# Summary of parametric statistics analysis for the differences of scores in the second empirical study for students with effective participation

Table 1: Summary of two-way ANOVA results for the differences of scores in the second empirical study for students with effective participation

|  | Sum Sq | Df | F value | Pr(>F) | Sig |
|---|---|---|---|---|---|
| Type.(Intercept) | 65.500 | 1 | 21.839 | 0.000 | |
| Type.Type | 2.788 | 1 | 0.930 | 0.341 | |
| Type.CLRole | 25.915 | 1 | 8.641 | 0.006 | ** |
| Type.Type:CLRole | 0.850 | 1 | 0.283 | 0.598 | |
| Type.Residuals | 116.969 | 39 | | | |

Signif. codes: 0 "**" 0.01 "*" 0.05

Table 2: Descriptive statistics and Tukey post-hoc test results for the differences of scores in the second empirical study for students with effective participation

| | N | mean | lsmean | SE | df | lwr.CI | upr.CI | t.ratio | p.value | p.ajd | g | sig | mag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type.non-gamified | 26 | 1.935 | 1.662 | 0.368 | 39 | 0.918 | 2.407 | | | | | | |
| Type.ont-gamified | 17 | 1.515 | 1.094 | 0.461 | 39 | 0.161 | 2.026 | | | | | | |
| Type.non-gamified - ont-gamified | 43 | 0.420 | 0.569 | 0.590 | | −0.672 | 1.513 | 0.964 | 0.341 | 0.441 | 0.221 | | |
| Type.non-gamified.Apprentice | 18 | 2.372 | 2.372 | 0.408 | 39 | 1.547 | 3.198 | | | | | | |
| Type.ont-gamified.Apprentice | 12 | 2.117 | 2.117 | 0.500 | 39 | 1.106 | 3.129 | | | | | | |
| Type.non-gamified.Apprentice - ont-gamified.Apprentice | 30 | 0.255 | 0.255 | 0.645 | | −1.477 | 1.987 | 0.395 | 0.695 | 0.979 | 0.134 | | |
| Type.non-gamified.Master | 8 | 0.952 | 0.953 | 0.612 | 39 | −0.286 | 2.191 | | | | | | |
| Type.ont-gamified.Master | 5 | 0.070 | 0.070 | 0.774 | 39 | −1.497 | 1.637 | | | | | | |
| Type.non-gamified.Master - ont-gamified.Master | 13 | 0.882 | 0.882 | 0.987 | | −1.767 | 3.532 | 0.894 | 0.377 | 0.808 | 0.597 | | |