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

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

	Df	Sum Sq	H	p.value	Sig
Type					
Type:Type	1	619.286	3.160	0.075	
Type:CLRole	1	234.083	1.194	0.274	
Type:Type:CLRole	1	44.688	0.228	0.633	
Type:Residuals	44	8313.943			

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

Table 2: Descriptive statistic of the pair wilcoxon analysis for the latent trait estimates 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	−0.28	20.25	405	195	−1.78	0.039	0.257	small
Type.less.2	ont-gamified	28	0.00	27.54	771	195	−1.78	0.039	0.257	small
Type:CLRole.less.1	non-gamified.Master	10	−0.47	9.00	90	35	−2.05	0.021	0.418	medium
Type:CLRole.less.2	ont-gamified.Apprentice	14	0.30	15.00	210	35	−2.05	0.021	0.418	medium
Type:CLRole.two.sided.1	non-gamified.Master	10	−0.47	9.00	90	35	−2.05	0.042	0.418	medium
Type:CLRole.two.sided.2	ont-gamified.Apprentice	14	0.30	15.00	210	35	−2.05	0.042	0.418	medium
Type:CLRole.less.11	non-gamified.Master	10	−0.47	9.50	95	40	−1.76	0.042	0.359	medium
Type:CLRole.less.21	ont-gamified.Master	14	−0.07	14.64	205	40	−1.76	0.042	0.359	medium

Table 3: Full descriptive statistic of the pair wilcoxon analysis for the latent trait estimates 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	−0.28	20.25	405	195	−1.78	0.039	0.257	small
Type.less.2	ont-gamified	28	0.00	27.54	771	195	−1.78	0.039	0.257	small
Type.greater.1	non-gamified	20	−0.28	20.25	405	195	−1.78	0.963	0.257	small
Type.greater.2	ont-gamified	28	0.00	27.54	771	195	−1.78	0.963	0.257	small
Type.two.sided.1	non-gamified	20	−0.28	20.25	405	195	−1.78	0.077	0.257	small
Type.two.sided.2	ont-gamified	28	0.00	27.54	771	195	−1.78	0.077	0.257	small
Type:CLRole.less.1	non-gamified.Apprentice	10	0.18	11.60	116	61	0.83	0.803	0.186	small
Type:CLRole.less.2	non-gamified.Master	10	−0.47	9.40	94	61	0.83	0.803	0.186	small
Type:CLRole.greater.1	non-gamified.Apprentice	10	0.18	11.60	116	61	0.83	0.218	0.186	small
Type:CLRole.greater.2	non-gamified.Master	10	−0.47	9.40	94	61	0.83	0.218	0.186	small
Type:CLRole.two.sided.1	non-gamified.Apprentice	10	0.18	11.60	116	61	0.83	0.436	0.186	small
Type:CLRole.two.sided.2	non-gamified.Master	10	−0.47	9.40	94	61	0.83	0.436	0.186	small
Type:CLRole.less.11	non-gamified.Apprentice	10	0.18	11.00	110	55	−0.88	0.202	0.179	small
Type:CLRole.less.21	ont-gamified.Apprentice	14	0.30	13.57	190	55	−0.88	0.202	0.179	small
Type:CLRole.greater.11	non-gamified.Apprentice	10	0.18	11.00	110	55	−0.88	0.814	0.179	small
Type:CLRole.greater.21	ont-gamified.Apprentice	14	0.30	13.57	190	55	−0.88	0.814	0.179	small
Type:CLRole.two.sided.11	non-gamified.Apprentice	10	0.18	11.00	110	55	−0.88	0.403	0.179	small
Type:CLRole.two.sided.21	ont-gamified.Apprentice	14	0.30	13.57	190	55	−0.88	0.403	0.179	small
Type:CLRole.less.12	non-gamified.Apprentice	10	0.18	12.00	120	65	−0.29	0.398	0.060	none
Type:CLRole.less.22	ont-gamified.Master	14	−0.07	12.86	180	65	−0.29	0.398	0.060	none
Type:CLRole.greater.12	non-gamified.Apprentice	10	0.18	12.00	120	65	−0.29	0.624	0.060	none
Type:CLRole.greater.22	ont-gamified.Master	14	−0.07	12.86	180	65	−0.29	0.624	0.060	none
Type:CLRole.two.sided.12	non-gamified.Apprentice	10	0.18	12.00	120	65	−0.29	0.796	0.060	none
Type:CLRole.two.sided.22	ont-gamified.Master	14	−0.07	12.86	180	65	−0.29	0.796	0.060	none
Type:CLRole.less.13	non-gamified.Master	10	−0.47	9.00	90	35	−2.05	0.021	0.418	medium
Type:CLRole.less.23	ont-gamified.Apprentice	14	0.30	15.00	210	35	−2.05	0.021	0.418	medium
Type:CLRole.greater.13	non-gamified.Master	10	−0.47	9.00	90	35	−2.05	0.982	0.418	medium
Type:CLRole.greater.23	ont-gamified.Apprentice	14	0.30	15.00	210	35	−2.05	0.982	0.418	medium
Type:CLRole.two.sided.13	non-gamified.Master	10	−0.47	9.00	90	35	−2.05	0.042	0.418	medium
Type:CLRole.two.sided.23	ont-gamified.Apprentice	14	0.30	15.00	210	35	−2.05	0.042	0.418	medium
Type:CLRole.less.14	non-gamified.Master	10	−0.47	9.50	95	40	−1.76	0.042	0.359	medium
Type:CLRole.less.24	ont-gamified.Master	14	−0.07	14.64	205	40	−1.76	0.042	0.359	medium
Type:CLRole.greater.14	non-gamified.Master	10	−0.47	9.50	95	40	−1.76	0.963	0.359	medium
Type:CLRole.greater.24	ont-gamified.Master	14	−0.07	14.64	205	40	−1.76	0.963	0.359	medium
Type:CLRole.two.sided.14	non-gamified.Master	10	−0.47	9.50	95	40	−1.76	0.084	0.359	medium
Type:CLRole.two.sided.24	ont-gamified.Master	14	−0.07	14.64	205	40	−1.76	0.084	0.359	medium
Type:CLRole.less.15	ont-gamified.Apprentice	14	0.30	15.36	215	110	0.55	0.714	0.104	small
Type:CLRole.less.25	ont-gamified.Master	14	−0.07	13.64	191	110	0.55	0.714	0.104	small
Type:CLRole.greater.15	ont-gamified.Apprentice	14	0.30	15.36	215	110	0.55	0.301	0.104	small
Type:CLRole.greater.25	ont-gamified.Master	14	−0.07	13.64	191	110	0.55	0.301	0.104	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	14	0.30	15.36	215	110	0.55	0.603	0.104	small
Type:CLRole.two.sided.25	ont-gamified.Master	14	−0.07	13.64	191	110	0.55	0.603	0.104	small