

Summary of parametric statistics analysis for the gains in skill/knowledge estimates in the second empirical study

October 1, 2018

Table 1: Summary of two-way ANOVA results for the gains in skill/knowledge estimates in the second empirical study

	Sum Sq	Df	F value	Pr(>F)	Sig
Type.(Intercept)	0.018	1	0.955	0.334	
Type.Type	0.026	1	1.343	0.253	
Type.CLRole	0.051	1	2.679	0.109	
Type.Type:CLRole	0.049	1	2.540	0.118	
Type.Residuals	0.824	43			

Signif. codes: 0 “***” 0.01 “**” 0.05

Table 2: Descriptive statistics and Tukey post-hoc test results for the gains in skill/knowledge estimates in the second empirical study

	N	mean	lsmean	SE	df	lwr.CI	upr.CI	t.ratio	p.value	p.adj	g	sig	mag
Type.non-gamified	29	0.005	0.004	0.029	43	-0.054	0.062						
Type.ont-gamified	18	-0.008	-0.052	0.039	43	-0.131	0.027						
Type.non-gamified - ont-gamified	47	0.013	0.056	0.049		-0.071	0.097	1.159	0.253	0.752	0.092		
Type.non-gamified.Apprentice	21	0.005	0.005	0.030	43	-0.055	0.066						
Type.ont-gamified.Apprentice	14	0.027	0.027	0.037	43	-0.048	0.101						
Type.non-gamified.Apprentice - ont-gamified.Apprentice	35	-0.021	-0.021	0.048		-0.149	0.106	-0.443	0.660	0.971	-0.145		
Type.non-gamified.Master	8	0.003	0.003	0.049	43	-0.095	0.102						
Type.ont-gamified.Master	4	-0.131	-0.131	0.069	43	-0.270	0.009						
Type.non-gamified.Master - ont-gamified.Master	12	0.134	0.134	0.085		-0.093	0.360	1.580	0.121	0.401	1.010		