

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

	Df	Sum Sq	H	p.value	Sig
Type					
Type:Type	1	504.600	1.737	0.187	
Type:CLRole	1	9.782	0.034	0.854	
Type:Type:CLRole	1	1602.613	5.517	0.019	*
Type:Residuals	56	15021.004			

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 first study for signed up students

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.greater.1	non-gamified.Apprentice	14	0.81	18.82	263.5	158.5	2.43	0.007	0.451	medium
Type:CLRole.greater.2	ont-gamified.Apprentice	15	-0.91	11.43	171.5	158.5	2.43	0.007	0.451	medium
Type:CLRole.two.sided.1	non-gamified.Apprentice	14	0.81	18.82	263.5	158.5	2.43	0.014	0.451	medium
Type:CLRole.two.sided.2	ont-gamified.Apprentice	15	-0.91	11.43	171.5	158.5	2.43	0.014	0.451	medium
Type:CLRole.less.1	ont-gamified.Apprentice	15	-0.91	12.60	189.0	69.0	-1.91	0.028	0.348	medium
Type:CLRole.less.2	ont-gamified.Master	15	0.82	18.40	276.0	69.0	-1.91	0.028	0.348	medium

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

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type.less.1	non-gamified	30	0.37	33.40	1002.0	537.0	1.32	0.906	0.170	small
Type.less.2	ont-gamified	30	-0.01	27.60	828.0	537.0	1.32	0.906	0.170	small
Type.greater.1	non-gamified	30	0.37	33.40	1002.0	537.0	1.32	0.095	0.170	small
Type.greater.2	ont-gamified	30	-0.01	27.60	828.0	537.0	1.32	0.095	0.170	small
Type.two.sided.1	non-gamified	30	0.37	33.40	1002.0	537.0	1.32	0.190	0.170	small
Type.two.sided.2	ont-gamified	30	-0.01	27.60	828.0	537.0	1.32	0.190	0.170	small
Type:CLRole.less.1	non-gamified.Apprentice	14	0.81	18.11	253.5	148.5	1.54	0.939	0.280	small
Type:CLRole.less.2	non-gamified.Master	16	0.18	13.22	211.5	148.5	1.54	0.939	0.280	small
Type:CLRole.greater.1	non-gamified.Apprentice	14	0.81	18.11	253.5	148.5	1.54	0.065	0.280	small
Type:CLRole.greater.2	non-gamified.Master	16	0.18	13.22	211.5	148.5	1.54	0.065	0.280	small
Type:CLRole.two.sided.1	non-gamified.Apprentice	14	0.81	18.11	253.5	148.5	1.54	0.129	0.280	small
Type:CLRole.two.sided.2	non-gamified.Master	16	0.18	13.22	211.5	148.5	1.54	0.129	0.280	small
Type:CLRole.less.11	non-gamified.Apprentice	14	0.81	18.82	263.5	158.5	2.43	0.993	0.451	medium
Type:CLRole.less.21	ont-gamified.Apprentice	15	-0.91	11.43	171.5	158.5	2.43	0.993	0.451	medium
Type:CLRole.greater.11	non-gamified.Apprentice	14	0.81	18.82	263.5	158.5	2.43	0.007	0.451	medium
Type:CLRole.greater.21	ont-gamified.Apprentice	15	-0.91	11.43	171.5	158.5	2.43	0.007	0.451	medium
Type:CLRole.two.sided.11	non-gamified.Apprentice	14	0.81	18.82	263.5	158.5	2.43	0.014	0.451	medium
Type:CLRole.two.sided.21	ont-gamified.Apprentice	15	-0.91	11.43	171.5	158.5	2.43	0.014	0.451	medium
Type:CLRole.less.12	non-gamified.Apprentice	14	0.81	16.57	232.0	127.0	0.97	0.835	0.180	small
Type:CLRole.less.22	ont-gamified.Master	15	0.82	13.53	203.0	127.0	0.97	0.835	0.180	small
Type:CLRole.greater.12	non-gamified.Apprentice	14	0.81	16.57	232.0	127.0	0.97	0.171	0.180	small
Type:CLRole.greater.22	ont-gamified.Master	15	0.82	13.53	203.0	127.0	0.97	0.171	0.180	small
Type:CLRole.two.sided.12	non-gamified.Apprentice	14	0.81	16.57	232.0	127.0	0.97	0.342	0.180	small
Type:CLRole.two.sided.22	ont-gamified.Master	15	0.82	13.53	203.0	127.0	0.97	0.342	0.180	small
Type:CLRole.less.13	non-gamified.Master	16	0.18	17.88	286.0	150.0	1.26	0.897	0.226	small
Type:CLRole.less.23	ont-gamified.Apprentice	15	-0.91	14.00	210.0	150.0	1.26	0.897	0.226	small
Type:CLRole.greater.13	non-gamified.Master	16	0.18	17.88	286.0	150.0	1.26	0.107	0.226	small
Type:CLRole.greater.23	ont-gamified.Apprentice	15	-0.91	14.00	210.0	150.0	1.26	0.107	0.226	small
Type:CLRole.two.sided.13	non-gamified.Master	16	0.18	17.88	286.0	150.0	1.26	0.214	0.226	small
Type:CLRole.two.sided.23	ont-gamified.Apprentice	15	-0.91	14.00	210.0	150.0	1.26	0.214	0.226	small
Type:CLRole.less.14	non-gamified.Master	16	0.18	14.84	237.5	101.5	-0.74	0.234	0.134	small
Type:CLRole.less.24	ont-gamified.Master	15	0.82	17.23	258.5	101.5	-0.74	0.234	0.134	small
Type:CLRole.greater.14	non-gamified.Master	16	0.18	14.84	237.5	101.5	-0.74	0.772	0.134	small
Type:CLRole.greater.24	ont-gamified.Master	15	0.82	17.23	258.5	101.5	-0.74	0.772	0.134	small
Type:CLRole.two.sided.14	non-gamified.Master	16	0.18	14.84	237.5	101.5	-0.74	0.467	0.134	small
Type:CLRole.two.sided.24	ont-gamified.Master	15	0.82	17.23	258.5	101.5	-0.74	0.467	0.134	small
Type:CLRole.less.15	ont-gamified.Apprentice	15	-0.91	12.60	189.0	69.0	-1.91	0.028	0.348	medium
Type:CLRole.less.25	ont-gamified.Master	15	0.82	18.40	276.0	69.0	-1.91	0.028	0.348	medium
Type:CLRole.greater.15	ont-gamified.Apprentice	15	-0.91	12.60	189.0	69.0	-1.91	0.973	0.348	medium
Type:CLRole.greater.25	ont-gamified.Master	15	0.82	18.40	276.0	69.0	-1.91	0.973	0.348	medium

Table 3: *(continued)*

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.two.sided.15	ont-gamified.Apprentice	15	-0.91	12.60	189.0	69.0	-1.91	0.057	0.348	medium
Type:CLRole.two.sided.25	ont-gamified.Master	15	0.82	18.40	276.0	69.0	-1.91	0.057	0.348	medium