Statistical Analysis in the first study for signed up students

October 1, 2018

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

	Sum Sq	Df	F value	Pr(>F)	Sig	Df	Sum Sq	H	p.value	Sig
gain.theta.(Intercept)	9.866	1	291.364	0.000						
gain.theta.Type	0.031	1	0.927	0.340		1	0.281	0.001	0.975	
gain.theta.CLRole	1.321	1	39.020	0.000	**	1	3459.620	12.558	0.000	**
gain.theta.Type:CLRole	0.002	1	0.067	0.796		1	475.858	1.727	0.189	
gain.theta.Residuals	1.693	50				53	11492.240			

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

Table 2: Summary of Pair wilcoxon in the first 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	13	0.58	19.31	251	160	2.88	0.002	0.544	large
gain.theta.Type:CLRole.greater.2	ont-gamified.Master	15	0.34	10.33	155	160	2.88	0.002	0.544	large
gain.theta.Type:CLRole.two.sided.1	non-gamified.Apprentice	13	0.58	19.31	251	160	2.88	0.003	0.544	large
gain.theta.Type:CLRole.two.sided.2	ont-gamified.Master	15	0.34	10.33	155	160	2.88	0.003	0.544	large
gain.theta.Type:CLRole.less.1	non-gamified.Master	14	0.31	11.64	163	58	−2.05	0.021	0.381	medium
gain.theta.Type:CLRole.less.2	ont-gamified.Apprentice	15	0.66	18.13	272	58	−2.05	0.021	0.381	medium
gain.theta.Type:CLRole.two.sided.11	non-gamified.Master	14	0.31	11.64	163	58	−2.05	0.041	0.381	medium
gain.theta.Type:CLRole.two.sided.21	ont-gamified.Apprentice	15	0.66	18.13	272	58	−2.05	0.041	0.381	medium
gain.theta.Type:CLRole.greater.11	ont-gamified.Apprentice	15	0.66	21.13	317	197	3.50	0.000	0.640	large
gain.theta.Type:CLRole.greater.21	ont-gamified.Master	15	0.34	9.87	148	197	3.50	0.000	0.640	large
gain.theta.Type:CLRole.two.sided.12	ont-gamified.Apprentice	15	0.66	21.13	317	197	3.50	0.000	0.640	large
gain.theta.Type:CLRole.two.sided.22	ont-gamified.Master	15	0.34	9.87	148	197	3.50	0.000	0.640	large