Summary of nonparametric statistics analysis for Intrinsic Motivation score in the pilot study for signed up students

Table 1: Summary of Scheirer-Ray-Hare results for Intrinsic Motivation score in the pilot study for signed up students

	Df	Sum Sq	H	p.value	Sig
Type					
Type:Type	1	450.536	5.813	0.016	*
Type:CLRole	1	3.040	0.039	0.843	
Type:Type:CLRole	1	23.758	0.307	0.580	
Type:Residuals	26	1770.167			

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

Table 2: Descriptive statistic of the pair wilcoxon analysis for Intrinsic Motivation score in the pilot study for signed up students

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type.less.1	non-gamified	14	4.09	11.36	159	54	−2.41	0.008	0.440	medium
Type.less.2	ont-gamified	16	4.91	19.12	306	54	−2.41	0.008	0.440	medium
Type.two.sided.1	non-gamified	14	4.09	11.36	159	54	−2.41	0.015	0.440	medium
Type.two.sided.2	ont-gamified	16	4.91	19.12	306	54	−2.41	0.015	0.440	medium
Type:CLRole.less.1	non-gamified.Apprentice	12	4.21	9.75	117	39	−1.91	0.030	0.389	medium
Type:CLRole.less.2	ont-gamified.Apprentice	12	4.91	15.25	183	39	−1.91	0.030	0.389	medium

Table 3: Full descriptive statistic of the pair wilcoxon analysis for Intrinsic Motivation score in the pilot study for signed up students

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type.less.1	non-gamified	14	4.09	11.36	159	54	−2.41	0.008	0.440	medium
Type.less.2	ont-gamified	16	4.91	19.12	306	54	−2.41	0.008	0.440	medium
Type.greater.1	non-gamified	14	4.09	11.36	159	54	−2.41	0.993	0.440	medium
Type.greater.2	ont-gamified	16	4.91	19.12	306	54	−2.41	0.993	0.440	medium
Type.two.sided.1	non-gamified	14	4.09	11.36	159	54	−2.41	0.015	0.440	medium
Type.two.sided.2	ont-gamified	16	4.91	19.12	306	54	−2.41	0.015	0.440	medium
Type:CLRole.less.1	non-gamified.Apprentice	12	4.21	7.58	91	13	0.18	0.604	0.049	none
Type:CLRole.less.2	non-gamified.Master	2	3.99	7.00	14	13	0.18	0.604	0.049	none
Type:CLRole.greater.1	non-gamified.Apprentice	12	4.21	7.58	91	13	0.18	0.462	0.049	none
Type:CLRole.greater.2	non-gamified.Master	2	3.99	7.00	14	13	0.18	0.462	0.049	none
Type:CLRole.two.sided.1	non-gamified.Apprentice	12	4.21	7.58	91	13	0.18	0.923	0.049	none
Type:CLRole.two.sided.2	non-gamified.Master	2	3.99	7.00	14	13	0.18	0.923	0.049	none
Type:CLRole.less.11	non-gamified.Apprentice	12	4.21	9.75	117	39	−1.91	0.030	0.389	medium
Type:CLRole.less.21	ont-gamified.Apprentice	12	4.91	15.25	183	39	−1.91	0.030	0.389	medium
Type:CLRole.greater.11	non-gamified.Apprentice	12	4.21	9.75	117	39	−1.91	0.974	0.389	medium
Type:CLRole.greater.21	ont-gamified.Apprentice	12	4.91	15.25	183	39	−1.91	0.974	0.389	medium
Type:CLRole.two.sided.11	non-gamified.Apprentice	12	4.21	9.75	117	39	−1.91	0.060	0.389	medium
Type:CLRole.two.sided.21	ont-gamified.Apprentice	12	4.91	15.25	183	39	−1.91	0.060	0.389	medium
Type:CLRole.less.12	non-gamified.Apprentice	12	4.21	7.33	88	10	−1.70	0.052	0.424	medium
Type:CLRole.less.22	ont-gamified.Master	4	5.12	12.00	48	10	−1.70	0.052	0.424	medium
Type:CLRole.greater.12	non-gamified.Apprentice	12	4.21	7.33	88	10	−1.70	0.961	0.424	medium
Type:CLRole.greater.22	ont-gamified.Master	4	5.12	12.00	48	10	−1.70	0.961	0.424	medium
Type:CLRole.two.sided.12	non-gamified.Apprentice	12	4.21	7.33	88	10	−1.70	0.103	0.424	medium
Type:CLRole.two.sided.22	ont-gamified.Master	4	5.12	12.00	48	10	−1.70	0.103	0.424	medium
Type:CLRole.less.13	non-gamified.Master	2	3.99	4.00	8	5	−1.28	0.132	0.342	medium
Type:CLRole.less.23	ont-gamified.Apprentice	12	4.91	8.08	97	5	−1.28	0.132	0.342	medium
Type:CLRole.greater.13	non-gamified.Master	2	3.99	4.00	8	5	−1.28	0.901	0.342	medium
Type:CLRole.greater.23	ont-gamified.Apprentice	12	4.91	8.08	97	5	−1.28	0.901	0.342	medium
Type:CLRole.two.sided.13	non-gamified.Master	2	3.99	4.00	8	5	−1.28	0.264	0.342	medium
Type:CLRole.two.sided.23	ont-gamified.Apprentice	12	4.91	8.08	97	5	−1.28	0.264	0.342	medium
Type:CLRole.less.14	non-gamified.Master	2	3.99	1.50	3	0	−1.85	0.067	0.756	large
Type:CLRole.less.24	ont-gamified.Master	4	5.12	4.50	18	0	−1.85	0.067	0.756	large
Type:CLRole.greater.14	non-gamified.Master	2	3.99	1.50	3	0	−1.85	1.000	0.756	large
Type:CLRole.greater.24	ont-gamified.Master	4	5.12	4.50	18	0	−1.85	1.000	0.756	large
Type:CLRole.two.sided.14	non-gamified.Master	2	3.99	1.50	3	0	−1.85	0.133	0.756	large
Type:CLRole.two.sided.24	ont-gamified.Master	4	5.12	4.50	18	0	−1.85	0.133	0.756	large
Type:CLRole.less.15	ont-gamified.Apprentice	12	4.91	8.17	98	20	−0.49	0.342	0.121	small
Type:CLRole.less.25	ont-gamified.Master	4	5.12	9.50	38	20	−0.49	0.342	0.121	small
Type:CLRole.greater.15	ont-gamified.Apprentice	12	4.91	8.17	98	20	−0.49	0.701	0.121	small
Type:CLRole.greater.25	ont-gamified.Master	4	5.12	9.50	38	20	−0.49	0.701	0.121	small

Table 3: *(continued)*

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.two.sided.15	ont-gamified.Apprentice	12	4.91	8.17	98	20	−0.49	0.684	0.121	small
Type:CLRole.two.sided.25	ont-gamified.Master	4	5.12	9.50	38	20	−0.49	0.684	0.121	small

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.two.sided.15	ont-gamified.Apprentice	12	4.91	8.17	98	20	−0.49	0.684	0.121	small
Type:CLRole.two.sided.25	ont-gamified.Master	4	5.12	9.50	38	20	−0.49	0.684	0.121	small