

# 1 Summaries of Parametric Statistics Analysis- for the gains in skill/knowledge estimates in the first empirical study

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

	Sum Sq	Df	F value	Pr(>F)	Sig
Type.(Intercept)	9.866	1	291.364	0.000	
Type.Type	0.031	1	0.927	0.340	
Type.CLRole	1.321	1	39.020	0.000	**
Type.Type:CLRole	0.002	1	0.067	0.796	
Type.Residuals	1.693	50			

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 first empirical study

	N	mean	lsmean	SE	df	lwr.CI	upr.CI	t.ratio	p.value	p.adj	g	sig	mag
Type.non-gamified	24	0.419	0.407	0.038	50	0.331	0.482						
Type.ont-gamified	30	0.455	0.455	0.034	50	0.388	0.523						
Type.non-gamified - ont-gamified	54	-0.036	-0.049	0.050		-0.137	0.065	-0.963	0.340	0.478	-0.147		
Type.non-gamified.Apprentice	13	0.558	0.558	0.051	50	0.455	0.660						
Type.ont-gamified.Apprentice	15	0.620	0.620	0.048	50	0.524	0.715						
Type.non-gamified.Apprentice - ont-gamified.Apprentice	28	-0.062	-0.062	0.070		-0.247	0.124	-0.885	0.380	0.813	-0.376		
Type.non-gamified.Master	11	0.255	0.255	0.055	50	0.144	0.367						
Type.ont-gamified.Master	15	0.291	0.291	0.048	50	0.196	0.386						
Type.non-gamified.Master - ont-gamified.Master	26	-0.036	-0.036	0.073		-0.230	0.159	-0.486	0.629	0.962	-0.166		

Signif. codes: 0 ‘\*\*\*’ 0.01 ‘\*’ 0.05