

# Summary of nonparametric statistics analysis for the latent trait estimates of Effort/Importance in the pilot study for students with effective participation

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Table 1: Summary of Scheirer-Ray-Hare results for the latent trait estimates of Effort/Importance in the pilot study for students with effective participation

	Df	Sum Sq	H	p.value	Sig
Type					
Type:Type	1	15.482	0.414	0.520	
Type:CLRole	1	16.858	0.450	0.502	
Type:Type:CLRole	1	2.072	0.055	0.814	
Type:Residuals	17	714.087			

Signif. codes: 0 “\*\*\*” 0.01 “\*\*” 0.05

Table 2: Full descriptive statistic of the pair wilcoxon analysis for the latent trait estimates of Effort/Importance in the pilot study for students with effective participation

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type.less.1	non-gamified	7	0.04	12.21	85.5	57.5	0.64	0.745	0.140	small
Type.less.2	ont-gamified	14	-0.12	10.39	145.5	57.5	0.64	0.745	0.140	small
Type.greater.1	non-gamified	7	0.04	12.21	85.5	57.5	0.64	0.277	0.140	small
Type.greater.2	ont-gamified	14	-0.12	10.39	145.5	57.5	0.64	0.277	0.140	small
Type.two.sided.1	non-gamified	7	0.04	12.21	85.5	57.5	0.64	0.552	0.140	small
Type.two.sided.2	ont-gamified	14	-0.12	10.39	145.5	57.5	0.64	0.552	0.140	small
Type.CLRole.less.1	non-gamified.Apprentice	5	0.04	4.00	20.0	5.0	0.00	0.524	0.000	none
Type.CLRole.less.2	non-gamified.Master	2	0.65	4.00	8.0	5.0	0.00	0.524	0.000	none
Type.CLRole.greater.1	non-gamified.Apprentice	5	0.04	4.00	20.0	5.0	0.00	0.524	0.000	none
Type.CLRole.greater.2	non-gamified.Master	2	0.65	4.00	8.0	5.0	0.00	0.524	0.000	none
Type.CLRole.two.sided.1	non-gamified.Apprentice	5	0.04	4.00	20.0	5.0	0.00	1.000	0.000	none
Type.CLRole.two.sided.2	non-gamified.Master	2	0.65	4.00	8.0	5.0	0.00	1.000	0.000	none
Type.CLRole.less.11	non-gamified.Apprentice	5	0.04	8.60	43.0	28.0	0.37	0.651	0.096	none
Type.CLRole.less.21	ont-gamified.Apprentice	10	0.16	7.70	77.0	28.0	0.37	0.651	0.096	none
Type.CLRole.greater.11	non-gamified.Apprentice	5	0.04	8.60	43.0	28.0	0.37	0.371	0.096	none
Type.CLRole.greater.21	ont-gamified.Apprentice	10	0.16	7.70	77.0	28.0	0.37	0.371	0.096	none
Type.CLRole.two.sided.11	non-gamified.Apprentice	5	0.04	8.60	43.0	28.0	0.37	0.736	0.096	none
Type.CLRole.two.sided.21	ont-gamified.Apprentice	10	0.16	7.70	77.0	28.0	0.37	0.736	0.096	none
Type.CLRole.less.12	non-gamified.Apprentice	5	0.04	5.90	29.5	14.5	1.13	0.897	0.375	medium
Type.CLRole.less.22	ont-gamified.Master	4	-0.27	3.88	15.5	14.5	1.13	0.897	0.375	medium
Type.CLRole.greater.12	non-gamified.Apprentice	5	0.04	5.90	29.5	14.5	1.13	0.167	0.375	medium
Type.CLRole.greater.22	ont-gamified.Master	4	-0.27	3.88	15.5	14.5	1.13	0.167	0.375	medium
Type.CLRole.two.sided.12	non-gamified.Apprentice	5	0.04	5.90	29.5	14.5	1.13	0.310	0.375	medium
Type.CLRole.two.sided.22	ont-gamified.Master	4	-0.27	3.88	15.5	14.5	1.13	0.310	0.375	medium
Type.CLRole.less.13	non-gamified.Master	2	0.65	6.75	13.5	10.5	0.11	0.621	0.031	none
Type.CLRole.less.23	ont-gamified.Apprentice	10	0.16	6.45	64.5	10.5	0.11	0.621	0.031	none
Type.CLRole.greater.13	non-gamified.Master	2	0.65	6.75	13.5	10.5	0.11	0.500	0.031	none
Type.CLRole.greater.23	ont-gamified.Apprentice	10	0.16	6.45	64.5	10.5	0.11	0.500	0.031	none
Type.CLRole.two.sided.13	non-gamified.Master	2	0.65	6.75	13.5	10.5	0.11	0.939	0.031	none
Type.CLRole.two.sided.23	ont-gamified.Apprentice	10	0.16	6.45	64.5	10.5	0.11	0.939	0.031	none
Type.CLRole.less.14	non-gamified.Master	2	0.65	3.75	7.5	4.5	0.23	0.667	0.096	none
Type.CLRole.less.24	ont-gamified.Master	4	-0.27	3.38	13.5	4.5	0.23	0.667	0.096	none
Type.CLRole.greater.14	non-gamified.Master	2	0.65	3.75	7.5	4.5	0.23	0.467	0.096	none
Type.CLRole.greater.24	ont-gamified.Master	4	-0.27	3.38	13.5	4.5	0.23	0.467	0.096	none
Type.CLRole.two.sided.14	non-gamified.Master	2	0.65	3.75	7.5	4.5	0.23	0.933	0.096	none
Type.CLRole.two.sided.24	ont-gamified.Master	4	-0.27	3.38	13.5	4.5	0.23	0.933	0.096	none
Type.CLRole.less.15	ont-gamified.Apprentice	10	0.16	7.95	79.5	24.5	0.65	0.779	0.173	small
Type.CLRole.less.25	ont-gamified.Master	4	-0.27	6.38	25.5	24.5	0.65	0.779	0.173	small
Type.CLRole.greater.15	ont-gamified.Apprentice	10	0.16	7.95	79.5	24.5	0.65	0.325	0.173	small
Type.CLRole.greater.25	ont-gamified.Master	4	-0.27	6.38	25.5	24.5	0.65	0.325	0.173	small

Table 2: *(continued)*

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.two.sided.15	ont-gamified.Apprentice	10	0.16	7.95	79.5	24.5	0.65	0.611	0.173	small
Type:CLRole.two.sided.25	ont-gamified.Master	4	−0.27	6.38	25.5	24.5	0.65	0.611	0.173	small