Summary of nonparametric statistics analysis for the scores of Intrinsic Motivation in the first study for signed up students

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

	Df	Sum Sq	H	p.value	Sig
Type					
Type:Type	1	2053.350	6.733	0.009	**
Type:CLRole	1	0.008	0.000	0.996	
Type:Type:CLRole	1	35.806	0.117	0.732	
Type:Residuals	56	15904.336			

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

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

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type.less.1	non-gamified	30	5.03	24.65	739.5	274.5	−2.59	0.004	0.335	medium
Type.less.2	ont-gamified	30	5.63	36.35	1090.5	274.5	−2.59	0.004	0.335	medium
Type.two.sided.1	non-gamified	30	5.03	24.65	739.5	274.5	−2.59	0.009	0.335	medium
Type.two.sided.2	ont-gamified	30	5.63	36.35	1090.5	274.5	−2.59	0.009	0.335	medium
Type:CLRole.less.1	non-gamified.Apprentice	14	5.10	12.14	170.0	65.0	−1.75	0.042	0.324	medium
Type:CLRole.less.2	ont-gamified.Master	15	5.62	17.67	265.0	65.0	−1.75	0.042	0.324	medium
Type:CLRole.less.11	non-gamified.Master	16	5.00	13.19	211.0	75.0	−1.78	0.038	0.320	medium
Type:CLRole.less.21	ont-gamified.Apprentice	15	5.72	19.00	285.0	75.0	−1.78	0.038	0.320	medium
Type:CLRole.less.12	non-gamified.Master	16	5.00	12.38	198.0	62.0	−2.29	0.010	0.412	medium
Type:CLRole.less.22	ont-gamified.Master	15	5.62	19.87	298.0	62.0	−2.29	0.010	0.412	medium
Type:CLRole.two.sided.1	non-gamified.Master	16	5.00	12.38	198.0	62.0	−2.29	0.021	0.412	medium
Type:CLRole.two.sided.2	ont-gamified.Master	15	5.62	19.87	298.0	62.0	−2.29	0.021	0.412	medium

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

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type.less.1	non-gamified	30	5.03	24.65	739.5	274.5	−2.59	0.004	0.335	medium
Type.less.2	ont-gamified	30	5.63	36.35	1090.5	274.5	−2.59	0.004	0.335	medium
Type.greater.1	non-gamified	30	5.03	24.65	739.5	274.5	−2.59	0.996	0.335	medium
Type.greater.2	ont-gamified	30	5.63	36.35	1090.5	274.5	−2.59	0.996	0.335	medium
Type.two.sided.1	non-gamified	30	5.03	24.65	739.5	274.5	−2.59	0.009	0.335	medium
Type.two.sided.2	ont-gamified	30	5.63	36.35	1090.5	274.5	−2.59	0.009	0.335	medium
Type:CLRole.less.1	non-gamified.Apprentice	14	5.10	15.64	219.0	114.0	0.08	0.537	0.015	none
Type:CLRole.less.2	non-gamified.Master	16	5.00	15.38	246.0	114.0	0.08	0.537	0.015	none
Type:CLRole.greater.1	non-gamified.Apprentice	14	5.10	15.64	219.0	114.0	0.08	0.471	0.015	none
Type:CLRole.greater.2	non-gamified.Master	16	5.00	15.38	246.0	114.0	0.08	0.471	0.015	none
Type:CLRole.two.sided.1	non-gamified.Apprentice	14	5.10	15.64	219.0	114.0	0.08	0.943	0.015	none
Type:CLRole.two.sided.2	non-gamified.Master	16	5.00	15.38	246.0	114.0	0.08	0.943	0.015	none
Type:CLRole.less.11	non-gamified.Apprentice	14	5.10	12.68	177.5	72.5	−1.42	0.081	0.263	small
Type:CLRole.less.21	ont-gamified.Apprentice	15	5.72	17.17	257.5	72.5	−1.42	0.081	0.263	small
Type:CLRole.greater.11	non-gamified.Apprentice	14	5.10	12.68	177.5	72.5	−1.42	0.923	0.263	small
Type:CLRole.greater.21	ont-gamified.Apprentice	15	5.72	17.17	257.5	72.5	−1.42	0.923	0.263	small
Type:CLRole.two.sided.11	non-gamified.Apprentice	14	5.10	12.68	177.5	72.5	−1.42	0.162	0.263	small
Type:CLRole.two.sided.21	ont-gamified.Apprentice	15	5.72	17.17	257.5	72.5	−1.42	0.162	0.263	small
Type:CLRole.less.12	non-gamified.Apprentice	14	5.10	12.14	170.0	65.0	−1.75	0.042	0.324	medium
Type:CLRole.less.22	ont-gamified.Master	15	5.62	17.67	265.0	65.0	−1.75	0.042	0.324	medium
Type:CLRole.greater.12	non-gamified.Apprentice	14	5.10	12.14	170.0	65.0	−1.75	0.962	0.324	medium
Type:CLRole.greater.22	ont-gamified.Master	15	5.62	17.67	265.0	65.0	−1.75	0.962	0.324	medium
Type:CLRole.two.sided.12	non-gamified.Apprentice	14	5.10	12.14	170.0	65.0	−1.75	0.085	0.324	medium
Type:CLRole.two.sided.22	ont-gamified.Master	15	5.62	17.67	265.0	65.0	−1.75	0.085	0.324	medium
Type:CLRole.less.13	non-gamified.Master	16	5.00	13.19	211.0	75.0	−1.78	0.038	0.320	medium
Type:CLRole.less.23	ont-gamified.Apprentice	15	5.72	19.00	285.0	75.0	−1.78	0.038	0.320	medium
Type:CLRole.greater.13	non-gamified.Master	16	5.00	13.19	211.0	75.0	−1.78	0.963	0.320	medium
Type:CLRole.greater.23	ont-gamified.Apprentice	15	5.72	19.00	285.0	75.0	−1.78	0.963	0.320	medium
Type:CLRole.two.sided.13	non-gamified.Master	16	5.00	13.19	211.0	75.0	−1.78	0.077	0.320	medium
Type:CLRole.two.sided.23	ont-gamified.Apprentice	15	5.72	19.00	285.0	75.0	−1.78	0.077	0.320	medium
Type:CLRole.less.14	non-gamified.Master	16	5.00	12.38	198.0	62.0	−2.29	0.010	0.412	medium
Type:CLRole.less.24	ont-gamified.Master	15	5.62	19.87	298.0	62.0	−2.29	0.010	0.412	medium
Type:CLRole.greater.14	non-gamified.Master	16	5.00	12.38	198.0	62.0	−2.29	0.990	0.412	medium
Type:CLRole.greater.24	ont-gamified.Master	15	5.62	19.87	298.0	62.0	−2.29	0.990	0.412	medium
Type:CLRole.two.sided.14	non-gamified.Master	16	5.00	12.38	198.0	62.0	−2.29	0.021	0.412	medium
Type:CLRole.two.sided.24	ont-gamified.Master	15	5.62	19.87	298.0	62.0	−2.29	0.021	0.412	medium
Type:CLRole.less.15	ont-gamified.Apprentice	15	5.72	15.40	231.0	111.0	−0.06	0.484	0.011	none
Type:CLRole.less.25	ont-gamified.Master	15	5.62	15.60	234.0	111.0	−0.06	0.484	0.011	none
Type:CLRole.greater.15	ont-gamified.Apprentice	15	5.72	15.40	231.0	111.0	−0.06	0.533	0.011	none
Type:CLRole.greater.25	ont-gamified.Master	15	5.62	15.60	234.0	111.0	−0.06	0.533	0.011	none

Table 3: *(continued)*

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.two.sided.15	ont-gamified.Apprentice	15	5.72	15.40	231.0	111.0	−0.06	0.967	0.011	none
Type:CLRole.two.sided.25	ont-gamified.Master	15	5.62	15.60	234.0	111.0	−0.06	0.967	0.011	none

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.two.sided.15	ont-gamified.Apprentice	15	5.72	15.40	231.0	111.0	−0.06	0.967	0.011	none
Type:CLRole.two.sided.25	ont-gamified.Master	15	5.62	15.60	234.0	111.0	−0.06	0.967	0.011	none