

Summary of nonparametric statistics analysis for Differences of Scores in the second study for signed-up students

Table 1: Summary of Scheirer-Ray-Hare results for Differences of Scores in the second study for signed-up students

	Df	Sum Sq	H	p.value	Sig
difScore					
difScore:Type	1	13.612	0.069	0.792	
difScore:CLRole	1	703.592	3.590	0.058	
difScore:Type:CLRole	1	48.644	0.248	0.618	
difScore:Residuals	44	8446.152			

Signif. codes: 0 ‘***’ 0.01 ‘**’ 0.05

Table 2: Full descriptive statistic of the pair wilcoxon analysis for Differences of Scores in the second study for signed-up students

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type.less.1	non-gamified	29	1.90	24.93	723	288	0.26	0.607	0.038	none
Type.less.2	ont-gamified	19	1.99	23.84	453	288	0.26	0.607	0.038	none
Type.greater.1	non-gamified	29	1.90	24.93	723	288	0.26	0.401	0.038	none
Type.greater.2	ont-gamified	19	1.99	23.84	453	288	0.26	0.401	0.038	none
Type.two.sided.1	non-gamified	29	1.90	24.93	723	288	0.26	0.802	0.038	none
Type.two.sided.2	ont-gamified	19	1.99	23.84	453	288	0.26	0.802	0.038	none
Type:CLRole.less.1	non-gamified.Apprentice	21	1.94	15.95	335	104	0.98	0.838	0.181	small
Type:CLRole.less.2	non-gamified.Master	8	1.70	12.50	100	104	0.98	0.838	0.181	small
Type:CLRole.greater.1	non-gamified.Apprentice	21	1.94	15.95	335	104	0.98	0.174	0.181	small
Type:CLRole.greater.2	non-gamified.Master	8	1.70	12.50	100	104	0.98	0.174	0.181	small
Type:CLRole.two.sided.1	non-gamified.Apprentice	21	1.94	15.95	335	104	0.98	0.349	0.181	small
Type:CLRole.two.sided.2	non-gamified.Master	8	1.70	12.50	100	104	0.98	0.349	0.181	small
Type:CLRole.less.11	non-gamified.Apprentice	21	1.94	18.24	383	152	0.17	0.572	0.028	none
Type:CLRole.less.21	ont-gamified.Apprentice	14	2.36	17.64	247	152	0.17	0.572	0.028	none
Type:CLRole.greater.11	non-gamified.Apprentice	21	1.94	18.24	383	152	0.17	0.441	0.028	none
Type:CLRole.greater.21	ont-gamified.Apprentice	14	2.36	17.64	247	152	0.17	0.441	0.028	none
Type:CLRole.two.sided.11	non-gamified.Apprentice	21	1.94	18.24	383	152	0.17	0.881	0.028	none
Type:CLRole.two.sided.21	ont-gamified.Apprentice	14	2.36	17.64	247	152	0.17	0.881	0.028	none
Type:CLRole.less.12	non-gamified.Apprentice	21	1.94	14.62	307	76	1.53	0.940	0.300	small
Type:CLRole.less.22	ont-gamified.Master	5	0.73	8.80	44	76	1.53	0.940	0.300	small
Type:CLRole.greater.12	non-gamified.Apprentice	21	1.94	14.62	307	76	1.53	0.069	0.300	small
Type:CLRole.greater.22	ont-gamified.Master	5	0.73	8.80	44	76	1.53	0.069	0.300	small
Type:CLRole.two.sided.12	non-gamified.Apprentice	21	1.94	14.62	307	76	1.53	0.138	0.300	small
Type:CLRole.two.sided.22	ont-gamified.Master	5	0.73	8.80	44	76	1.53	0.138	0.300	small
Type:CLRole.less.13	non-gamified.Master	8	1.70	8.88	71	35	-1.43	0.083	0.306	medium
Type:CLRole.less.23	ont-gamified.Apprentice	14	2.36	13.00	182	35	-1.43	0.083	0.306	medium
Type:CLRole.greater.13	non-gamified.Master	8	1.70	8.88	71	35	-1.43	0.927	0.306	medium
Type:CLRole.greater.23	ont-gamified.Apprentice	14	2.36	13.00	182	35	-1.43	0.927	0.306	medium
Type:CLRole.two.sided.13	non-gamified.Master	8	1.70	8.88	71	35	-1.43	0.165	0.306	medium
Type:CLRole.two.sided.23	ont-gamified.Apprentice	14	2.36	13.00	182	35	-1.43	0.165	0.306	medium
Type:CLRole.less.14	non-gamified.Master	8	1.70	7.62	61	25	0.73	0.782	0.203	small
Type:CLRole.less.24	ont-gamified.Master	5	0.73	6.00	30	25	0.73	0.782	0.203	small
Type:CLRole.greater.14	non-gamified.Master	8	1.70	7.62	61	25	0.73	0.262	0.203	small
Type:CLRole.greater.24	ont-gamified.Master	5	0.73	6.00	30	25	0.73	0.262	0.203	small
Type:CLRole.two.sided.14	non-gamified.Master	8	1.70	7.62	61	25	0.73	0.524	0.203	small
Type:CLRole.two.sided.24	ont-gamified.Master	5	0.73	6.00	30	25	0.73	0.524	0.203	small
Type:CLRole.less.15	ont-gamified.Apprentice	14	2.36	11.21	157	52	1.57	0.947	0.361	medium
Type:CLRole.less.25	ont-gamified.Master	5	0.73	6.60	33	52	1.57	0.947	0.361	medium
Type:CLRole.greater.15	ont-gamified.Apprentice	14	2.36	11.21	157	52	1.57	0.065	0.361	medium
Type:CLRole.greater.25	ont-gamified.Master	5	0.73	6.60	33	52	1.57	0.065	0.361	medium

Table 2: *(continued)*

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.two.sided.15	ont-gamified.Apprentice	14	2.36	11.21	157	52	1.57	0.130	0.361	medium
Type:CLRole.two.sided.25	ont-gamified.Master	5	0.73	6.60	33	52	1.57	0.130	0.361	medium