

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

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

	Df	Sum Sq	H	p.value	Sig
Type					
Type:Type	1	628.049	2.209	0.137	
Type:CLRole	1	12.385	0.044	0.835	
Type:Type:CLRole	1	311.029	1.094	0.296	
Type:Residuals	54	15253.537			

Signif. codes: 0 ‘***’ 0.01 ‘**’ 0.05

Table 2: Descriptive statistic of the pair wilcoxon analysis for the scores of Attention in the second study for signed-up students

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.less.1	non-gamified.Apprentice	23	3.50	17.35	399	123	-1.75	0.041	0.279	small
Type:CLRole.less.2	ont-gamified.Apprentice	16	4.42	23.81	381	123	-1.75	0.041	0.279	small

Table 3: Full descriptive statistic of the pair wilcoxon analysis for the scores of Attention 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	3.75	26.74	909.0	314.0	-1.49	0.070	0.195	small
Type.less.2	ont-gamified	24	4.25	33.42	802.0	314.0	-1.49	0.070	0.195	small
Type.greater.1	non-gamified	34	3.75	26.74	909.0	314.0	-1.49	0.931	0.195	small
Type.greater.2	ont-gamified	24	4.25	33.42	802.0	314.0	-1.49	0.931	0.195	small
Type.two.sided.1	non-gamified	34	3.75	26.74	909.0	314.0	-1.49	0.139	0.195	small
Type.two.sided.2	ont-gamified	24	4.25	33.42	802.0	314.0	-1.49	0.139	0.195	small
Type:CLRole.less.1	non-gamified.Apprentice	23	3.50	16.52	380.0	104.0	-0.83	0.209	0.142	small
Type:CLRole.less.2	non-gamified.Master	11	4.33	19.55	215.0	104.0	-0.83	0.209	0.142	small
Type:CLRole.greater.1	non-gamified.Apprentice	23	3.50	16.52	380.0	104.0	-0.83	0.796	0.142	small
Type:CLRole.greater.2	non-gamified.Master	11	4.33	19.55	215.0	104.0	-0.83	0.796	0.142	small
Type:CLRole.two.sided.1	non-gamified.Apprentice	23	3.50	16.52	380.0	104.0	-0.83	0.418	0.142	small
Type:CLRole.two.sided.2	non-gamified.Master	11	4.33	19.55	215.0	104.0	-0.83	0.418	0.142	small
Type:CLRole.less.11	non-gamified.Apprentice	23	3.50	17.35	399.0	123.0	-1.75	0.041	0.279	small
Type:CLRole.less.21	ont-gamified.Apprentice	16	4.42	23.81	381.0	123.0	-1.75	0.041	0.279	small
Type:CLRole.greater.11	non-gamified.Apprentice	23	3.50	17.35	399.0	123.0	-1.75	0.960	0.279	small
Type:CLRole.greater.21	ont-gamified.Apprentice	16	4.42	23.81	381.0	123.0	-1.75	0.960	0.279	small
Type:CLRole.two.sided.11	non-gamified.Apprentice	23	3.50	17.35	399.0	123.0	-1.75	0.082	0.279	small
Type:CLRole.two.sided.21	ont-gamified.Apprentice	16	4.42	23.81	381.0	123.0	-1.75	0.082	0.279	small
Type:CLRole.less.12	non-gamified.Apprentice	23	3.50	15.20	349.5	73.5	-0.84	0.208	0.150	small
Type:CLRole.less.22	ont-gamified.Master	8	4.17	18.31	146.5	73.5	-0.84	0.208	0.150	small
Type:CLRole.greater.12	non-gamified.Apprentice	23	3.50	15.20	349.5	73.5	-0.84	0.798	0.150	small
Type:CLRole.greater.22	ont-gamified.Master	8	4.17	18.31	146.5	73.5	-0.84	0.798	0.150	small
Type:CLRole.two.sided.12	non-gamified.Apprentice	23	3.50	15.20	349.5	73.5	-0.84	0.417	0.150	small
Type:CLRole.two.sided.22	ont-gamified.Master	8	4.17	18.31	146.5	73.5	-0.84	0.417	0.150	small
Type:CLRole.less.13	non-gamified.Master	11	4.33	12.59	138.5	72.5	-0.77	0.229	0.148	small
Type:CLRole.less.23	ont-gamified.Apprentice	16	4.42	14.97	239.5	72.5	-0.77	0.229	0.148	small
Type:CLRole.greater.13	non-gamified.Master	11	4.33	12.59	138.5	72.5	-0.77	0.779	0.148	small
Type:CLRole.greater.23	ont-gamified.Apprentice	16	4.42	14.97	239.5	72.5	-0.77	0.779	0.148	small
Type:CLRole.two.sided.13	non-gamified.Master	11	4.33	12.59	138.5	72.5	-0.77	0.457	0.148	small
Type:CLRole.two.sided.23	ont-gamified.Apprentice	16	4.42	14.97	239.5	72.5	-0.77	0.457	0.148	small
Type:CLRole.less.14	non-gamified.Master	11	4.33	10.09	111.0	45.0	0.08	0.540	0.019	none
Type:CLRole.less.24	ont-gamified.Master	8	4.17	9.88	79.0	45.0	0.08	0.540	0.019	none
Type:CLRole.greater.14	non-gamified.Master	11	4.33	10.09	111.0	45.0	0.08	0.476	0.019	none
Type:CLRole.greater.24	ont-gamified.Master	8	4.17	9.88	79.0	45.0	0.08	0.476	0.019	none
Type:CLRole.two.sided.14	non-gamified.Master	11	4.33	10.09	111.0	45.0	0.08	0.951	0.019	none
Type:CLRole.two.sided.24	ont-gamified.Master	8	4.17	9.88	79.0	45.0	0.08	0.951	0.019	none
Type:CLRole.less.15	ont-gamified.Apprentice	16	4.42	13.25	212.0	76.0	0.74	0.771	0.151	small
Type:CLRole.less.25	ont-gamified.Master	8	4.17	11.00	88.0	76.0	0.74	0.771	0.151	small
Type:CLRole.greater.15	ont-gamified.Apprentice	16	4.42	13.25	212.0	76.0	0.74	0.239	0.151	small
Type:CLRole.greater.25	ont-gamified.Master	8	4.17	11.00	88.0	76.0	0.74	0.239	0.151	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	16	4.42	13.25	212.0	76.0	0.74	0.478	0.151	small
Type:CLRole.two.sided.25	ont-gamified.Master	8	4.17	11.00	88.0	76.0	0.74	0.478	0.151	small