

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

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

	Sum Sq	Df	F value	Pr(>F)	Sig
Type.(Intercept)	0.180	1	0.028	0.868	
Type.Type	70.550	1	10.870	0.002	**
Type.CLRole	60.012	1	9.246	0.004	**
Type.Type:CLRole	0.590	1	0.091	0.764	
Type.Residuals	292.069	45			

Signif. codes: 0 ‘***’ 0.01 ‘**’ 0.05

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

	N	mean	lsmean	SE	df	lwr.CI	upr.CI	t.ratio	p.value	p.adj	g	sig	mag
Type.ont-gamified	23	1.829	1.397	0.577	45	0.234	2.559						
Type.w/o-gamified	26	-0.640	-1.262	0.563	45	-2.397	-0.128						
Type.ont-gamified - w/o-gamified	49	2.469	2.659	0.806		1.000	3.938	3.297	0.002	0.001	0.886	**	large
Type.ont-gamified.Apprentice	16	2.501	2.501	0.637	45	1.218	3.784						
Type.w/o-gamified.Apprentice	19	0.086	0.086	0.584	45	-1.092	1.263						
Type.ont-gamified.Apprentice - w/o-gamified.Apprentice	35	2.416	2.416	0.864		0.110	4.722	2.795	0.008	0.037	0.892	*	large
Type.ont-gamified.Master	7	0.292	0.292	0.963	45	-1.647	2.232						
Type.w/o-gamified.Master	7	-2.610	-2.610	0.963	45	-4.549	-0.671						
Type.ont-gamified.Master - w/o-gamified.Master	14	2.902	2.902	1.362		-0.731	6.535	2.131	0.039	0.159	1.207		