## 1 Summaries of Parametric Statistics Analysis for the latent trait estimates of Interest/Enjoyment in the first empirical study

Table 1: Summary of two-way ANOVA results for the latent trait estimates of Interest/Enjoyment in the first empirical study

|                  | Sum Sq | Df | F value | Pr(>F) | Sig |
|------------------|--------|----|---------|--------|-----|
| Type.(Intercept) | 0.421  | 1  | 0.419   | 0.520  |     |
| Type.Type        | 0.946  | 1  | 0.942   | 0.336  |     |
| Type.CLRole      | 0.268  | 1  | 0.267   | 0.607  |     |
| Type.Type:CLRole | 2.003  | 1  | 1.993   | 0.164  |     |
| Type.Residuals   | 52.258 | 52 |         |        |     |

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

Table 2: Descriptive statistics and Tukey post-hoc test results for the latent trait estimates of Interest/Enjoyment in the first empirical study

|  | N  | mean   |        | SE df | дþ | lwr.CI | -     | t.ratio | p.value | p.ajd | 50     | sig | mag |
|--|----|--------|--------|-------|----|--------|-------|---------|---------|-------|--------|-----|-----|
| Type.non-gamified                                      | 28 | -0.217 |        | 0.189 | 52 | -0.597 | 0.163 |         |         |       |        |     |     |
| Type.ont-gamified                                      | 28 | 0.062  |        | 0.190 | 52 | -0.338 | 0.424 |         |         |       |        |     |     |
| Type.non-gamified - ont-gamified                       | 99 | -0.279 | -0.260 | 0.268 |    | -0.816 | 0.259 | -0.970  | 0.336   | 0.303 | -0.274 |     |     |
| Type.non-gamified.Apprentice                           | 14 | -0.097 |        | 0.268 | 52 | -0.635 | 0.441 |         |         |       |        |     |     |
| Type.ont-gamified.Apprentice                           | 13 | -0.215 |        | 0.278 | 52 | -0.773 | 0.343 |         |         |       |        |     |     |
| Type.non-gamified.Apprentice - ont-gamified.Apprentice | 27 | 0.118  |        | 0.386 |    | -0.906 | 1.143 | 0.307   | 0.760   | 0.990 | 0.106  |     |     |
| Type.non-gamified.Master                               | 14 | -0.337 |        | 0.268 | 52 | -0.875 | 0.201 |         |         |       |        |     |     |
| Type.ont-gamified.Master                               | 15 | 0.302  |        | 0.259 | 52 | -0.217 | 0.821 |         |         |       |        |     |     |
| Type.non-gamified.Master - ont-gamified.Master         | 29 | -0.639 |        | 0.373 |    | -1.628 | 0.350 | -1.715  | 0.092   | 0.326 | -0.678 |     |     |

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