

Summary of nonparametric statistics analysis for the latent trait estimates of Pressure/Tension in the third study for signed up students

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Table 1: Summary of Scheirer-Ray-Hare results for the latent trait estimates of Pressure/Tension in the third study for signed up students

	Df	Sum Sq	H	p.value	Sig
Type					
Type:Type	1	0.492	0.002	0.962	
Type:CLRole	1	1711.859	7.804	0.005	**
Type:Type:CLRole	1	40.610	0.185	0.667	
Type:Residuals	47	9215.539			

Signif. codes: 0 “***” 0.01 “**” 0.05

Table 2: Descriptive statistic of the pair wilcoxon analysis for the latent trait estimates of Pressure/Tension in the third study for signed up students

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.greater.1	ont-gamified.Apprentice	15	0.35	15.10	226.5	106.5	2.33	0.009	0.476	medium
Type:CLRole.greater.2	ont-gamified.Master	9	-0.46	8.17	73.5	106.5	2.33	0.009	0.476	medium
Type:CLRole.two.sided.1	ont-gamified.Apprentice	15	0.35	15.10	226.5	106.5	2.33	0.018	0.476	medium
Type:CLRole.two.sided.2	ont-gamified.Master	9	-0.46	8.17	73.5	106.5	2.33	0.018	0.476	medium
Type:CLRole.greater.11	ont-gamified.Apprentice	15	0.35	13.87	208.0	88.0	1.81	0.036	0.378	medium
Type:CLRole.greater.21	w/o-gamified.Master	8	-0.85	8.50	68.0	88.0	1.81	0.036	0.378	medium
Type:CLRole.less.1	ont-gamified.Master	9	-0.46	9.83	88.5	43.5	-2.08	0.019	0.392	medium
Type:CLRole.less.2	w/o-gamified.Apprentice	19	0.22	16.71	317.5	43.5	-2.08	0.019	0.392	medium
Type:CLRole.two.sided.11	ont-gamified.Master	9	-0.46	9.83	88.5	43.5	-2.08	0.037	0.392	medium
Type:CLRole.two.sided.21	w/o-gamified.Apprentice	19	0.22	16.71	317.5	43.5	-2.08	0.037	0.392	medium

Table 3: Full descriptive statistic of the pair wilcoxon analysis for the latent trait estimates of Pressure/Tension in the third study for signed up students

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type.less.1	ont-gamified	24	0.10	25.90	621.5	321.5	-0.05	0.483	0.007	none
Type.less.2	w/o-gamified	27	0.10	26.09	704.5	321.5	-0.05	0.483	0.007	none
Type.greater.1	ont-gamified	24	0.10	25.90	621.5	321.5	-0.05	0.521	0.007	none
Type.greater.2	w/o-gamified	27	0.10	26.09	704.5	321.5	-0.05	0.521	0.007	none
Type.two.sided.1	ont-gamified	24	0.10	25.90	621.5	321.5	-0.05	0.966	0.007	none
Type.two.sided.2	w/o-gamified	27	0.10	26.09	704.5	321.5	-0.05	0.966	0.007	none
Type:CLRole.less.1	ont-gamified.Apprentice	15	0.35	15.10	226.5	106.5	2.33	0.992	0.476	medium
Type:CLRole.less.2	ont-gamified.Master	9	-0.46	8.17	73.5	106.5	2.33	0.992	0.476	medium
Type:CLRole.greater.1	ont-gamified.Apprentice	15	0.35	15.10	226.5	106.5	2.33	0.009	0.476	medium
Type:CLRole.greater.2	ont-gamified.Master	9	-0.46	8.17	73.5	106.5	2.33	0.009	0.476	medium
Type:CLRole.two.sided.1	ont-gamified.Apprentice	15	0.35	15.10	226.5	106.5	2.33	0.018	0.476	medium
Type:CLRole.two.sided.2	ont-gamified.Master	9	-0.46	8.17	73.5	106.5	2.33	0.018	0.476	medium
Type:CLRole.less.11	ont-gamified.Apprentice	15	0.35	18.27	274.0	154.0	0.40	0.657	0.069	none
Type:CLRole.less.21	w/o-gamified.Apprentice	19	0.22	16.89	321.0	154.0	0.40	0.657	0.069	none
Type:CLRole.greater.11	ont-gamified.Apprentice	15	0.35	18.27	274.0	154.0	0.40	0.350	0.069	none
Type:CLRole.greater.21	w/o-gamified.Apprentice	19	0.22	16.89	321.0	154.0	0.40	0.350	0.069	none
Type:CLRole.two.sided.11	ont-gamified.Apprentice	15	0.35	18.27	274.0	154.0	0.40	0.699	0.069	none
Type:CLRole.two.sided.21	w/o-gamified.Apprentice	19	0.22	16.89	321.0	154.0	0.40	0.699	0.069	none
Type:CLRole.less.12	ont-gamified.Apprentice	15	0.35	13.87	208.0	88.0	1.81	0.967	0.378	medium
Type:CLRole.less.22	w/o-gamified.Master	8	-0.85	8.50	68.0	88.0	1.81	0.967	0.378	medium
Type:CLRole.greater.12	ont-gamified.Apprentice	15	0.35	13.87	208.0	88.0	1.81	0.036	0.378	medium
Type:CLRole.greater.22	w/o-gamified.Master	8	-0.85	8.50	68.0	88.0	1.81	0.036	0.378	medium
Type:CLRole.two.sided.12	ont-gamified.Apprentice	15	0.35	13.87	208.0	88.0	1.81	0.072	0.378	medium
Type:CLRole.two.sided.22	w/o-gamified.Master	8	-0.85	8.50	68.0	88.0	1.81	0.072	0.378	medium
Type:CLRole.less.13	ont-gamified.Master	9	-0.46	9.83	88.5	43.5	-2.08	0.019	0.392	medium
Type:CLRole.less.23	w/o-gamified.Apprentice	19	0.22	16.71	317.5	43.5	-2.08	0.019	0.392	medium
Type:CLRole.greater.13	ont-gamified.Master	9	-0.46	9.83	88.5	43.5	-2.08	0.983	0.392	medium
Type:CLRole.greater.23	w/o-gamified.Apprentice	19	0.22	16.71	317.5	43.5	-2.08	0.983	0.392	medium
Type:CLRole.two.sided.13	ont-gamified.Master	9	-0.46	9.83	88.5	43.5	-2.08	0.037	0.392	medium
Type:CLRole.two.sided.23	w/o-gamified.Apprentice	19	0.22	16.71	317.5	43.5	-2.08	0.037	0.392	medium
Type:CLRole.less.14	ont-gamified.Master	9	-0.46	9.00	81.0	36.0	0.00	0.510	0.000	none
Type:CLRole.less.24	w/o-gamified.Master	8	-0.85	9.00	72.0	36.0	0.00	0.510	0.000	none
Type:CLRole.greater.14	ont-gamified.Master	9	-0.46	9.00	81.0	36.0	0.00	0.512	0.000	none
Type:CLRole.greater.24	w/o-gamified.Master	8	-0.85	9.00	72.0	36.0	0.00	0.512	0.000	none
Type:CLRole.two.sided.14	ont-gamified.Master	9	-0.46	9.00	81.0	36.0	0.00	1.000	0.000	none
Type:CLRole.two.sided.24	w/o-gamified.Master	8	-0.85	9.00	72.0	36.0	0.00	1.000	0.000	none
Type:CLRole.less.15	w/o-gamified.Apprentice	19	0.22	15.58	296.0	106.0	1.60	0.946	0.308	medium
Type:CLRole.less.25	w/o-gamified.Master	8	-0.85	10.25	82.0	106.0	1.60	0.946	0.308	medium
Type:CLRole.greater.15	w/o-gamified.Apprentice	19	0.22	15.58	296.0	106.0	1.60	0.057	0.308	medium
Type:CLRole.greater.25	w/o-gamified.Master	8	-0.85	10.25	82.0	106.0	1.60	0.057	0.308	medium

Table 3: *(continued)*

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.two.sided.15	w/o-gamified.Apprentice	19	0.22	15.58	296.0	106.0	1.60	0.114	0.308	medium
Type:CLRole.two.sided.25	w/o-gamified.Master	8	-0.85	10.25	82.0	106.0	1.60	0.114	0.308	medium