## 1 Summaries of Parametric Statistics Analysis for the latent trait estimates of Intrinsic Motivation in the pilot study

Table 1: Summary of two-way ANOVA results for the latent trait estimates of Intrinsic Motivation in the pilot study

|                  | Sum Sq | Df | F value | Pr(>F) | Sig |
|------------------|--------|----|---------|--------|-----|
| Type.(Intercept) | 0.042  | 1  | 0.082   | 0.777  |     |
| Type.Type        | 2.397  | 1  | 4.702   | 0.039  | *   |
| Type.CLRole      | 0.456  | 1  | 0.894   | 0.353  |     |
| Type.Type:CLRole | 0.080  | 1  | 0.156   | 0.696  |     |
| Type.Residuals   | 13.254 | 26 |         |        |     |

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

Table 2: Descriptive statistics and Tukey post-hoc test results for the latent trait estimates of Intrinsic Motivation in the pilot study

|  |    |        |        |            |    |        | Ш      |        |         |       |             |             |      |
|--|----|--------|--------|------------|----|--------|--------|--------|---------|-------|-------------|-------------|------|
|  | Z  | mean   | lsmean | $_{ m SE}$ | df | lwr.CI | upr.CI | tratio | p.value | p.ajd | <i>5</i> .0 | $_{ m sig}$ | mag  |
| Type.non-gamified                                      | 14 | -0.389 | -0.322 | 0.273      | 56 | -0.882 |        |        |         |       |             |             |      |
| Type.ont-gamified                                      | 16 | 0.305  | 0.419  | 0.206      | 26 | -0.004 | 0.843  |        |         |       |             |             |      |
| Type.non-gamified - ont-gamified                       | 30 | -0.694 | -0.741 | 0.342      |    | -1.231 | '      | -2.168 | 0.039   | 0.013 | -0.956      | *           | larg |
| Type.non-gamified.Apprentice                           | 12 | -0.416 | -0.416 | 0.206      | 26 | -0.839 |        |        |         |       |             |             |      |
| Type.ont-gamified.Apprentice                           | 12 | 0.190  | 0.190  | 0.206      | 26 | -0.233 |        |        |         |       |             |             |      |
| Type.non-gamified.Apprentice - ont-gamified.Apprentice | 24 | -0.606 | -0.606 | 0.291      |    | -1.406 |        | -2.079 | 0.048   | 0.186 | -0.818      |             |      |
| Type.non-gamified.Master                               | 2  | -0.228 | -0.228 | 0.505      | 26 | -1.266 |        |        |         |       |             |             |      |
| Type.ont-gamified.Master                               | 4  | 0.649  | 0.649  | 0.357      | 26 | -0.085 |        |        |         |       |             |             |      |
| Type.non-gamified.Master - ont-gamified.Master         | 9  | -0.876 | -0.876 | 0.618      |    | -2.573 |        | -1.417 | 0.168   | 0.500 | -0.991      |             |      |

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