## Test of Homogeneity of Variances - i\* and use cases, creation task

|               |                                      | Levene<br>Statistic | df1 | df2     | Sig. |
|---------------|--------------------------------------|---------------------|-----|---------|------|
| Precision     | Based on Mean                        | .110                | 3   | 166     | .954 |
|               | Based on Median                      | .094                | 3   | 166     | .963 |
|               | Based on Median and with adjusted df | .094                | 3   | 143.143 | .963 |
|               | Based on trimmed mean                | .053                | 3   | 166     | .984 |
| Recall        | Based on Mean                        | 2.929               | 3   | 166     | .035 |
|               | Based on Median                      | 2.077               | 3   | 166     | .105 |
|               | Based on Median and with adjusted df | 2.077               | 3   | 122.540 | .107 |
|               | Based on trimmed mean                | 2.827               | 3   | 166     | .040 |
| FMeasure      | Based on Mean                        | 3.745               | 3   | 166     | .012 |
|               | Based on Median                      | 1.812               | 3   | 166     | .147 |
|               | Based on Median and with adjusted df | 1.812               | 3   | 110.383 | .149 |
|               | Based on trimmed mean                | 3.062               | 3   | 166     | .030 |
| Duration      | Based on Mean                        | 63.427              | 3   | 166     | .000 |
|               | Based on Median                      | 23.884              | 3   | 166     | .000 |
|               | Based on Median and with adjusted df | 23.884              | 3   | 62.833  | .000 |
|               | Based on trimmed mean                | 55.325              | 3   | 166     | .000 |
| FirstActDet   | Based on Mean                        | 14.243              | 3   | 166     | .000 |
|               | Based on Median                      | 7.815               | 3   | 166     | .000 |
|               | Based on Median and with adjusted df | 7.815               | 3   | 97.243  | .000 |
|               | Based on trimmed mean                | 12.129              | 3   | 166     | .000 |
| LastActDet    | Based on Mean                        | 47.957              | 3   | 166     | .000 |
|               | Based on Median                      | 19.050              | 3   | 166     | .000 |
|               | Based on Median and with adjusted df | 19.050              | 3   | 57.191  | .000 |
|               | Based on trimmed mean                | 42.371              | 3   | 166     | .000 |
| ProcDur       | Based on Mean                        | 52.275              | 3   | 166     | .000 |
|               | Based on Median                      | 51.487              | 3   | 166     | .000 |
|               | Based on Median and with adjusted df | 51.487              | 3   | 49.940  | .000 |
|               | Based on trimmed mean                | 51.071              | 3   | 166     | .000 |
| FixRel        | Based on Mean                        | 2.257               | 3   | 166     | .084 |
|               | Based on Median                      | 1.239               | 3   | 166     | .297 |
|               | Based on Median and with adjusted df | 1.239               | 3   | 164.596 | .297 |
|               | Based on trimmed mean                | 2.246               | 3   | 166     | .085 |
| FixIrrel      | Based on Mean                        | 280.668             | 3   | 166     | .000 |
|               | Based on Median                      | 82.416              | 3   | 166     | .000 |
|               | Based on Median and with adjusted df | 82.416              | 3   | 39.413  | .000 |
|               | Based on trimmed mean                | 245.172             | 3   | 166     | .000 |
| AvDurRelFix   | Based on Mean                        | 40.523              | 3   | 166     | .000 |
|               | Based on Median                      | 27.015              | 3   | 166     | .000 |
|               | Based on Median and with adjusted df | 27.015              | 3   | 56.290  | .000 |
|               | Based on trimmed mean                | 37.688              | 3   | 166     | .000 |
| AvDurIrrelFix | Based on Mean                        | 8.956               | 3   | 166     | .000 |
|               | Based on Median                      | 8.048               | 3   | 166     | .000 |
|               | Based on Median and with adjusted df | 8.048               | 3   | 82.955  | .000 |

|                  | Based on trimmed mean                | 8.841  | 3 | 166     | .000 |
|------------------|--------------------------------------|--------|---|---------|------|
| TotSac           | Based on Mean                        | .348   | 3 | 166     | .791 |
|                  | Based on Median                      | .374   | 3 | 166     | .772 |
|                  | Based on Median and with adjusted df | .374   | 3 | 164.798 | .772 |
|                  | Based on trimmed mean                | .305   | 3 | 166     | .822 |
| Sac2Key          | Based on Mean                        | 2.788  | 3 | 166     | .042 |
|                  | Based on Median                      | 2.485  | 3 | 166     | .063 |
|                  | Based on Median and with adjusted df | 2.485  | 3 | 165.040 | .063 |
|                  | Based on trimmed mean                | 2.779  | 3 | 166     | .043 |
| AvAttention      | Based on Mean                        | 3.375  | 3 | 166     | .020 |
|                  | Based on Median                      | 2.604  | 3 | 166     | .054 |
|                  | Based on Median and with adjusted df | 2.604  | 3 | 159.936 | .054 |
|                  | Based on trimmed mean                | 3.288  | 3 | 166     | .022 |
| AvMentWL         | Based on Mean                        | .625   | 3 | 166     | .600 |
|                  | Based on Median                      | .477   | 3 | 166     | .699 |
|                  | Based on Median and with adjusted df | .477   | 3 | 149.837 | .699 |
|                  | Based on trimmed mean                | .573   | 3 | 166     | .633 |
| AvFam            | Based on Mean                        | 1.023  | 3 | 166     | .384 |
|                  | Based on Median                      | .600   | 3 | 166     | .616 |
|                  | Based on Median and with adjusted df | .600   | 3 | 148.166 | .616 |
|                  | Based on trimmed mean                | 1.032  | 3 | 166     | .380 |
| AvSCL            | Based on Mean                        | 1.084  | 3 | 166     | .357 |
|                  | Based on Median                      | .793   | 3 | 166     | .499 |
|                  | Based on Median and with adjusted df | .793   | 3 | 165.476 | .499 |
|                  | Based on trimmed mean                | 1.029  | 3 | 166     | .381 |
| HRVar_RMSSD      | Based on Mean                        | .420   | 3 | 166     | .739 |
|                  | Based on Median                      | .155   | 3 | 166     | .926 |
|                  | Based on Median and with adjusted df | .155   | 3 | 149.862 | .926 |
|                  | Based on trimmed mean                | .419   | 3 | 166     | .740 |
| HRVar_NN50       | Based on Mean                        | .204   | 3 | 166     | .893 |
|                  | Based on Median                      | .244   | 3 | 166     | .866 |
|                  | Based on Median and with adjusted df | .244   | 3 | 147.135 | .866 |
|                  | Based on trimmed mean                | .237   | 3 | 166     | .871 |
| NASA_MD          | Based on Mean                        | 2.896  | 3 | 166     | .037 |
|                  | Based on Median                      | 1.777  | 3 | 166     | .153 |
|                  | Based on Median and with adjusted df | 1.777  | 3 | 135.575 | .154 |
|                  | Based on trimmed mean                | 2.849  | 3 | 166     | .039 |
| NASA_PD          | Based on Mean                        | .744   | 3 | 166     | .527 |
|                  | Based on Median                      | .043   | 3 | 166     | .988 |
|                  | Based on Median and with adjusted df | .043   | 3 | 156.289 | .988 |
|                  | Based on trimmed mean                | .634   | 3 | 166     | .594 |
| NASA_TD          | Based on Mean                        | 19.065 | 3 | 166     | .000 |
|                  | Based on Median                      | 10.654 | 3 | 166     | .000 |
|                  | Based on Median and with adjusted df | 10.654 | 3 | 136.817 | .000 |
|                  | Based on trimmed mean                | 18.732 | 3 | 166     | .000 |
| NASA_Performance | Based on Mean                        | 11.358 | 3 | 166     | .000 |

|                  | Based on Median                      | 4.444  | 3 | 166     | .005 |
|------------------|--------------------------------------|--------|---|---------|------|
|                  | Based on Median and with adjusted df | 4.444  | 3 | 113.286 | .005 |
|                  | Based on trimmed mean                | 10.609 | 3 | 166     | .000 |
| NASA_Effort      | Based on Mean                        | 1.018  | 3 | 166     | .386 |
|                  | Based on Median                      | .999   | 3 | 166     | .395 |
|                  | Based on Median and with adjusted df | .999   | 3 | 157.600 | .395 |
|                  | Based on trimmed mean                | 1.007  | 3 | 166     | .391 |
| NASA_Frustration | Based on Mean                        | 9.471  | 3 | 166     | .000 |
|                  | Based on Median                      | 4.776  | 3 | 166     | .003 |
|                  | Based on Median and with adjusted df | 4.776  | 3 | 91.473  | .004 |
|                  | Based on trimmed mean                | 9.095  | 3 | 166     | .000 |
| NASA_Score       | Based on Mean                        | 13.060 | 3 | 166     | .000 |
|                  | Based on Median                      | 10.530 | 3 | 166     | .000 |
|                  | Based on Median and with adjusted df | 10.530 | 3 | 153.777 | .000 |
|                  | Based on trimmed mean                | 12.905 | 3 | 166     | .000 |

## Test of Homogeneity of Variances - i\* and use cases, modification task

|               |                                      | Levene<br>Statistic | df1 | df2     | Sig. |
|---------------|--------------------------------------|---------------------|-----|---------|------|
| Precision     | Based on Mean                        | .291                | 3   | 166     | .832 |
|               | Based on Median                      | .084                | 3   | 166     | .969 |
|               | Based on Median and with adjusted df | .084                | 3   | 144.752 | .969 |
|               | Based on trimmed mean                | .175                | 3   | 166     | .913 |
| Recall        | Based on Mean                        | 4.726               | 3   | 166     | .003 |
|               | Based on Median                      | 3.376               | 3   | 166     | .020 |
|               | Based on Median and with adjusted df | 3.376               | 3   | 133.920 | .020 |
|               | Based on trimmed mean                | 4.352               | 3   | 166     | .006 |
| FMeasure      | Based on Mean                        | 1.883               | 3   | 166     | .134 |
|               | Based on Median                      | .605                | 3   | 166     | .612 |
|               | Based on Median and with adjusted df | .605                | 3   | 134.178 | .613 |
|               | Based on trimmed mean                | 1.452               | 3   | 166     | .229 |
| Duration      | Based on Mean                        | 60.030              | 3   | 166     | .000 |
|               | Based on Median                      | 24.918              | 3   | 166     | .000 |
|               | Based on Median and with adjusted df | 24.918              | 3   | 60.724  | .000 |
|               | Based on trimmed mean                | 50.824              | 3   | 166     | .000 |
| FirstActDet   | Based on Mean                        | 27.722              | 3   | 166     | .000 |
|               | Based on Median                      | 7.774               | 3   | 166     | .000 |
|               | Based on Median and with adjusted df | 7.774               | 3   | 104.699 | .000 |
|               | Based on trimmed mean                | 23.791              | 3   | 166     | .00  |
| LastActDet    | Based on Mean                        | 25.684              | 3   | 166     | .00  |
|               | Based on Median                      | 18.803              | 3   | 166     | .00  |
|               | Based on Median and with adjusted df | 18.803              | 3   | 61.415  | .00  |
|               | Based on trimmed mean                | 22.961              | 3   | 166     | .000 |
| ProcDur       | Based on Mean                        | 47.401              | 3   | 166     | .000 |
|               | Based on Median                      | 40.224              | 3   | 166     | .00  |
|               | Based on Median and with adjusted df | 40.224              | 3   | 50.116  | .00  |
|               | Based on trimmed mean                | 42.908              | 3   | 166     | .000 |
| FixRel        | Based on Mean                        | .475                | 3   | 166     | .70  |
|               | Based on Median                      | .292                | 3   | 166     | .83  |
|               | Based on Median and with adjusted df | .292                | 3   | 162.844 | .83  |
|               | Based on trimmed mean                | .505                | 3   | 166     | .679 |
| FixIrrel      | Based on Mean                        | 300.800             | 3   | 166     | .000 |
|               | Based on Median                      | 76.593              | 3   | 166     | .000 |
|               | Based on Median and with adjusted df | 76.593              | 3   | 39.385  | .00  |
|               | Based on trimmed mean                | 270.321             | 3   | 166     | .000 |
| AvDurRelFix   | Based on Mean                        | 39.586              | 3   | 166     | .000 |
|               | Based on Median                      | 24.171              | 3   | 166     | .000 |
|               | Based on Median and with adjusted df | 24.171              | 3   | 52.220  | .000 |
|               | Based on trimmed mean                | 34.390              | 3   | 166     | .00  |
| AvDurIrrelFix | Based on Mean                        | 15.066              | 3   | 166     | .000 |
|               | Based on Median                      | 10.193              | 3   | 166     | .000 |
|               | Based on Median and with adjusted df | 10.193              | 3   | 65.560  | .000 |

|                  | Based on trimmed mean                | 13.341 | 3 | 166     | .000 |
|------------------|--------------------------------------|--------|---|---------|------|
| TotSac           | Based on Mean                        | .774   | 3 | 166     | .510 |
|                  | Based on Median                      | .849   | 3 | 166     | .469 |
|                  | Based on Median and with adjusted df | .849   | 3 | 164.093 | .469 |
|                  | Based on trimmed mean                | .780   | 3 | 166     | .507 |
| Sac2Key          | Based on Mean                        | .580   | 3 | 166     | .629 |
|                  | Based on Median                      | .605   | 3 | 166     | .612 |
|                  | Based on Median and with adjusted df | .605   | 3 | 165.224 | .612 |
|                  | Based on trimmed mean                | .590   | 3 | 166     | .623 |
| AvAttention      | Based on Mean                        | 3.175  | 3 | 166     | .026 |
|                  | Based on Median                      | 2.830  | 3 | 166     | .040 |
|                  | Based on Median and with adjusted df | 2.830  | 3 | 162.026 | .040 |
|                  | Based on trimmed mean                | 3.224  | 3 | 166     | .024 |
| AvMentWL         | Based on Mean                        | .658   | 3 | 166     | .579 |
|                  | Based on Median                      | .609   | 3 | 166     | .610 |
|                  | Based on Median and with adjusted df | .609   | 3 | 165.136 | .610 |
|                  | Based on trimmed mean                | .647   | 3 | 166     | .586 |
| AvFam            | Based on Mean                        | .441   | 3 | 166     | .724 |
|                  | Based on Median                      | .171   | 3 | 166     | .916 |
|                  | Based on Median and with adjusted df | .171   | 3 | 132.188 | .916 |
|                  | Based on trimmed mean                | .366   | 3 | 166     | .778 |
| AvSCL            | Based on Mean                        | 1.464  | 3 | 166     | .226 |
|                  | Based on Median                      | 1.103  | 3 | 166     | .350 |
|                  | Based on Median and with adjusted df | 1.103  | 3 | 164.365 | .350 |
|                  | Based on trimmed mean                | 1.445  | 3 | 166     | .232 |
| HRVar_RMSSD      | Based on Mean                        | .720   | 3 | 166     | .541 |
|                  | Based on Median                      | .657   | 3 | 166     | .580 |
|                  | Based on Median and with adjusted df | .657   | 3 | 156.398 | .580 |
|                  | Based on trimmed mean                | .759   | 3 | 166     | .519 |
| HRVar_NN50       | Based on Mean                        | .253   | 3 | 166     | .859 |
|                  | Based on Median                      | .355   | 3 | 166     | .786 |
|                  | Based on Median and with adjusted df | .355   | 3 | 136.976 | .786 |
|                  | Based on trimmed mean                | .290   | 3 | 166     | .833 |
| NASA_MD          | Based on Mean                        | 2.538  | 3 | 166     | .058 |
|                  | Based on Median                      | 2.513  | 3 | 166     | .060 |
|                  | Based on Median and with adjusted df | 2.513  | 3 | 116.118 | .062 |
|                  | Based on trimmed mean                | 2.979  | 3 | 166     | .033 |
| NASA_PD          | Based on Mean                        | 9.022  | 3 | 166     | .000 |
|                  | Based on Median                      | 2.278  | 3 | 166     | .081 |
|                  | Based on Median and with adjusted df | 2.278  | 3 | 159.270 | .082 |
|                  | Based on trimmed mean                | 8.101  | 3 | 166     | .000 |
| NASA_TD          | Based on Mean                        | 8.149  | 3 | 166     | .000 |
|                  | Based on Median                      | 4.266  | 3 | 166     | .006 |
|                  | Based on Median and with adjusted df | 4.266  | 3 | 142.212 | .006 |
|                  | Based on trimmed mean                | 7.983  | 3 | 166     | .000 |
| NASA_Performance | Based on Mean                        | 5.903  | 3 | 166     | .001 |

|                  | Based on Median                      | 3.921 | 3 | 166     | .010 |
|------------------|--------------------------------------|-------|---|---------|------|
|                  | Based on Median and with adjusted df | 3.921 | 3 | 150.785 | .010 |
|                  | Based on trimmed mean                | 5.836 | 3 | 166     | .001 |
| NASA_Effort      | Based on Mean                        | 1.264 | 3 | 166     | .288 |
|                  | Based on Median                      | 1.384 | 3 | 166     | .250 |
|                  | Based on Median and with adjusted df | 1.384 | 3 | 151.100 | .250 |
|                  | Based on trimmed mean                | 1.232 | 3 | 166     | .300 |
| NASA_Frustration | Based on Mean                        | 2.291 | 3 | 166     | .080 |
|                  | Based on Median                      | 1.307 | 3 | 166     | .274 |
|                  | Based on Median and with adjusted df | 1.307 | 3 | 138.965 | .275 |
|                  | Based on trimmed mean                | 2.169 | 3 | 166     | .094 |
| NASA_Score       | Based on Mean                        | 5.276 | 3 | 166     | .002 |
|                  | Based on Median                      | 3.966 | 3 | 166     | .009 |
|                  | Based on Median and with adjusted df | 3.966 | 3 | 110.805 | .010 |
|                  | Based on trimmed mean                | 5.321 | 3 | 166     | .002 |

## Test of Homogeneity of Variances - i\* and use cases, understanding task

|               |                                      | Levene<br>Statistic | df1 | df2     | Sig. |
|---------------|--------------------------------------|---------------------|-----|---------|------|
| Precision     | Based on Mean                        | 4.107               | 3   | 156     | .008 |
|               | Based on Median                      | 4.059               | 3   | 156     | .008 |
|               | Based on Median and with adjusted df | 4.059               | 3   | 140.450 | .008 |
|               | Based on trimmed mean                | 4.082               | 3   | 156     | .008 |
| Recall        | Based on Mean                        | 4.506               | 3   | 156     | .005 |
|               | Based on Median                      | 5.656               | 3   | 156     | .001 |
|               | Based on Median and with adjusted df | 5.656               | 3   | 129.017 | .001 |
|               | Based on trimmed mean                | 4.629               | 3   | 156     | .004 |
| FMeasure      | Based on Mean                        | 1.196               | 3   | 156     | .313 |
|               | Based on Median                      | 1.627               | 3   | 156     | .185 |
|               | Based on Median and with adjusted df | 1.627               | 3   | 133.144 | .186 |
|               | Based on trimmed mean                | 1.396               | 3   | 156     | .246 |
| Duration      | Based on Mean                        | 26.219              | 3   | 156     | .000 |
|               | Based on Median                      | 11.093              | 3   | 156     | .000 |
|               | Based on Median and with adjusted df | 11.093              | 3   | 109.381 | .000 |
|               | Based on trimmed mean                | 22.519              | 3   | 156     | .000 |
| FirstActDet   | Based on Mean                        | 23.926              | 3   | 156     | .000 |
|               | Based on Median                      | 8.191               | 3   | 156     | .000 |
|               | Based on Median and with adjusted df | 8.191               | 3   | 93.807  | .000 |
|               | Based on trimmed mean                | 22.001              | 3   | 156     | .000 |
| _astActDet    | Based on Mean                        | 20.983              | 3   | 156     | .000 |
|               | Based on Median                      | 8.682               | 3   | 156     | .000 |
|               | Based on Median and with adjusted df | 8.682               | 3   | 107.960 | .000 |
|               | Based on trimmed mean                | 18.094              | 3   | 156     | .000 |
| ProcDur       | Based on Mean                        | 5.152               | 3   | 156     | .002 |
|               | Based on Median                      | 3.145               | 3   | 156     | .027 |
|               | Based on Median and with adjusted df | 3.145               | 3   | 152.897 | .027 |
|               | Based on trimmed mean                | 5.493               | 3   | 156     | .00  |
| FixRel        | Based on Mean                        | .217                | 3   | 156     | .88  |
|               | Based on Median                      | .137                | 3   | 156     | .938 |
|               | Based on Median and with adjusted df | .137                | 3   | 155.034 | .938 |
|               | Based on trimmed mean                | .252                | 3   | 156     | .860 |
| FixIrrel      | Based on Mean                        | 200.989             | 3   | 156     | .000 |
|               | Based on Median                      | 97.914              | 3   | 156     | .000 |
|               | Based on Median and with adjusted df | 97.914              | 3   | 56.536  | .000 |
|               | Based on trimmed mean                | 186.357             | 3   | 156     | .000 |
| AvDurRelFix   | Based on Mean                        | .499                | 3   | 156     | .683 |
|               | Based on Median                      | .376                | 3   | 156     | .770 |
|               | Based on Median and with adjusted df | .376                | 3   | 128.045 | .770 |
|               | Based on trimmed mean                | .448                | 3   | 156     | .719 |
| AvDurIrrelFix | Based on Mean                        | 1.104               | 3   | 156     | .350 |
|               | Based on Median                      | .422                | 3   | 156     | .738 |
|               | Based on Median and with adjusted df | .422                | 3   | 118.142 | .738 |

|                  | Based on trimmed mean                | .874   | 3 | 156     | .456 |
|------------------|--------------------------------------|--------|---|---------|------|
| TotSac           | Based on Mean                        | .512   | 3 | 156     | .674 |
|                  | Based on Median                      | .615   | 3 | 156     | .606 |
|                  | Based on Median and with adjusted df | .615   | 3 | 150.781 | .606 |
|                  | Based on trimmed mean                | .526   | 3 | 156     | .665 |
| Sac2Key          | Based on Mean                        | .484   | 3 | 156     | .694 |
|                  | Based on Median                      | .451   | 3 | 156     | .717 |
|                  | Based on Median and with adjusted df | .451   | 3 | 154.655 | .717 |
|                  | Based on trimmed mean                | .521   | 3 | 156     | .669 |
| AvAttention      | Based on Mean                        | 1.468  | 3 | 156     | .226 |
|                  | Based on Median                      | 1.849  | 3 | 156     | .141 |
|                  | Based on Median and with adjusted df | 1.849  | 3 | 155.245 | .141 |
|                  | Based on trimmed mean                | 1.407  | 3 | 156     | .243 |
| AvMentWL         | Based on Mean                        | 3.282  | 3 | 156     | .023 |
|                  | Based on Median                      | 3.584  | 3 | 156     | .015 |
|                  | Based on Median and with adjusted df | 3.584  | 3 | 142.335 | .015 |
|                  | Based on trimmed mean                | 3.270  | 3 | 156     | .023 |
| AvFam            | Based on Mean                        | 1.292  | 3 | 156     | .279 |
|                  | Based on Median                      | 1.531  | 3 | 156     | .209 |
|                  | Based on Median and with adjusted df | 1.531  | 3 | 147.987 | .209 |
|                  | Based on trimmed mean                | 1.216  | 3 | 156     | .306 |
| AvSCL            | Based on Mean                        | .643   | 3 | 156     | .589 |
|                  | Based on Median                      | .604   | 3 | 156     | .614 |
|                  | Based on Median and with adjusted df | .604   | 3 | 143.558 | .614 |
|                  | Based on trimmed mean                | .658   | 3 | 156     | .579 |
| HRVar_RMSSD      | Based on Mean                        | 1.793  | 3 | 156     | .151 |
|                  | Based on Median                      | .542   | 3 | 156     | .654 |
|                  | Based on Median and with adjusted df | .542   | 3 | 150.635 | .654 |
|                  | Based on trimmed mean                | 1.804  | 3 | 156     | .149 |
| HRVar_NN50       | Based on Mean                        | .325   | 3 | 156     | .807 |
|                  | Based on Median                      | .154   | 3 | 156     | .927 |
|                  | Based on Median and with adjusted df | .154   | 3 | 151.718 | .927 |
|                  | Based on trimmed mean                | .370   | 3 | 156     | .775 |
| NASA_MD          | Based on Mean                        | .063   | 3 | 156     | .979 |
|                  | Based on Median                      | .024   | 3 | 156     | .995 |
|                  | Based on Median and with adjusted df | .024   | 3 | 154.590 | .995 |
|                  | Based on trimmed mean                | .090   | 3 | 156     | .965 |
| NASA_PD          | Based on Mean                        | 11.681 | 3 | 156     | .000 |
|                  | Based on Median                      | 2.293  | 3 | 156     | .080 |
|                  | Based on Median and with adjusted df | 2.293  | 3 | 140.639 | .081 |
|                  | Based on trimmed mean                | 9.904  | 3 | 156     | .000 |
| NASA_TD          | Based on Mean                        | 5.372  | 3 | 156     | .002 |
|                  | Based on Median                      | 2.981  | 3 | 156     | .033 |
|                  | Based on Median and with adjusted df | 2.981  | 3 | 147.347 | .033 |
|                  | Based on trimmed mean                | 5.093  | 3 | 156     | .002 |
| NASA_Performance | Based on Mean                        | 6.970  | 3 | 156     | .000 |

|                  | Based on Median                      | 5.802 | 3 | 156     | .001 |
|------------------|--------------------------------------|-------|---|---------|------|
|                  | Based on Median and with adjusted df | 5.802 | 3 | 149.598 | .001 |
|                  | Based on trimmed mean                | 7.036 | 3 | 156     | .000 |
| NASA_Effort      | Based on Mean                        | .048  | 3 | 156     | .986 |
|                  | Based on Median                      | .034  | 3 | 156     | .992 |
|                  | Based on Median and with adjusted df | .034  | 3 | 153.924 | .992 |
|                  | Based on trimmed mean                | .048  | 3 | 156     | .986 |
| NASA_Frustration | Based on Mean                        | .937  | 3 | 156     | .424 |
|                  | Based on Median                      | .846  | 3 | 156     | .471 |
|                  | Based on Median and with adjusted df | .846  | 3 | 138.392 | .471 |
|                  | Based on trimmed mean                | .861  | 3 | 156     | .463 |
| NASA_Score       | Based on Mean                        | 3.032 | 3 | 156     | .031 |
|                  | Based on Median                      | 1.872 | 3 | 156     | .137 |
|                  | Based on Median and with adjusted df | 1.872 | 3 | 129.441 | .138 |
|                  | Based on trimmed mean                | 2.782 | 3 | 156     | .043 |

## Test of Homogeneity of Variances - i\* and use cases, reviewing task

|               |                                      | Levene<br>Statistic | df1 | df2     | Sig. |
|---------------|--------------------------------------|---------------------|-----|---------|------|
| Precision     | Based on Mean                        | .525                | 3   | 156     | .666 |
|               | Based on Median                      | .553                | 3   | 156     | .647 |
|               | Based on Median and with adjusted df | .553                | 3   | 132.304 | .647 |
|               | Based on trimmed mean                | .371                | 3   | 156     | .774 |
| Recall        | Based on Mean                        | 3.382               | 3   | 156     | .020 |
|               | Based on Median                      | 1.472               | 3   | 156     | .224 |
|               | Based on Median and with adjusted df | 1.472               | 3   | 81.095  | .228 |
|               | Based on trimmed mean                | 2.489               | 3   | 156     | .062 |
| FMeasure      | Based on Mean                        | 2.875               | 3   | 156     | .03  |
|               | Based on Median                      | .919                | 3   | 156     | .43  |
|               | Based on Median and with adjusted df | .919                | 3   | 81.773  | .430 |
|               | Based on trimmed mean                | 1.794               | 3   | 156     | .15  |
| Duration      | Based on Mean                        | 201.388             | 3   | 156     | .00  |
|               | Based on Median                      | 159.717             | 3   | 156     | .00  |
|               | Based on Median and with adjusted df | 159.717             | 3   | 60.643  | .00  |
|               | Based on trimmed mean                | 198.214             | 3   | 156     | .00  |
| FirstActDet   | Based on Mean                        | 35.047              | 3   | 156     | .00  |
|               | Based on Median                      | 25.293              | 3   | 156     | .00  |
|               | Based on Median and with adjusted df | 25.293              | 3   | 110.804 | .00  |
|               | Based on trimmed mean                | 34.753              | 3   | 156     | .00  |
| LastActDet    | Based on Mean                        | 154.937             | 3   | 156     | .00  |
|               | Based on Median                      | 91.270              | 3   | 156     | .00  |
|               | Based on Median and with adjusted df | 91.270              | 3   | 48.457  | .00  |
|               | Based on trimmed mean                | 154.710             | 3   | 156     | .00  |
| ProcDur       | Based on Mean                        | 51.902              | 3   | 156     | .00  |
|               | Based on Median                      | 50.755              | 3   | 156     | .00  |
|               | Based on Median and with adjusted df | 50.755              | 3   | 39.722  | .00  |
|               | Based on trimmed mean                | 52.013              | 3   | 156     | .00  |
| FixRel        | Based on Mean                        | 1.509               | 3   | 156     | .21  |
|               | Based on Median                      | .713                | 3   | 156     | .54  |
|               | Based on Median and with adjusted df | .713                | 3   | 151.921 | .54  |
|               | Based on trimmed mean                | 1.542               | 3   | 156     | .20  |
| FixIrrel      | Based on Mean                        | 298.977             | 3   | 156     | .00  |
|               | Based on Median                      | 76.942              | 3   | 156     | .00  |
|               | Based on Median and with adjusted df | 76.942              | 3   | 39.345  | .00  |
|               | Based on trimmed mean                | 276.859             | 3   | 156     | .00  |
| AvDurRelFix   | Based on Mean                        | 58.618              | 3   | 156     | .00  |
|               | Based on Median                      | 57.036              | 3   | 156     | .00  |
|               | Based on Median and with adjusted df | 57.036              | 3   | 43.862  | .00  |
|               | Based on trimmed mean                | 58.587              | 3   | 156     | .00  |
| AvDurlrrelFix | Based on Mean                        | 16.250              | 3   | 156     | .00  |
|               | Based on Median                      | 13.143              | 3   | 156     | .00  |
|               | Based on Median and with adjusted df | 13.143              | 3   | 65.124  | .00  |

|                  | Based on trimmed mean                | 15.411 | 3 | 156     | .000 |
|------------------|--------------------------------------|--------|---|---------|------|
| TotSac           | Based on Mean                        | .198   | 3 | 156     | .898 |
|                  | Based on Median                      | .190   | 3 | 156     | .903 |
|                  | Based on Median and with adjusted df | .190   | 3 | 154.877 | .903 |
|                  | Based on trimmed mean                | .197   | 3 | 156     | .898 |
| Sac2Key          | Based on Mean                        | 2.240  | 3 | 156     | .086 |
|                  | Based on Median                      | 2.155  | 3 | 156     | .096 |
|                  | Based on Median and with adjusted df | 2.155  | 3 | 152.386 | .096 |
|                  | Based on trimmed mean                | 2.463  | 3 | 156     | .065 |
| AvAttention      | Based on Mean                        | 4.057  | 3 | 156     | .008 |
|                  | Based on Median                      | 3.549  | 3 | 156     | .016 |
|                  | Based on Median and with adjusted df | 3.549  | 3 | 145.433 | .016 |
|                  | Based on trimmed mean                | 4.106  | 3 | 156     | .008 |
| AvMentWL         | Based on Mean                        | 6.301  | 3 | 156     | .000 |
|                  | Based on Median                      | 6.133  | 3 | 156     | .001 |
|                  | Based on Median and with adjusted df | 6.133  | 3 | 145.357 | .001 |
|                  | Based on trimmed mean                | 6.363  | 3 | 156     | .000 |
| AvFam            | Based on Mean                        | 3.154  | 3 | 156     | .027 |
|                  | Based on Median                      | 2.722  | 3 | 156     | .046 |
|                  | Based on Median and with adjusted df | 2.722  | 3 | 146.077 | .047 |
|                  | Based on trimmed mean                | 3.226  | 3 | 156     | .024 |
| AvSCL            | Based on Mean                        | 1.128  | 3 | 156     | .339 |
|                  | Based on Median                      | .929   | 3 | 156     | .428 |
|                  | Based on Median and with adjusted df | .929   | 3 | 152.973 | .428 |
|                  | Based on trimmed mean                | 1.078  | 3 | 156     | .360 |
| HRVar_RMSSD      | Based on Mean                        | 1.129  | 3 | 156     | .339 |
|                  | Based on Median                      | .553   | 3 | 156     | .647 |
|                  | Based on Median and with adjusted df | .553   | 3 | 152.834 | .647 |
|                  | Based on trimmed mean                | 1.169  | 3 | 156     | .323 |
| HRVar_NN50       | Based on Mean                        | .023   | 3 | 156     | .995 |
|                  | Based on Median                      | .020   | 3 | 156     | .996 |
|                  | Based on Median and with adjusted df | .020   | 3 | 150.189 | .996 |
|                  | Based on trimmed mean                | .021   | 3 | 156     | .996 |
| NASA_MD          | Based on Mean                        | 2.493  | 3 | 156     | .062 |
|                  | Based on Median                      | 2.417  | 3 | 156     | .068 |
|                  | Based on Median and with adjusted df | 2.417  | 3 | 149.784 | .069 |
|                  | Based on trimmed mean                | 2.547  | 3 | 156     | .058 |
| NASA_PD          | Based on Mean                        | 4.192  | 3 | 156     | .007 |
|                  | Based on Median                      | .993   | 3 | 156     | .398 |
|                  | Based on Median and with adjusted df | .993   | 3 | 144.622 | .398 |
|                  | Based on trimmed mean                | 4.082  | 3 | 156     | .008 |
| NASA_TD          | Based on Mean                        | 5.802  | 3 | 156     | .001 |
|                  | Based on Median                      | 2.454  | 3 | 156     | .065 |
|                  | Based on Median and with adjusted df | 2.454  | 3 | 139.426 | .066 |
|                  | Based on trimmed mean                | 5.476  | 3 | 156     | .001 |
| NASA_Performance | Based on Mean                        | 3.258  | 3 | 156     | .023 |

|                  | Based on Median                      | 1.840 | 3 | 156     | .142 |
|------------------|--------------------------------------|-------|---|---------|------|
|                  | Based on Median and with adjusted df | 1.840 | 3 | 135.740 | .143 |
|                  | Based on trimmed mean                | 3.106 | 3 | 156     | .028 |
| NASA_Effort      | Based on Mean                        | 1.640 | 3 | 156     | .182 |
|                  | Based on Median                      | 1.083 | 3 | 156     | .358 |
|                  | Based on Median and with adjusted df | 1.083 | 3 | 126.191 | .359 |
|                  | Based on trimmed mean                | 1.555 | 3 | 156     | .203 |
| NASA_Frustration | Based on Mean                        | 2.096 | 3 | 156     | .103 |
|                  | Based on Median                      | 1.913 | 3 | 156     | .130 |
|                  | Based on Median and with adjusted df | 1.913 | 3 | 113.009 | .132 |
|                  | Based on trimmed mean                | 1.752 | 3 | 156     | .159 |
| NASA_Score       | Based on Mean                        | 5.745 | 3 | 156     | .001 |
|                  | Based on Median                      | 3.766 | 3 | 156     | .012 |
|                  | Based on Median and with adjusted df | 3.766 | 3 | 143.744 | .012 |
|                  | Based on trimmed mean                | 5.629 | 3 | 156     | .001 |