

Summary of nonparametric statistics analysis for the scores of Level of Motivation in the second study for signed-up students

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

	Df	Sum Sq	H	p.value	Sig
Type					
Type:Type	1	247.424	0.869	0.351	
Type:CLRole	1	82.286	0.289	0.591	
Type:Type:CLRole	1	188.551	0.662	0.416	
Type:Residuals	54	15712.740			

Signif. codes: 0 ‘***’ 0.01 ‘**’ 0.05

Table 2: Full descriptive statistic of the pair wilcoxon analysis for the scores of Level of Motivation 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	34	4.27	27.76	944.0	349.0	-0.93	0.178	0.122	small
Type.less.2	ont-gamified	24	4.46	31.96	767.0	349.0	-0.93	0.178	0.122	small
Type.greater.1	non-gamified	34	4.27	27.76	944.0	349.0	-0.93	0.824	0.122	small
Type.greater.2	ont-gamified	24	4.46	31.96	767.0	349.0	-0.93	0.824	0.122	small
Type.two.sided.1	non-gamified	34	4.27	27.76	944.0	349.0	-0.93	0.356	0.122	small
Type.two.sided.2	ont-gamified	24	4.46	31.96	767.0	349.0	-0.93	0.356	0.122	small
Type:CLRole.less.1	non-gamified.Apprentice	23	4.23	16.41	377.5	101.5	-0.92	0.184	0.158	small
Type:CLRole.less.2	non-gamified.Master	11	4.54	19.77	217.5	101.5	-0.92	0.184	0.158	small
Type:CLRole.greater.1	non-gamified.Apprentice	23	4.23	16.41	377.5	101.5	-0.92	0.821	0.158	small
Type:CLRole.greater.2	non-gamified.Master	11	4.54	19.77	217.5	101.5	-0.92	0.821	0.158	small
Type:CLRole.two.sided.1	non-gamified.Apprentice	23	4.23	16.41	377.5	101.5	-0.92	0.367	0.158	small
Type:CLRole.two.sided.2	non-gamified.Master	11	4.54	19.77	217.5	101.5	-0.92	0.367	0.158	small
Type:CLRole.less.11	non-gamified.Apprentice	23	4.23	18.17	418.0	142.0	-1.20	0.118	0.192	small
Type:CLRole.less.21	ont-gamified.Apprentice	16	4.46	22.62	362.0	142.0	-1.20	0.118	0.192	small
Type:CLRole.greater.11	non-gamified.Apprentice	23	4.23	18.17	418.0	142.0	-1.20	0.885	0.192	small
Type:CLRole.greater.21	ont-gamified.Apprentice	16	4.46	22.62	362.0	142.0	-1.20	0.885	0.192	small
Type:CLRole.two.sided.11	non-gamified.Apprentice	23	4.23	18.17	418.0	142.0	-1.20	0.236	0.192	small
Type:CLRole.two.sided.21	ont-gamified.Apprentice	16	4.46	22.62	362.0	142.0	-1.20	0.236	0.192	small
Type:CLRole.less.12	non-gamified.Apprentice	23	4.23	15.30	352.0	76.0	-0.72	0.242	0.130	small
Type:CLRole.less.22	ont-gamified.Master	8	4.50	18.00	144.0	76.0	-0.72	0.242	0.130	small
Type:CLRole.greater.12	non-gamified.Apprentice	23	4.23	15.30	352.0	76.0	-0.72	0.765	0.130	small
Type:CLRole.greater.22	ont-gamified.Master	8	4.50	18.00	144.0	76.0	-0.72	0.765	0.130	small
Type:CLRole.two.sided.12	non-gamified.Apprentice	23	4.23	15.30	352.0	76.0	-0.72	0.484	0.130	small
Type:CLRole.two.sided.22	ont-gamified.Master	8	4.50	18.00	144.0	76.0	-0.72	0.484	0.130	small
Type:CLRole.less.13	non-gamified.Master	11	4.54	13.64	150.0	84.0	-0.20	0.428	0.038	none
Type:CLRole.less.23	ont-gamified.Apprentice	16	4.46	14.25	228.0	84.0	-0.20	0.428	0.038	none
Type:CLRole.greater.13	non-gamified.Master	11	4.54	13.64	150.0	84.0	-0.20	0.582	0.038	none
Type:CLRole.greater.23	ont-gamified.Apprentice	16	4.46	14.25	228.0	84.0	-0.20	0.582	0.038	none
Type:CLRole.two.sided.13	non-gamified.Master	11	4.54	13.64	150.0	84.0	-0.20	0.856	0.038	none
Type:CLRole.two.sided.23	ont-gamified.Apprentice	16	4.46	14.25	228.0	84.0	-0.20	0.856	0.038	none
Type:CLRole.less.14	non-gamified.Master	11	4.54	10.27	113.0	47.0	0.25	0.603	0.057	none
Type:CLRole.less.24	ont-gamified.Master	8	4.50	9.62	77.0	47.0	0.25	0.603	0.057	none
Type:CLRole.greater.14	non-gamified.Master	11	4.54	10.27	113.0	47.0	0.25	0.412	0.057	none
Type:CLRole.greater.24	ont-gamified.Master	8	4.50	9.62	77.0	47.0	0.25	0.412	0.057	none
Type:CLRole.two.sided.14	non-gamified.Master	11	4.54	10.27	113.0	47.0	0.25	0.824	0.057	none
Type:CLRole.two.sided.24	ont-gamified.Master	8	4.50	9.62	77.0	47.0	0.25	0.824	0.057	none
Type:CLRole.less.15	ont-gamified.Apprentice	16	4.46	12.75	204.0	68.0	0.25	0.601	0.050	none
Type:CLRole.less.25	ont-gamified.Master	8	4.50	12.00	96.0	68.0	0.25	0.601	0.050	none
Type:CLRole.greater.15	ont-gamified.Apprentice	16	4.46	12.75	204.0	68.0	0.25	0.411	0.050	none
Type:CLRole.greater.25	ont-gamified.Master	8	4.50	12.00	96.0	68.0	0.25	0.411	0.050	none

Table 2: *(continued)*

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.two.sided.15	ont-gamified.Apprentice	16	4.46	12.75	204.0	68.0	0.25	0.822	0.050	none
Type:CLRole.two.sided.25	ont-gamified.Master	8	4.50	12.00	96.0	68.0	0.25	0.822	0.050	none