Summary of nonparametric statistics analysis for the scores of Intrinsic Motivation in the first study for students with effective participation

Table 1: Summary of Scheirer-Ray-Hare results for the scores of Intrinsic Motivation in the first study for students with effective participation

	Df	Sum Sq	H	p.value	Sig
Type					
Type:Type	1	678.943	3.464	0.063	
Type:CLRole	1	96.333	0.491	0.483	
Type:Type:CLRole	1	60.952	0.311	0.577	
Type:Residuals	44	8375.771			

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 students with effective participation

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type.less.1	non-gamified	20	5.20	20.05	401	191	−1.86	0.032	0.269	small
Type.less.2	ont-gamified	28	5.63	27.68	775	191	−1.86	0.032	0.269	small
Type:CLRole.less.1	non-gamified.Master	10	4.96	9.40	94	39	−1.82	0.037	0.371	medium
Type:CLRole.less.2	ont-gamified.Apprentice	14	5.72	14.71	206	39	−1.82	0.037	0.371	medium
Type:CLRole.less.11	non-gamified.Master	10	4.96	9.00	90	35	−2.05	0.021	0.418	medium
Type:CLRole.less.21	ont-gamified.Master	14	5.52	15.00	210	35	−2.05	0.021	0.418	medium
Type:CLRole.two.sided.1	non-gamified.Master	10	4.96	9.00	90	35	−2.05	0.042	0.418	medium
Type:CLRole.two.sided.2	ont-gamified.Master	14	5.52	15.00	210	35	−2.05	0.042	0.418	medium

Table 3: Full descriptive statistic of the pair wilcoxon analysis for the scores of Intrinsic Motivation in the first study for students with effective participation

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type.less.1	non-gamified	20	5.20	20.05	401	191	−1.86	0.032	0.269	small
Type.less.2	ont-gamified	28	5.63	27.68	775	191	−1.86	0.032	0.269	small
Type.greater.1	non-gamified	20	5.20	20.05	401	191	−1.86	0.970	0.269	small
Type.greater.2	ont-gamified	28	5.63	27.68	775	191	−1.86	0.970	0.269	small
Type.two.sided.1	non-gamified	20	5.20	20.05	401	191	−1.86	0.064	0.269	small
Type.two.sided.2	ont-gamified	28	5.63	27.68	775	191	−1.86	0.064	0.269	small
Type:CLRole.less.1	non-gamified.Apprentice	10	5.54	11.10	111	56	0.45	0.685	0.101	small
Type:CLRole.less.2	non-gamified.Master	10	4.96	9.90	99	56	0.45	0.685	0.101	small
Type:CLRole.greater.1	non-gamified.Apprentice	10	5.54	11.10	111	56	0.45	0.342	0.101	small
Type:CLRole.greater.2	non-gamified.Master	10	4.96	9.90	99	56	0.45	0.342	0.101	small
Type:CLRole.two.sided.1	non-gamified.Apprentice	10	5.54	11.10	111	56	0.45	0.684	0.101	small
Type:CLRole.two.sided.2	non-gamified.Master	10	4.96	9.90	99	56	0.45	0.684	0.101	small
Type:CLRole.less.11	non-gamified.Apprentice	10	5.54	11.30	113	58	−0.70	0.254	0.143	small
Type:CLRole.less.21	ont-gamified.Apprentice	14	5.72	13.36	187	58	−0.70	0.254	0.143	small
Type:CLRole.greater.11	non-gamified.Apprentice	10	5.54	11.30	113	58	−0.70	0.764	0.143	small
Type:CLRole.greater.21	ont-gamified.Apprentice	14	5.72	13.36	187	58	−0.70	0.764	0.143	small
Type:CLRole.two.sided.11	non-gamified.Apprentice	10	5.54	11.30	113	58	−0.70	0.508	0.143	small
Type:CLRole.two.sided.21	ont-gamified.Apprentice	14	5.72	13.36	187	58	−0.70	0.508	0.143	small
Type:CLRole.less.12	non-gamified.Apprentice	10	5.54	11.40	114	59	−0.64	0.273	0.131	small
Type:CLRole.less.22	ont-gamified.Master	14	5.52	13.29	186	59	−0.64	0.273	0.131	small
Type:CLRole.greater.12	non-gamified.Apprentice	10	5.54	11.40	114	59	−0.64	0.746	0.131	small
Type:CLRole.greater.22	ont-gamified.Master	14	5.52	13.29	186	59	−0.64	0.746	0.131	small
Type:CLRole.two.sided.12	non-gamified.Apprentice	10	5.54	11.40	114	59	−0.64	0.546	0.131	small
Type:CLRole.two.sided.22	ont-gamified.Master	14	5.52	13.29	186	59	−0.64	0.546	0.131	small
Type:CLRole.less.13	non-gamified.Master	10	4.96	9.40	94	39	−1.82	0.037	0.371	medium
Type:CLRole.less.23	ont-gamified.Apprentice	14	5.72	14.71	206	39	−1.82	0.037	0.371	medium
Type:CLRole.greater.13	non-gamified.Master	10	4.96	9.40	94	39	−1.82	0.968	0.371	medium
Type:CLRole.greater.23	ont-gamified.Apprentice	14	5.72	14.71	206	39	−1.82	0.968	0.371	medium
Type:CLRole.two.sided.13	non-gamified.Master	10	4.96	9.40	94	39	−1.82	0.074	0.371	medium
Type:CLRole.two.sided.23	ont-gamified.Apprentice	14	5.72	14.71	206	39	−1.82	0.074	0.371	medium
Type:CLRole.less.14	non-gamified.Master	10	4.96	9.00	90	35	−2.05	0.021	0.418	medium
Type:CLRole.less.24	ont-gamified.Master	14	5.52	15.00	210	35	−2.05	0.021	0.418	medium
Type:CLRole.greater.14	non-gamified.Master	10	4.96	9.00	90	35	−2.05	0.982	0.418	medium
Type:CLRole.greater.24	ont-gamified.Master	14	5.52	15.00	210	35	−2.05	0.982	0.418	medium
Type:CLRole.two.sided.14	non-gamified.Master	10	4.96	9.00	90	35	−2.05	0.042	0.418	medium
Type:CLRole.two.sided.24	ont-gamified.Master	14	5.52	15.00	210	35	−2.05	0.042	0.418	medium
Type:CLRole.less.15	ont-nomified.Apprentice	14	5.72	15.07	211	106	0.37	0.650	0.069	none
Type:CLRole.less.25	ont-gamified.Master	14	5.52	13.93	195	106	0.37	0.650	0.069	none
Type:CLRole.greater.15	ont-gamified.Apprentice	14	5.72	15.07	211	106	0.37	0.367	0.069	none
Type:CLRole.greater.25	ont-gamified.Master	14	5.52	13.93	195	106	0.37	0.367	0.069	none

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.two.sided.15	ont-gamified.Apprentice	14	5.72	15.07	211	106	0.37	0.734	0.069	none
Type:CLRole.two.sided.25	ont-gamified.Master	14	5.52	13.93	195	106	0.37	0.734	0.069	none