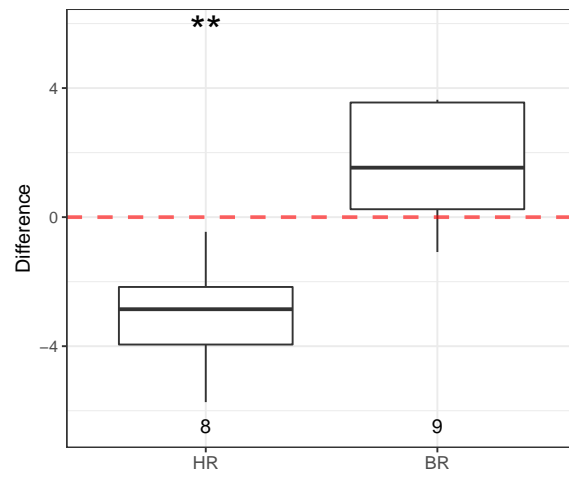
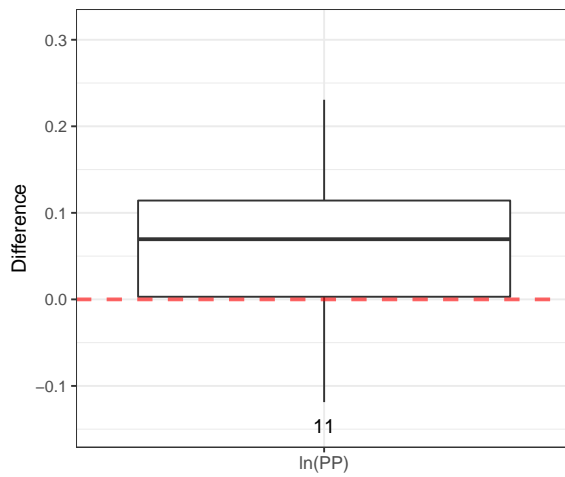
BL: DT – RB



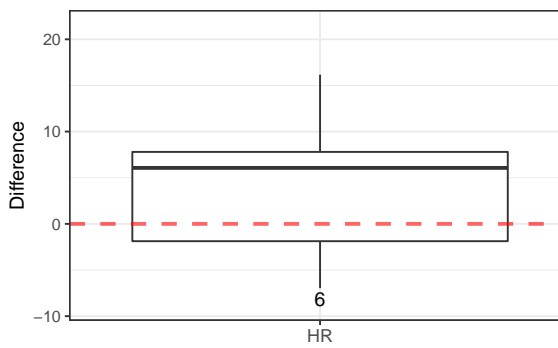
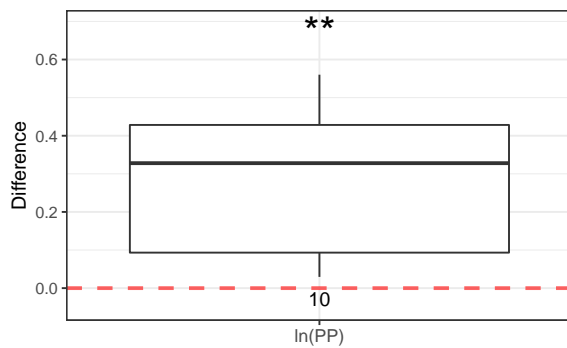
BL: DT – WB



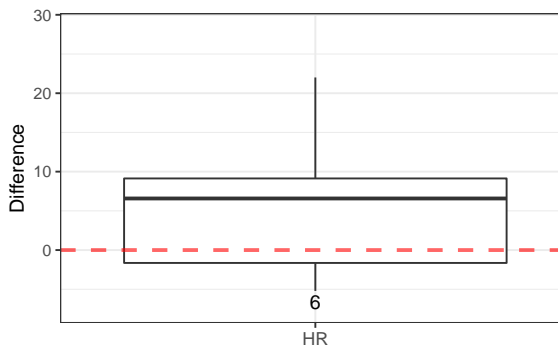
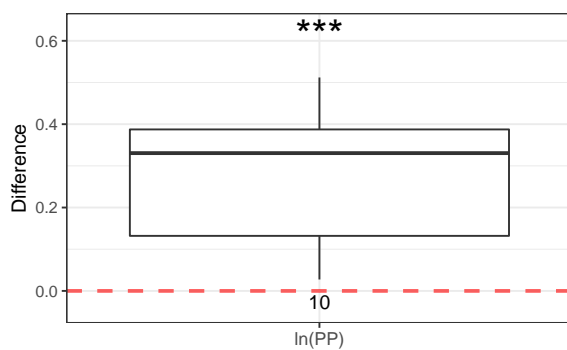
BL: DT – SC



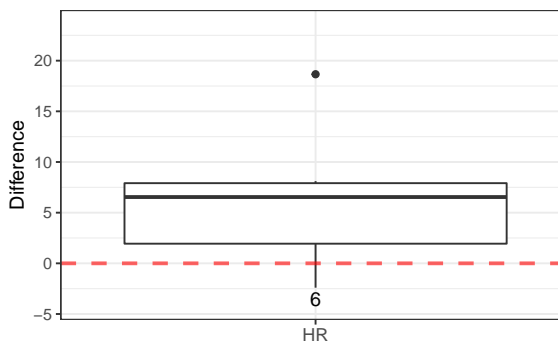
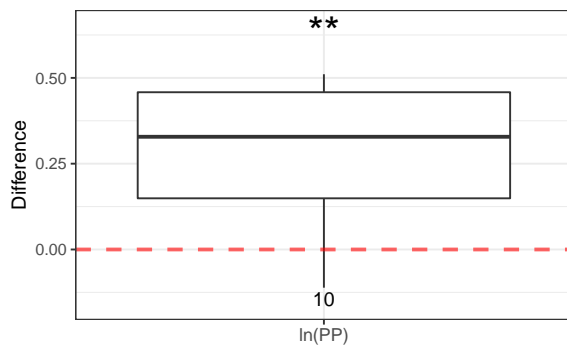
BL: P – RB



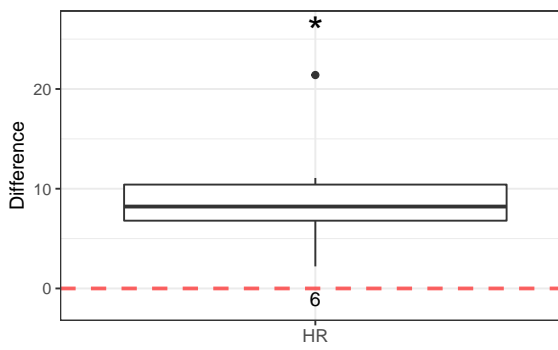
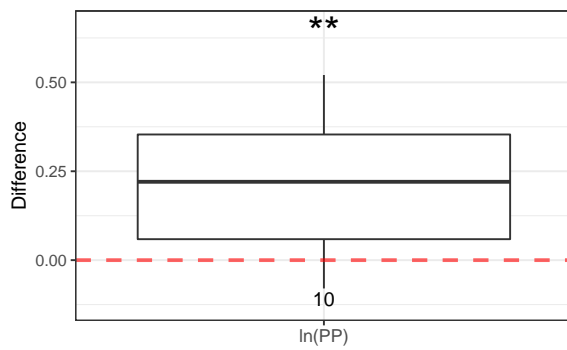
BL: P – WB



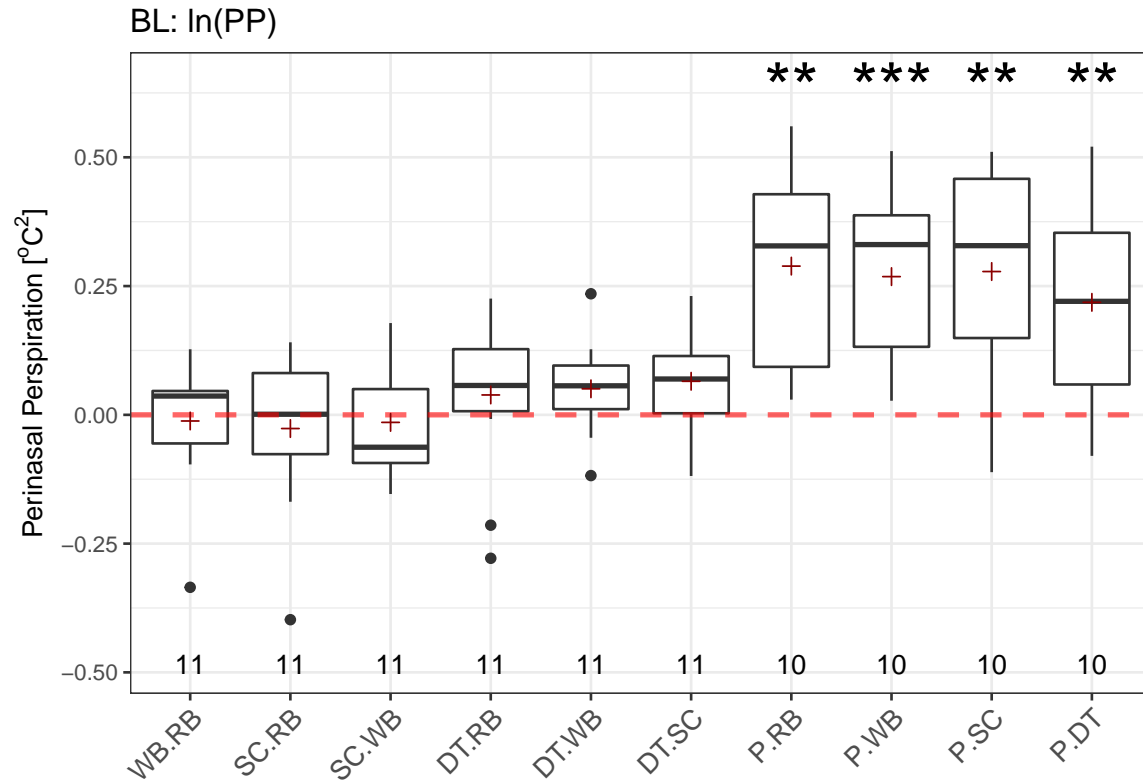
BL: P – SC



BL: P – DT



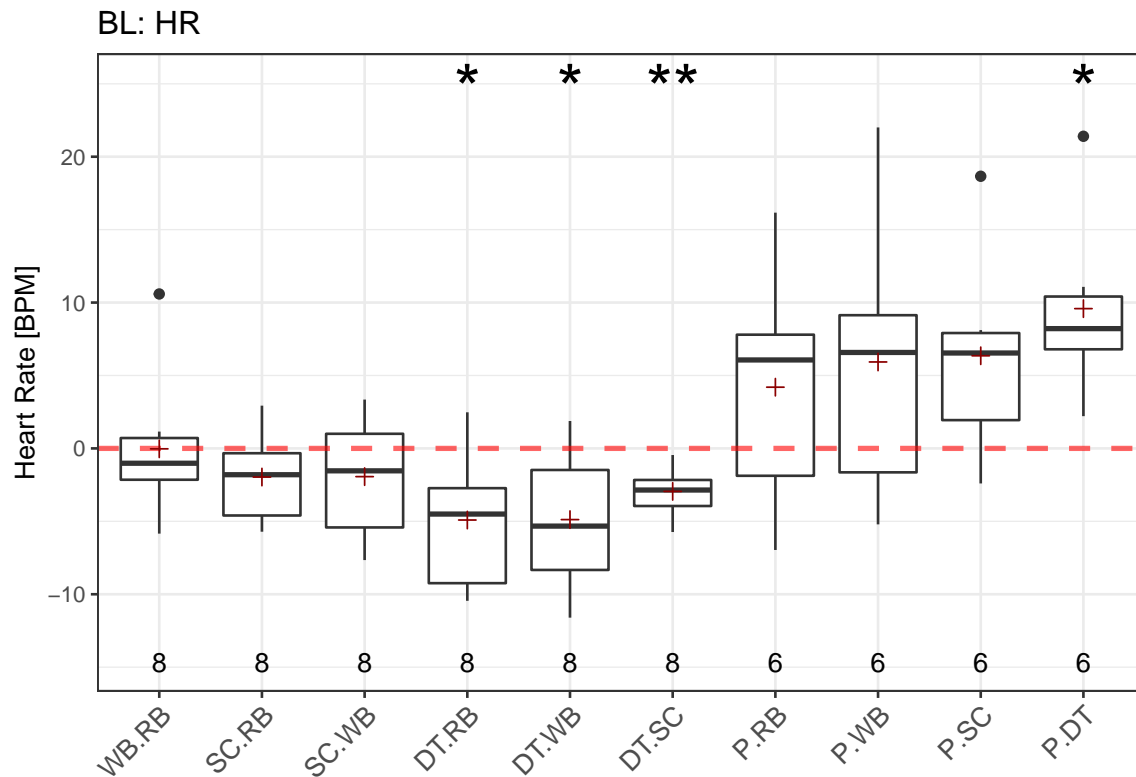
Sensor Channel across Session



```
## Writing Baseline - Resting Baseline
## t-test p = 0.7647 > 0.05
##
## Stress Condition - Resting Baseline
## t-test p = 0.5789 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.6708 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.4387 > 0.05
##
## Dual Task - Writing Baseline
## t-test p = 0.1005 > 0.05
##
## Dual Task - Stress Condition
## t-test p = 0.0646 > 0.05
##
## Presentation - Resting Baseline
## t-test p = 0.0012 < 0.01 **
##
## Presentation - Writing Baseline
## t-test p = 8e-04 < 0.001 ***
```

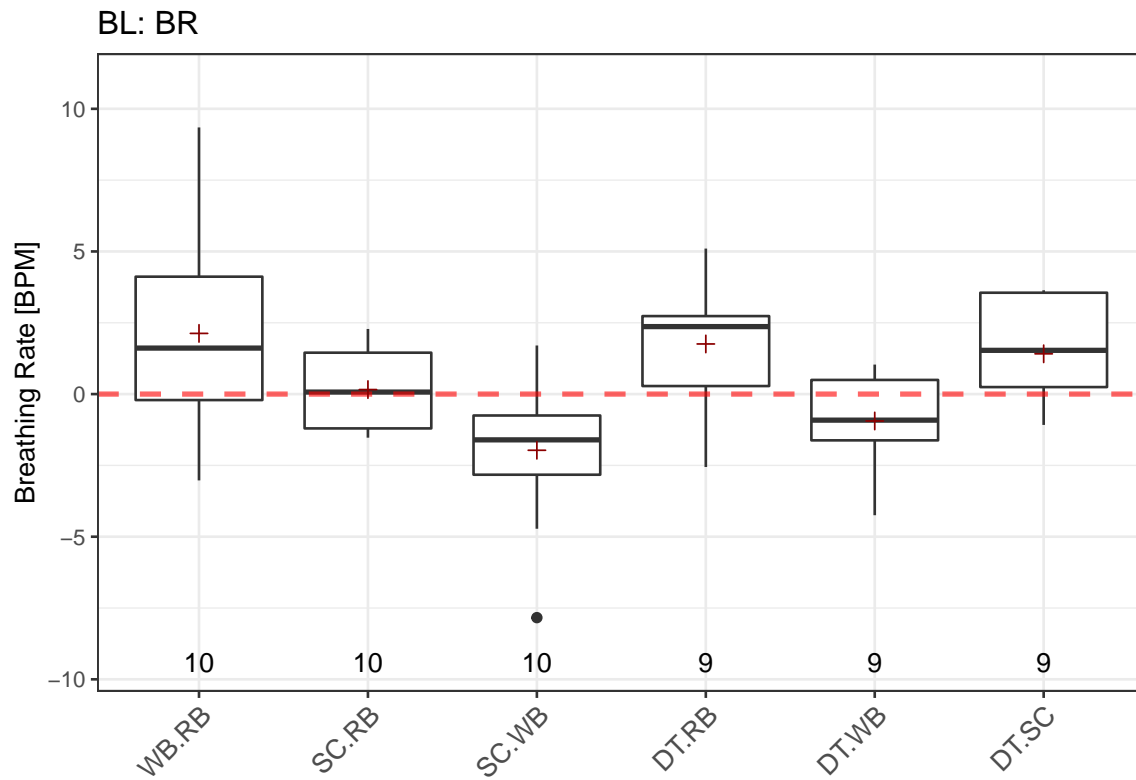


```
##  
## Presentation - Stress Condition  
## t-test  $p = 0.003 < 0.01$  **  
##  
## Presentation - Dual Task  
## t-test  $p = 0.0066 < 0.01$  **
```



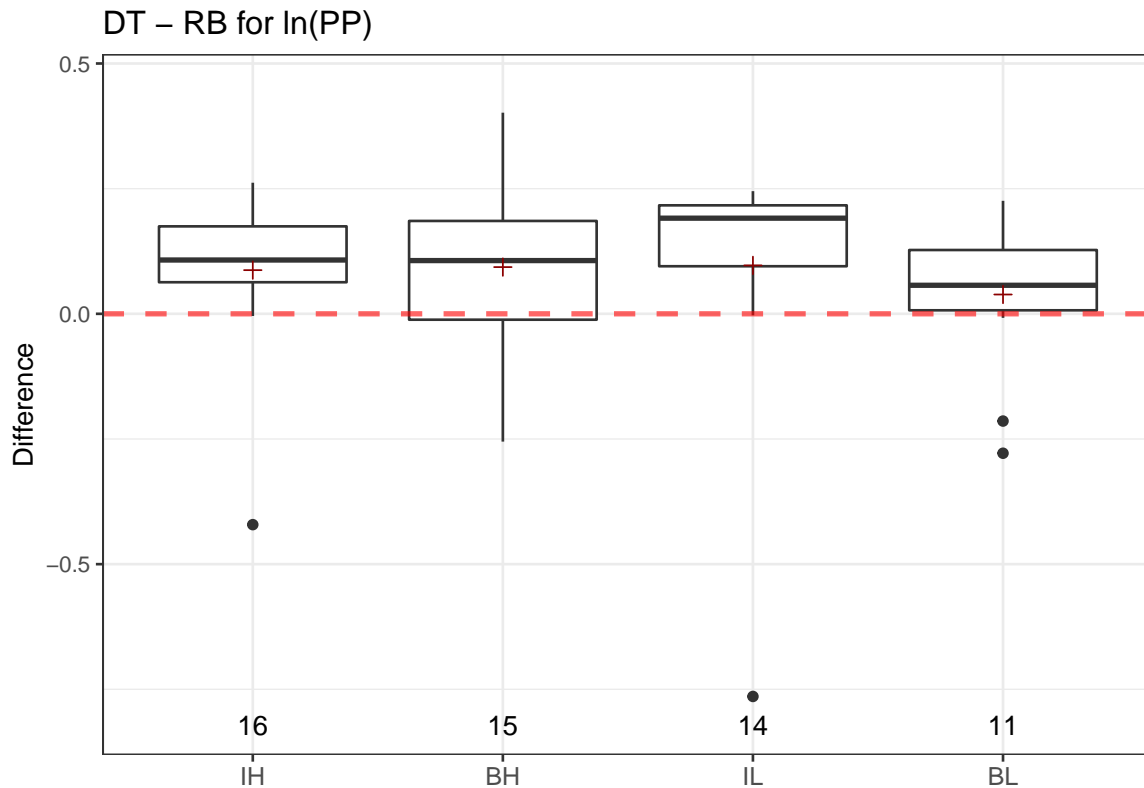
```
## Writing Baseline - Resting Baseline
## t-test p = 0.9869 > 0.05
##
## Stress Condition - Resting Baseline
## t-test p = 0.1034 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.217 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.02 < 0.05  *
##
## Dual Task - Writing Baseline
## t-test p = 0.023 < 0.05  *
##
## Dual Task - Stress Condition
## t-test p = 0.0024 < 0.01  **
##
## Presentation - Resting Baseline
## t-test p = 0.2801 > 0.05
##
## Presentation - Writing Baseline
## t-test p = 0.2075 > 0.05
##
## Presentation - Stress Condition
```

```
## t-test p = 0.0855 > 0.05
##
## Presentation - Dual Task
## t-test p = 0.0152 < 0.05  *
```

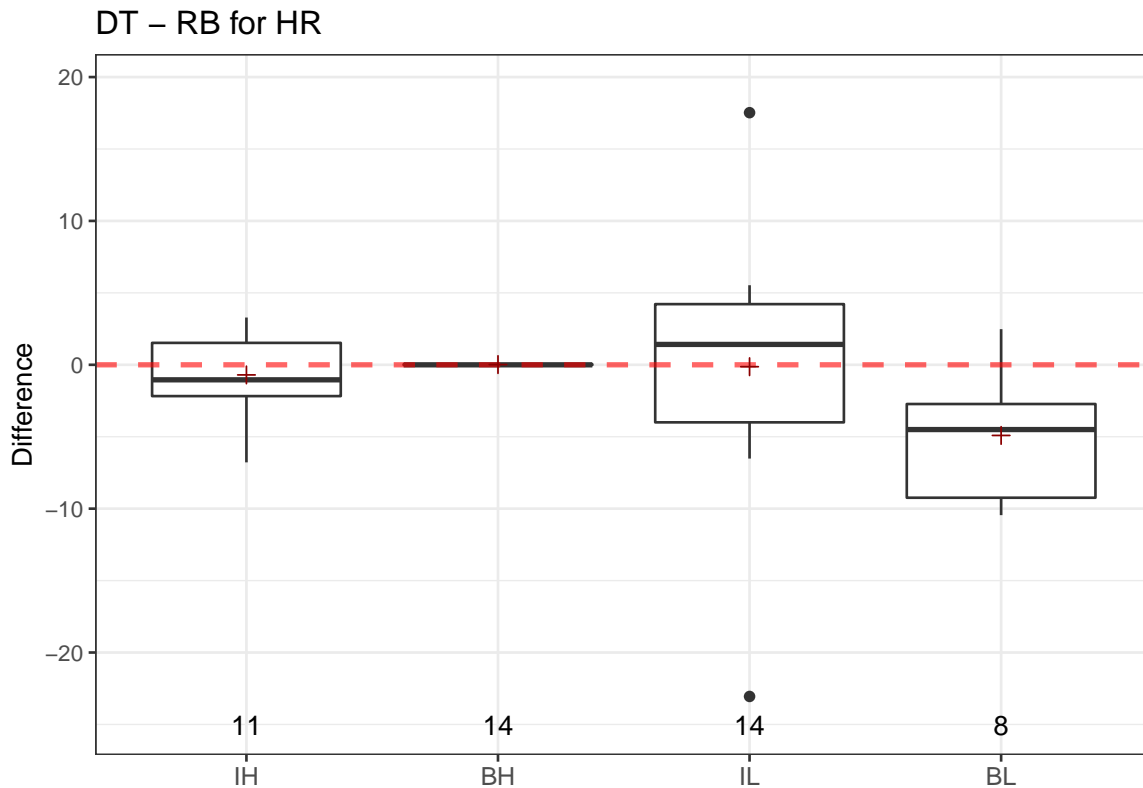


```
## Writing Baseline - Resting Baseline
## t-test p = 0.0916 > 0.05
##
## Stress Condition - Resting Baseline
## t-test p = 0.7428 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.0548 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.0695 > 0.05
##
## Dual Task - Writing Baseline
## t-test p = 0.1269 > 0.05
##
## Dual Task - Stress Condition
## t-test p = 0.0515 > 0.05
```

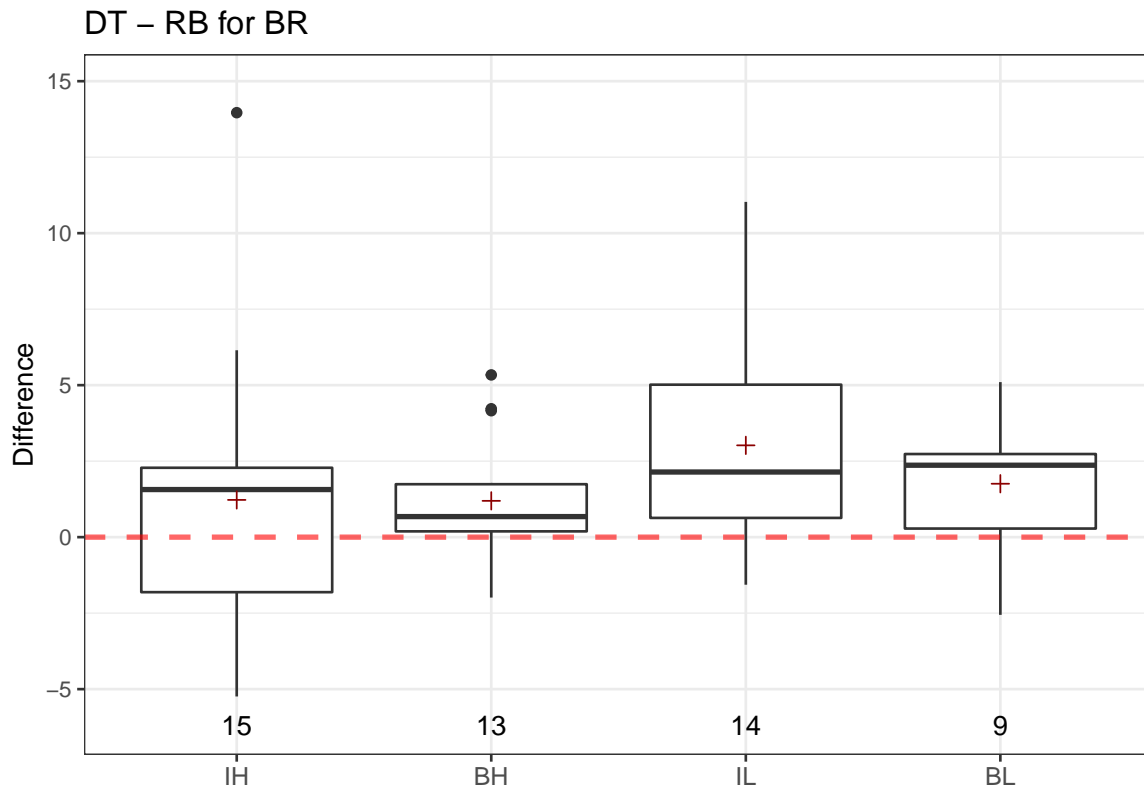

Across Sessions



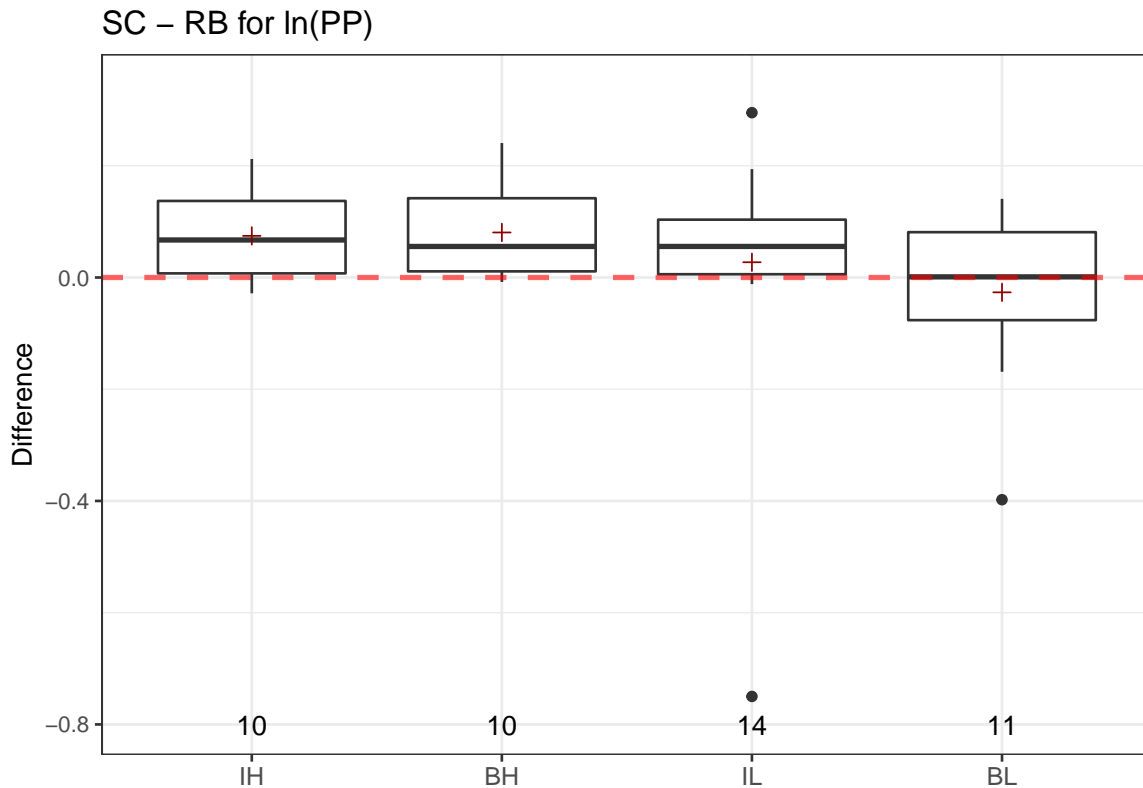
```
##           Df Sum Sq Mean Sq F value Pr(>F)
## Condition    3  0.0261  0.00871    0.248  0.862
## Residuals   52  1.8250  0.03510
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##           diff          lwr          upr      p adj
## BL-BH -0.054747486 -0.2521240  0.1426290  0.8820620
## IH-BH -0.006096063 -0.1847967  0.1726045  0.9997305
## IL-BH  0.003380831 -0.1813929  0.1881545  0.9999583
## IH-BL  0.048651424 -0.1460981  0.2434009  0.9104505
## IL-BL  0.058128317 -0.1422084  0.2584650  0.8675560
## IL-IH  0.009476893 -0.1724879  0.1914417  0.9990450
```



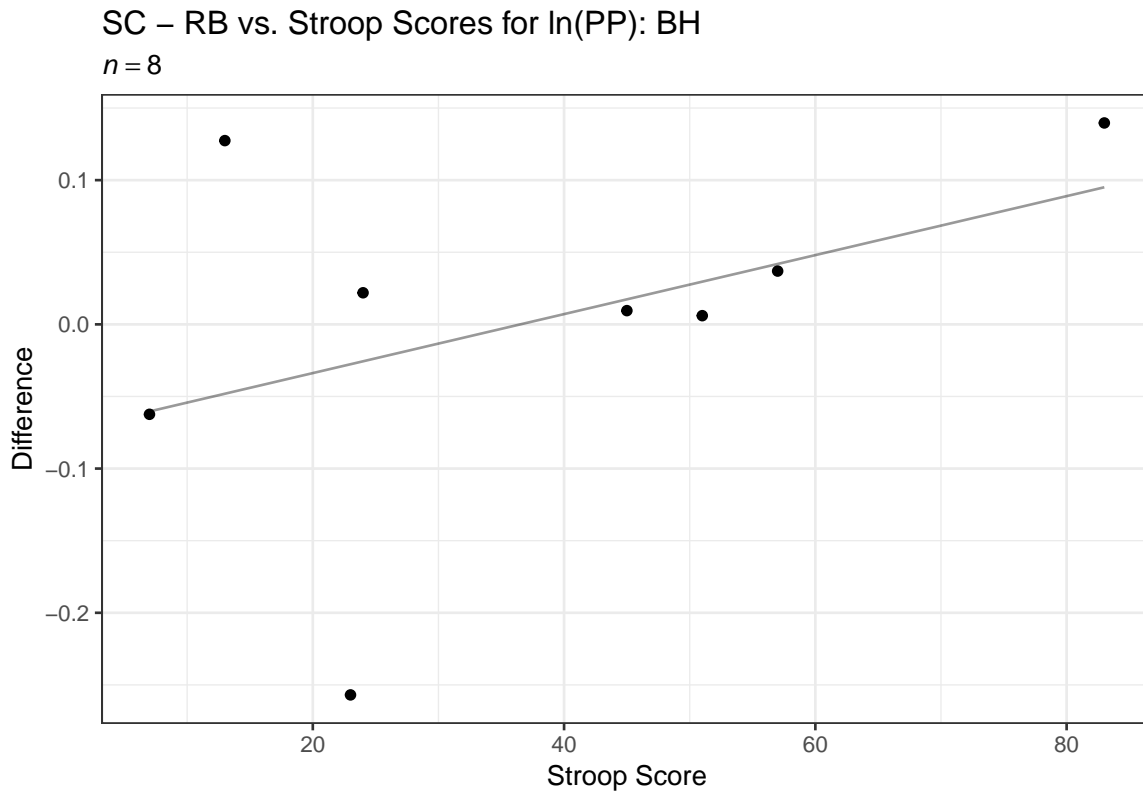
```
##           Df Sum Sq Mean Sq F value Pr(>F)
## Condition    3   148.2    49.4    1.669  0.188
## Residuals   43  1272.7    29.6
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##      diff      lwr      upr    p adj
## BL-BH -4.9257293 -11.369363  1.517905 0.1885296
## IH-BH -0.7186071  -6.576456  5.139242 0.9876655
## IL-BH -0.1479398  -5.643089  5.347210 0.9998642
## IH-BL  4.2071221  -2.548479 10.962723 0.3547230
## IL-BL  4.7777895  -1.665844 11.221423 0.2107991
## IL-IH  0.5706674  -5.287182  6.428516 0.9937245
```

```
##           Df Sum Sq Mean Sq F value Pr(>F)
## Condition    3   30.6   10.19    0.785  0.508
## Residuals   47  610.3   12.98
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##           diff          lwr          upr          p adj
## BL-BH  0.56288206 -3.598925  4.724689  0.9837998
## IH-BH  0.03130078 -3.605548  3.668149  0.9999956
## IL-BH  1.82566162 -1.871000  5.522323  0.5579624
## IH-BL -0.53158128 -4.578293  3.515130  0.9851142
## IL-BL  1.26277956 -2.837771  5.363330  0.8446226
## IL-IH  1.79436084 -1.772226  5.360948  0.5426749
```



```
## [1] "Removed 12 subjects who had Stroop scores less than 30."
##
## ---
##              Df Sum Sq Mean Sq F value Pr(>F)
## Condition      3  0.0788  0.02628    0.967  0.417
## Residuals    41  1.1138  0.02717
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##           diff           lwr           upr           p adj
## BL-BH -0.107158209 -0.29998967  0.08567325  0.4538370
## IH-BH -0.006078721 -0.20344802  0.19129057  0.9997955
## IL-BH -0.053294985 -0.23602344  0.12943348  0.8626341
## IH-BL  0.101079488 -0.09175197  0.29391095  0.5044025
## IL-BL  0.053863225 -0.12395417  0.23168062  0.8488631
## IL-IH -0.047216264 -0.22994472  0.13551220  0.8996072
```



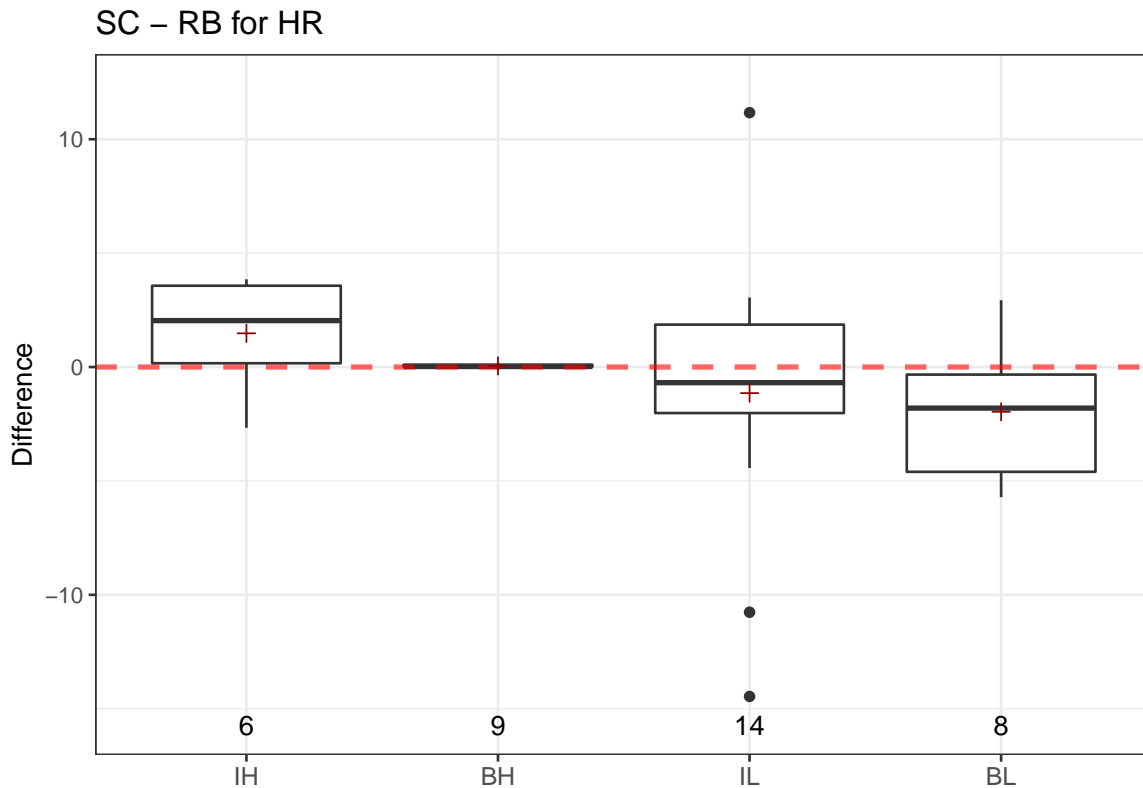
```
##
## Call:
## lm(formula = formula(paste(diff, "~ Score")), data = sc_df)
##
## Residuals:
```

	Min	1Q	Median	3Q	Max
	-0.229283	-0.011763	-0.003465	0.045326	0.175510

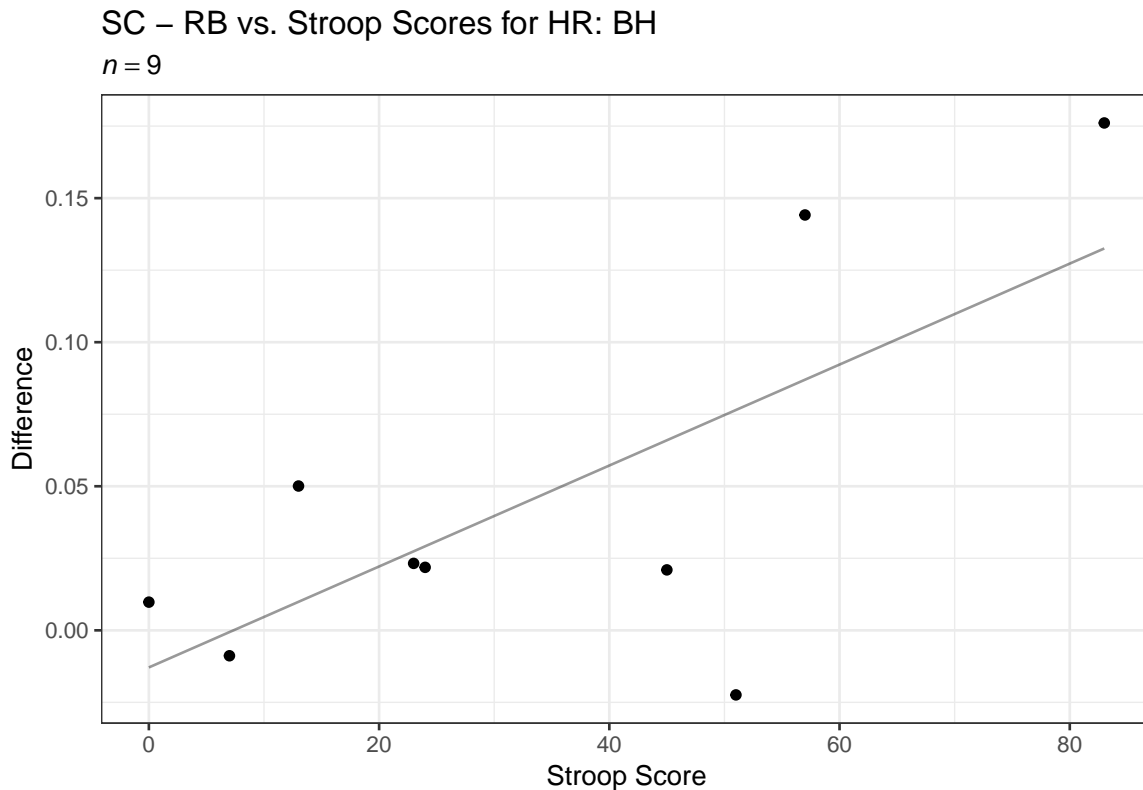
```
##
## Coefficients:
```

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	-0.074694	0.080098	-0.933	0.387
Score	0.002045	0.001786	1.145	0.296

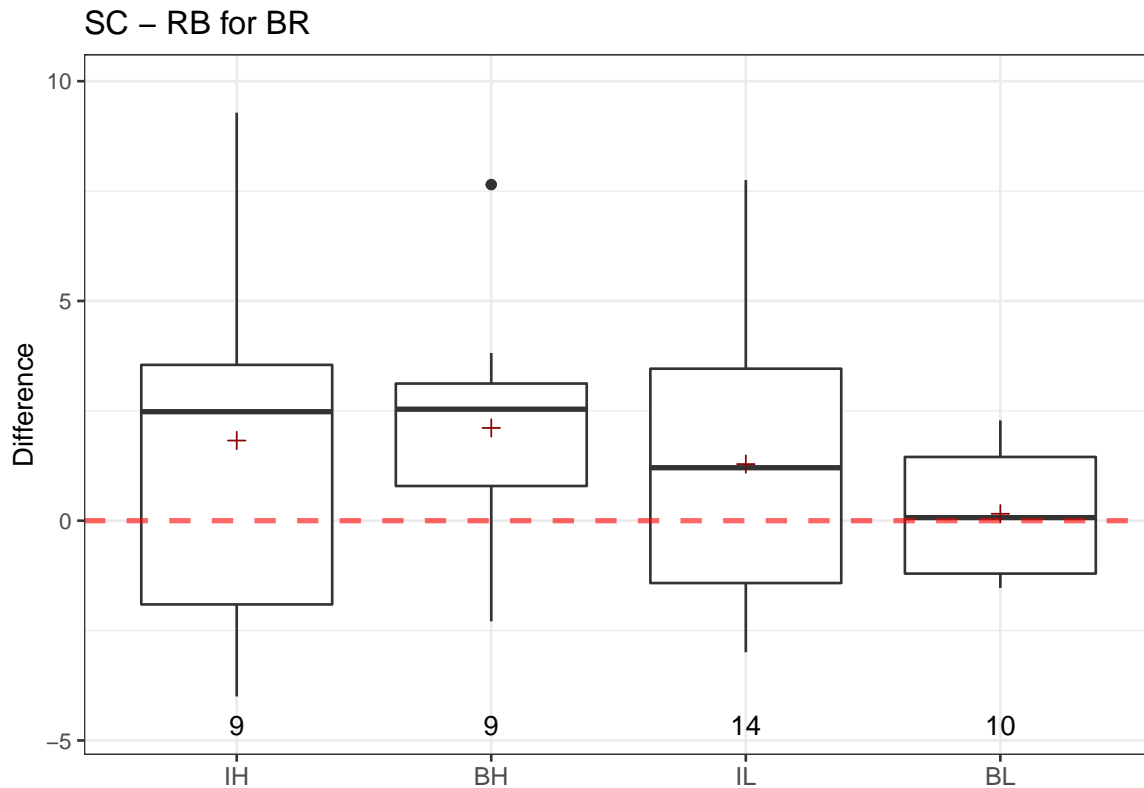
```
##
## Residual standard error: 0.1213 on 6 degrees of freedom
## Multiple R-squared: 0.1793, Adjusted R-squared: 0.04252
## F-statistic: 1.311 on 1 and 6 DF, p-value: 0.2958
```



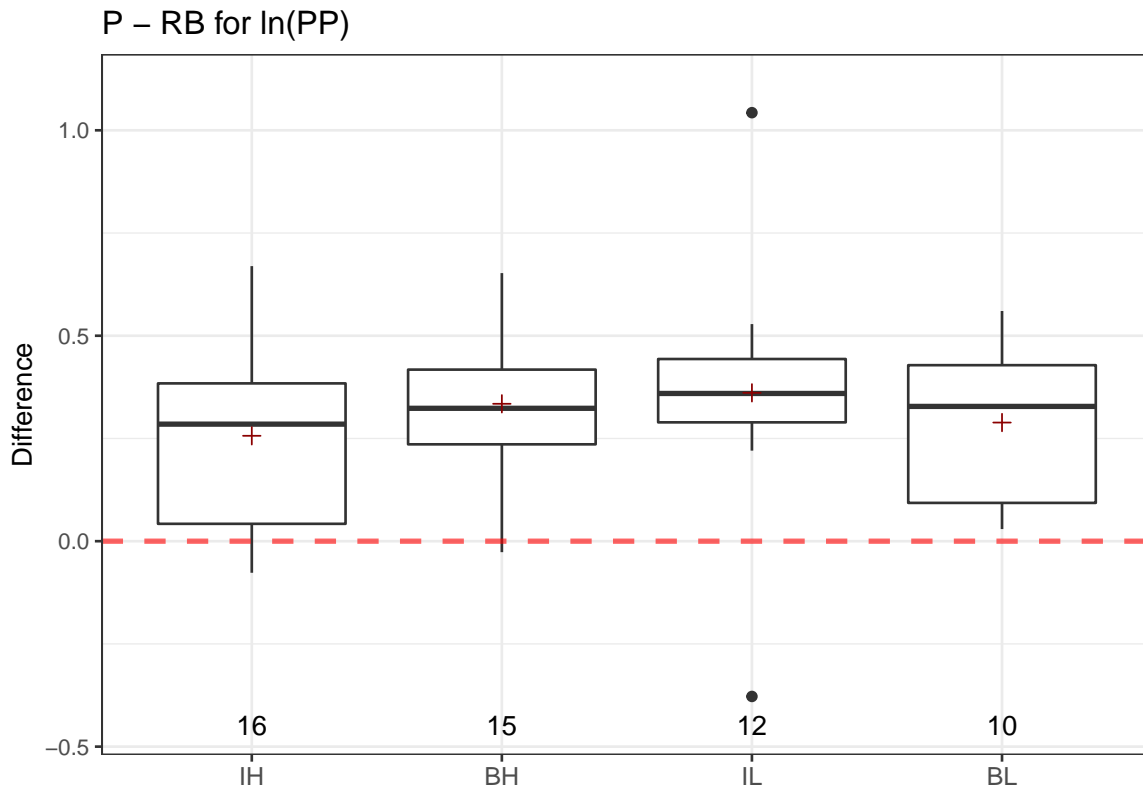
```
## [1] "Removed 12 subjects who had Stroop scores less than 30."
##
## ---
##              Df Sum Sq Mean Sq F value Pr(>F)
## Condition      3   48.8   16.27    0.932  0.436
## Residuals    33  576.0    17.45
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##      diff      lwr      upr      p adj
## BL-BH -2.0133160 -7.504415  3.477783 0.7550819
## IH-BH  1.4303974 -4.525536  7.386331 0.9149259
## IL-BH -1.1960968 -6.024235  3.632042 0.9076004
## IH-BL  3.4437134 -2.659302  9.546729 0.4338003
## IL-BL  0.8172192 -4.191231  5.825670 0.9708163
## IL-IH -2.6264942 -8.140617  2.887629 0.5765866
```



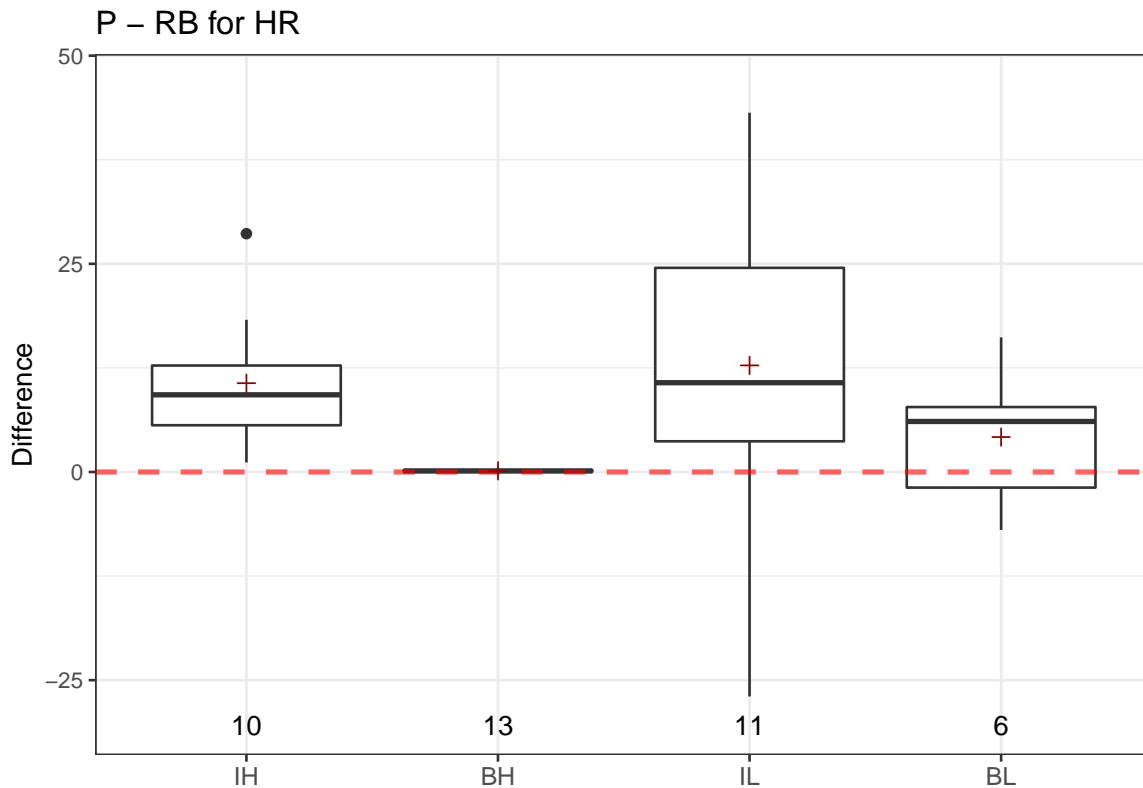
```
##
## Call:
## lm(formula = formula(paste(diff, "~ Score")), data = sc_df)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.098884 -0.008212 -0.004183  0.040184  0.057171
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -0.0128769  0.0288863  -0.446   0.6692
## Score        0.0017519  0.0006832   2.564   0.0373 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.05242 on 7 degrees of freedom
## Multiple R-squared:  0.4843, Adjusted R-squared:  0.4107
## F-statistic: 6.575 on 1 and 7 DF, p-value: 0.03732
```



```
## [1] "Removed 12 subjects who had Stroop scores less than 30."
##
## ---
##              Df Sum Sq Mean Sq F value Pr(>F)
## Condition      3   21.4    7.149   0.704  0.555
## Residuals    38  385.8   10.153
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##      diff      lwr      upr      p adj
## BL-BH -1.9538117 -5.886873  1.979250  0.5472353
## IH-BH -0.2871680 -4.322404  3.748068  0.9974784
## IL-BH -0.8231676 -4.480411  2.834076  0.9299641
## IH-BL  1.6666437 -2.266418  5.599705  0.6684465
## IL-BL  1.1306441 -2.413545  4.674833  0.8267114
## IL-IH -0.5359996 -4.193243  3.121244  0.9789960
```



```
##           Df Sum Sq Mean Sq F value Pr(>F)
## Condition    3  0.0904  0.03013    0.58  0.631
## Residuals   49  2.5459  0.05196
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##      diff      lwr      upr    p adj
## BL-BH -0.04559871 -0.2930748  0.2018774 0.9609602
## IH-BH -0.07788242 -0.2957458  0.1399809 0.7776900
## IL-BH  0.02671407 -0.2080624  0.2614905 0.9902560
## IH-BL -0.03228371 -0.2766468  0.2120794 0.9849381
## IL-BL  0.07231278 -0.1872424  0.3318679 0.8800552
## IL-IH  0.10459648 -0.1268962  0.3360892 0.6287636
```



```
##           Df Sum Sq Mean Sq F value Pr(>F)
## Condition   3   1163   387.7    2.922 0.0471 *
## Residuals  36   4777   132.7
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##      diff      lwr      upr    p adj
## BL-BH  4.061217 -11.25116681 19.37360 0.8907643
## IH-BH 10.527892  -2.52195840 23.57774 0.1503088
## IL-BH 12.663910  -0.04624692 25.37407 0.0511343
## IH-BL  6.466676  -9.55462121 22.48797 0.6995544
## IL-BL  8.602693  -7.14314547 24.34853 0.4647807
## IL-IH  2.136017 -11.41982783 15.69186 0.9739392
```


Summary

Condition	Difference	Measure	p	Test	n	Significance
BH	WB - RB	PP	0.0219462	t-test	15	*
BH	WB - RB	HR	0.0000130	Transformed t-test	14	***
BH	WB - RB	BR	0.0001138	t-test	14	***
BH	SC - RB	PP	0.1778303	t-test	14	
BH	SC - RB	HR	0.0327106	Transformed t-test	14	*
BH	SC - RB	BR	0.0167176	t-test	14	*
BH	SC - WB	PP	0.0973689	t-test	14	
BH	SC - WB	HR	0.3940901	Transformed t-test	14	
BH	SC - WB	BR	0.1543122	t-test	14	
BH	DT - RB	PP	0.0363198	t-test	15	*
BH	DT - RB	HR	0.2171923	Transformed t-test	14	
BH	DT - RB	BR	0.0744732	t-test	13	
BH	DT - WB	PP	0.5259981	t-test	15	
BH	DT - WB	HR	0.0024620	Transformed t-test	14	**
BH	DT - WB	BR	0.0000095	t-test	13	***
BH	DT - SC	PP	0.0629673	t-test	14	
BH	DT - SC	HR	0.0971471	Transformed t-test	14	
BH	DT - SC	BR	0.1008707	t-test	13	
BH	P - RB	PP	0.0000026	t-test	15	***
BH	P - RB	HR	0.0047967	Transformed t-test	13	**
BH	P - WB	PP	0.0000551	t-test	15	***
BH	P - WB	HR	0.0411070	Transformed t-test	13	*
BH	P - SC	PP	0.0000624	t-test	14	***
BH	P - SC	HR	0.0161774	Transformed t-test	13	*
BH	P - DT	PP	0.0000121	t-test	15	***
BH	P - DT	HR	0.0094598	Transformed t-test	13	**
BL	WB - RB	PP	0.7647287	t-test	11	
BL	WB - RB	HR	0.9869320	t-test	8	
BL	WB - RB	BR	0.0915679	t-test	10	
BL	SC - RB	PP	0.5788975	t-test	11	
BL	SC - RB	HR	0.1034335	t-test	8	
BL	SC - RB	BR	0.7428199	t-test	10	
BL	SC - WB	PP	0.6707895	t-test	11	
BL	SC - WB	HR	0.2170117	t-test	8	
BL	SC - WB	BR	0.0548135	t-test	10	
BL	DT - RB	PP	0.4386556	t-test	11	
BL	DT - RB	HR	0.0200050	t-test	8	*
BL	DT - RB	BR	0.0694710	t-test	9	
BL	DT - WB	PP	0.1005082	t-test	11	
BL	DT - WB	HR	0.0230059	t-test	8	*
BL	DT - WB	BR	0.1268540	t-test	9	
BL	DT - SC	PP	0.0645733	t-test	11	
BL	DT - SC	HR	0.0023709	t-test	8	**
BL	DT - SC	BR	0.0515357	t-test	9	
BL	P - RB	PP	0.0011607	t-test	10	**

(continued)

Condition	Difference	Measure	p	Test	n	Significance
BL	P - RB	HR	0.2800986	t-test	6	
BL	P - WB	PP	0.0007679	t-test	10	***
BL	P - WB	HR	0.2075354	t-test	6	
BL	P - SC	PP	0.0029690	t-test	10	**
BL	P - SC	HR	0.0855441	t-test	6	
BL	P - DT	PP	0.0065598	t-test	10	**
BL	P - DT	HR	0.0152101	t-test	6	*
IH	WB - RB	PP	0.0024663	t-test	16	**
IH	WB - RB	HR	0.0188344	t-test	11	*
IH	WB - RB	BR	0.0074935	t-test	15	**
IH	SC - RB	PP	0.1711167	t-test	16	
IH	SC - RB	HR	0.3552732	t-test	10	
IH	SC - RB	BR	0.1188954	t-test	15	
IH	SC - WB	PP	0.0993611	t-test	16	
IH	SC - WB	HR	0.0243429	t-test	10	*
IH	SC - WB	BR	0.0317792	t-test	15	*
IH	DT - RB	PP	0.0394605	t-test	16	*
IH	DT - RB	HR	0.4334571	t-test	11	
IH	DT - RB	BR	0.3322883	t-test	15	
IH	DT - WB	PP	0.6591341	t-test	16	
IH	DT - WB	HR	0.0035532	t-test	11	**
IH	DT - WB	BR	0.0022952	t-test	15	**
IH	DT - SC	PP	0.2054630	t-test	16	
IH	DT - SC	HR	0.1613719	t-test	10	
IH	DT - SC	BR	0.5106319	t-test	15	
IH	P - RB	PP	0.0002384	t-test	16	***
IH	P - RB	HR	0.0023820	t-test	10	**
IH	P - WB	PP	0.0029834	t-test	16	**
IH	P - WB	HR	0.0288561	t-test	10	*
IH	P - SC	PP	0.0019724	t-test	16	**
IH	P - SC	HR	0.0063270	t-test	10	**
IH	P - DT	PP	0.0023657	t-test	16	**
IH	P - DT	HR	0.0014945	t-test	10	**
IL	WB - RB	PP	0.0038265	t-test	14	**
IL	WB - RB	HR	0.0318164	t-test	14	*
IL	WB - RB	BR	0.0029280	t-test	13	**
IL	SC - RB	PP	0.6776737	t-test	14	
IL	SC - RB	HR	0.4931241	t-test	14	
IL	SC - RB	BR	0.1716031	t-test	14	
IL	SC - WB	PP	0.0838939	t-test	14	
IL	SC - WB	HR	0.0000160	t-test	14	***
IL	SC - WB	BR	0.0056543	t-test	13	**
IL	DT - RB	PP	0.1857230	t-test	14	
IL	DT - RB	HR	0.9564261	t-test	14	
IL	DT - RB	BR	0.0109817	t-test	14	*
IL	DT - WB	PP	0.6271269	t-test	14	
IL	DT - WB	HR	0.0153782	t-test	14	*

(continued)

Condition	Difference	Measure	p	Test	n	Significance
IL	DT - WB	BR	0.0141019	t-test	13	*
IL	DT - SC	PP	0.0548789	t-test	14	
IL	DT - SC	HR	0.4432256	t-test	14	
IL	DT - SC	BR	0.0396767	t-test	14	*
IL	P - RB	PP	0.0022816	t-test	12	**
IL	P - RB	HR	0.0552440	t-test	11	
IL	P - WB	PP	0.0135299	t-test	12	*
IL	P - WB	HR	0.1202428	t-test	11	
IL	P - SC	PP	0.0004258	t-test	12	***
IL	P - SC	HR	0.0209275	t-test	11	*
IL	P - DT	PP	0.0005524	t-test	12	***
IL	P - DT	HR	0.0093801	t-test	11	**