## Performance Data Analysis

```
## [1] "Group1-T003-SuperSession: SUCCESSFUL"
## [1] "Group1-T005-SuperSession: SUCCESSFUL"
  [1] "Group1-T006-SuperSession: NOT PROCESSED"
  [1] "Group1-T009-SuperSession: SUCCESSFUL"
  [1] "Group1-T011-SuperSession: SUCCESSFUL"
       "Group1-T016-SuperSession: SUCCESSFUL"
       "Group1-T019-SuperSession: SUCCESSFUL"
   [1] "Group1-T021-SuperSession: SUCCESSFUL"
   [1] "Group1-T023-SuperSession: NOT PROCESSED"
   [1] "Group1-T031-SuperSession: SUCCESSFUL"
       "Group1-T032-SuperSession: SUCCESSFUL"
  [1] "Group1-T035-SuperSession: SUCCESSFUL"
       "Group1-T037-SuperSession: SUCCESSFUL"
       "Group1-T043-SuperSession: NOT PROCESSED"
       "Group1-T046-SuperSession: SUCCESSFUL"
  [1] "Group1-T047-SuperSession: SUCCESSFUL"
  [1] "Group1-T051-SuperSession: SUCCESSFUL"
   [1] "Group2-T061-SuperSession: SUCCESSFUL"
##
   [1]
       "Group2-T062-SuperSession: NOT PROCESSED"
  [1] "Group2-T063-SuperSession: SUCCESSFUL"
       "Group2-T064-SuperSession: SUCCESSFUL"
       "Group2-T065-SuperSession: SUCCESSFUL"
   [1]
       "Group2-T066-SuperSession: SUCCESSFUL"
  [1] "Group2-T067-SuperSession: NOT PROCESSED"
  [1] "Group2-T068-SuperSession: SUCCESSFUL"
       "Group2-T076-SuperSession: NOT PROCESSED"
  [1] "Group2-T077-SuperSession: SUCCESSFUL"
       "Group2-T078-SuperSession: SUCCESSFUL"
       "Group2-T079-SuperSession: SUCCESSFUL"
       "Group2-T080-SuperSession: NOT PROCESSED"
   [1] "Group2-T081-SuperSession: NOT PROCESSED"
  [1] "Group2-T082-SuperSession: SUCCESSFUL"
  [1] "Group2-T083-SuperSession: SUCCESSFUL"
       "Group2-T084-SuperSession: SUCCESSFUL"
  [1] "Group2-T085-SuperSession: SUCCESSFUL"
       "Group2-T091-SuperSession: SUCCESSFUL"
       "Group2-T092-SuperSession: SUCCESSFUL"
  [1]
       "Group2-T093-SuperSession: SUCCESSFUL"
  [1] "Group2-T094-SuperSession: SUCCESSFUL"
       "Group2-T095-SuperSession: NOT PROCESSED"
       "Group2-T096-SuperSession: SUCCESSFUL"
       "Group2-T097-SuperSession: NOT PROCESSED"
       "Group2-T098-SuperSession: SUCCESSFUL"
       "Group2-T099-SuperSession: SUCCESSFUL"
       "Group2-T100-SuperSession: NOT PROCESSED"
      "Group2-T106-SuperSession: SUCCESSFUL"
## [1] "Group2-T107-SuperSession: NOT PROCESSED"
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## [1] "Group2-T108-SuperSession: NOT PROCESSED"
  [1] "Group2-T109-SuperSession: NOT PROCESSED"
  [1] "Group2-T110-SuperSession: NOT PROCESSED"
##
       "Group2-T111-SuperSession: NOT PROCESSED"
   [1] "Group2-T112-SuperSession: SUCCESSFUL"
##
  [1] "Group2-T113-SuperSession: SUCCESSFUL"
  [1] "Group2-T114-SuperSession: SUCCESSFUL"
   [1] "Group2-T115-SuperSession: NOT PROCESSED"
  [1] "Group2-T116-SuperSession: NOT PROCESSED"
## [1] "Group3-T121-SuperSession: SUCCESSFUL"
## [1]
       "Group3-T122-SuperSession: SUCCESSFUL"
##
  [1]
       "Group3-T124-SuperSession: SUCCESSFUL"
  [1] "Group3-T126-SuperSession: SUCCESSFUL"
  [1] "Group3-T127-SuperSession: NOT PROCESSED"
   [1] "Group3-T128-SuperSession: SUCCESSFUL"
##
##
   [1] "Group3-T130-SuperSession: SUCCESSFUL"
  [1] "Group3-T132-SuperSession: SUCCESSFUL"
       "Group3-T133-SuperSession: NOT PROCESSED"
##
       "Group3-T136-SuperSession: NOT PROCESSED"
   [1] "Group3-T138-SuperSession: SUCCESSFUL"
##
   [1] "Group3-T139-SuperSession: SUCCESSFUL"
  [1] "Group3-T140-SuperSession: NOT PROCESSED"
       "Group3-T141-SuperSession: SUCCESSFUL"
  [1] "Group3-T142-SuperSession: NOT PROCESSED"
##
  [1] "Group3-T144-SuperSession: SUCCESSFUL"
## [1] "Group3-T145-SuperSession: SUCCESSFUL"
       "Group3-T146-SuperSession: NOT PROCESSED"
##
   [1]
  [1] "Group3-T148-SuperSession: NOT PROCESSED"
  [1] "Group3-T150-SuperSession: NOT PROCESSED"
   [1] "Group3-T151-SuperSession: SUCCESSFUL"
##
   [1] "Group3-T152-SuperSession: SUCCESSFUL"
  [1] "Group3-T153-SuperSession: NOT PROCESSED"
       "Group3-T154-SuperSession: SUCCESSFUL"
       "Group3-T155-SuperSession: NOT PROCESSED"
##
##
   [1]
       "Group3-T156-SuperSession: SUCCESSFUL"
   [1] "Group3-T157-SuperSession: SUCCESSFUL"
   [1] "Group3-T158-SuperSession: NOT PROCESSED"
       "Group3-T160-SuperSession: NOT PROCESSED"
  [1] "Group3-T162-SuperSession: SUCCESSFUL"
##
  [1] "Group3-T166-SuperSession: SUCCESSFUL"
## [1] "Group3-T167-SuperSession: NOT PROCESSED"
       "Group3-T168-SuperSession: NOT PROCESSED"
  [1] "Group3-T169-SuperSession: NOT PROCESSED"
  [1] "Group3-T170-SuperSession: NOT PROCESSED"
  [1] "Group3-T171-SuperSession: NOT PROCESSED"
##
  [1] "Group3-T172-SuperSession: SUCCESSFUL"
  [1] "Group3-T173-SuperSession: SUCCESSFUL"
       "Group3-T174-SuperSession: SUCCESSFUL"
## [1]
       "Group3-T175-SuperSession: SUCCESSFUL"
       "Group3-T176-SuperSession: SUCCESSFUL"
## [1]
## [1] "Group3-T178-SuperSession: SUCCESSFUL"
```

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## [1] "Group3-T180-SuperSession: NOT PROCESSED"
## [1] "Group3-T198-SuperSession: NOT PROCESSED"
## [1] "Group3-T200-SuperSession: NOT PROCESSED"
## Classes 'tbl_df', 'tbl' and 'data.frame':
                                   56 obs. of 1 variable:
## $ Subject: Factor w/ 58 levels "T003","T005",..: 1 2 3 4 5 6 7 8 9 10 ...
## NULL
## [1] "-----
## [1] "----
                      Word Count (WC) -----"
## [1] "------"
## [1] "Test Type: w-test"
##
## Wilcoxon signed rank test with continuity correction
## data: temp_ets_test_df$DT and temp_ets_test_df$ST
## V = 1935.5, p-value = 1.815e-11
## alternative hypothesis: true location shift is not equal to 0
## [1] "The mean differences between the HR from two sensors are significant."
## [1] ""
## [1] ""
## [1] ""
## [1] "-----
## [1] "-----" Char Count (CC) -----"
## [1] "-----"
## [1] "Test Type: t-test"
##
## Paired t-test
##
## data: temp_ets_test_df$DT and temp_ets_test_df$ST
## t = 12.135, df = 61, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
## 1036.755 1445.858
## sample estimates:
## mean of the differences
##
             1241.306
## [1] "The mean differences between the HR from two sensors are significant."
## [1] ""
## [1] ""
## [1] ""
## [1] "-----"
## [1] "-----
                      Criterion Score
## [1] "-----"
## [1] "Test Type: w-test"
##
## Wilcoxon signed rank test with continuity correction
##
## data: temp_ets_test_df$DT and temp_ets_test_df$ST
## V = 1687, p-value = 5.774e-11
```

```
## alternative hypothesis: true location shift is not equal to 0
## [1] "The mean differences between the HR from two sensors are significant."
## [1] ""
## [1] ""
## [1] ""
## [1] "----
                     Mechanics Errors/WC
## [1] "-----"
## [1] "Test Type: w-test"
## Wilcoxon signed rank test with continuity correction
##
## data: temp_ets_test_df$DT and temp_ets_test_df$ST
## V = 1599, p-value = 1.295e-05
## alternative hypothesis: true location shift is not equal to 0
## [1] "The mean differences between the HR from two sensors are significant."
## [1] ""
## [1] ""
## [1] ""
## [1] "-----
## [1] "-----
                      Grammar Errors/WC
## [1] "Test Type: w-test"
##
## Wilcoxon signed rank test with continuity correction
##
## data: temp_ets_test_df$DT and temp_ets_test_df$ST
## V = 537, p-value = 0.4432
\#\# alternative hypothesis: true location shift is not equal to 0
## [1] "The mean differences between the HR from two sensors are not significant."
## [1] ""
## [1] ""
## [1] ""
## [1] "-----"
## [1] "----- Usage Errors/WC
## [1] "-----"
## [1] "Test Type: w-test"
##
## Wilcoxon signed rank test with continuity correction
## data: temp_ets_test_df$DT and temp_ets_test_df$ST
## V = 889, p-value = 0.2087
## alternative hypothesis: true location shift is not equal to 0
## [1] "The mean differences between the HR from two sensors are not significant."
## [1] ""
## [1] ""
## [1] ""
```

```
## [1] "-----" Style Errors/WC -----"
## [1] "-----"
## [1] "Test Type: w-test"
##
## Wilcoxon signed rank test with continuity correction
##
## data: temp_ets_test_df$DT and temp_ets_test_df$ST
## V = 422, p-value = 0.0001722
## alternative hypothesis: true location shift is not equal to 0
## [1] "The mean differences between the HR from two sensors are significant."
## [1] ""
## [1] ""
## [1] ""
## [1] "-----"
## [1] "-----" Delete Keys/CC -----"
## [1] "-----"
## [1] "Test Type: w-test"
##
## Wilcoxon signed rank test with continuity correction
##
## data: temp_ets_test_df$DT and temp_ets_test_df$ST
## V = 1522, p-value = 3.045e-10
## alternative hypothesis: true location shift is not equal to 0
##
## [1] "The mean differences between the HR from two sensors are significant."
## [1] ""
## [1] ""
## [1] ""
## 'data.frame':
               8 obs. of 3 variables:
## $ PerformanceCriteria: Factor w/ 8 levels "Word Count (WC)",..: 1 2 3 4 5 6 7 8
## $ Significance : Factor w/ 2 levels "***"," ": 1 1 1 1 2 2 1 1
## $ Subj_No
                  : int 62 62 62 62 62 62 55
## NULL
```