

Statistical Analysis in the pilot study for signed up students

September 30, 2018

Table 1: Two-way ANOVA and Scheirer-Ray-Hare in the pilot study for signed up students

	Sum Sq	Df	F value	Pr(>F)	Sig	Df	Sum Sq	H	p.value	Sig
gain.theta.(Intercept)	147.269	1	32.624	0.000						
gain.theta.Type	0.432	1	0.096	0.759		1	59.062	0.763	0.382	
gain.theta.CLRole	48.137	1	10.664	0.003	**	1	404.890	5.233	0.022	*
gain.theta.Type:CLRole	3.485	1	0.772	0.388		1	61.808	0.799	0.371	
gain.theta.Residuals	117.368	26				26	1718.239			

Signif. codes: 0 '***' 0.01 '**' 0.05

Table 2: Summary of Pair wilcoxon in the pilot study for signed up students

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
gain.theta.Type:CLRole.greater.1	non-gamified.Apprentice	11	5.21	9.00	99	33	2.58	0.003	0.690	large
gain.theta.Type:CLRole.greater.2	non-gamified.Master	3	0.88	2.00	6	33	2.58	0.003	0.690	large
gain.theta.Type:CLRole.two.sided.1	non-gamified.Apprentice	11	5.21	9.00	99	33	2.58	0.005	0.690	large
gain.theta.Type:CLRole.two.sided.2	non-gamified.Master	3	0.88	2.00	6	33	2.58	0.005	0.690	large
gain.theta.Type:CLRole.greater.11	non-gamified.Apprentice	11	5.21	9.91	109	43	1.76	0.041	0.441	medium
gain.theta.Type:CLRole.greater.21	ont-gamified.Master	5	0.75	5.40	27	43	1.76	0.041	0.441	medium