## Summary of nonparametric statistics analysis for Effort/Importance score in the pilot study for signed up students

Table 1: Summary of Scheirer-Ray-Hare results for Effort/Importance score in the pilot study for signed up students

	Df	Sum Sq	Н	p.value	Sig
Type					
Type:Type	1	13.393	0.175	0.676	
Type:CLRole	1	0.069	0.001	0.976	
Type:Type:CLRole	1	7.517	0.098	0.754	
Type:Residuals	26	2201.021			

Signif. codes: 0 "\*\*" 0.01 "\*" 0.05

Table 2: Full descriptive statistic of the pair wilcoxon analysis for Effort/Importance score in the pilot study for signed up students

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type.less.1	non-gamified	14	5.17	16.21	227.0	122.0	0.42	0.663	0.076	none
Type.less.2	ont-gamified	16	5.00	14.88	238.0	122.0	0.42	0.663	0.076	none
Type.greater.1	non-gamified	14	5.17	16.21	227.0	122.0	0.42	0.344	0.076	none
Type.greater.2	ont-gamified	16	5.00	14.88	238.0	122.0	0.42	0.344	0.076	none
Type.two.sided.1	non-gamified	14	5.17	16.21	227.0	122.0	0.42	0.687	0.076	none
Type.two.sided.2	ont-gamified	16	5.00	14.88	238.0	122.0	0.42	0.687	0.076	none
Type:CLRole.less.1	non-gamified.Apprentice	12	5.17	7.38	88.5	10.5	-0.28	0.429	0.074	none
Type:CLRole.less.2	non-gamified.Master	2	5.50	8.25	16.5	10.5	-0.28	0.429	0.074	none
Type:CLRole.greater.1	non-gamified.Apprentice	12	5.17	7.38	88.5	10.5	-0.28	0.615	0.074	none
Type:CLRole.greater.2	non-gamified.Master	2	5.50	8.25	16.5	10.5	-0.28	0.615	0.074	none
Type:CLRole.two.sided.1	non-gamified.Apprentice	12	5.17	7.38	88.5	10.5	-0.28	0.857	0.074	none
Type:CLRole.two.sided.2	non-gamified.Master	2	5.50	8.25	16.5	10.5	-0.28	0.857	0.074	none
Type:CLRole.less.11	non-gamified.Apprentice	12	5.17	12.75	153.0	75.0	0.17	0.573	0.036	none
Type:CLRole.less.21	ont-gamified. Apprentice	12	5.00	12.25	147.0	75.0	0.17	0.573	0.036	none
Type:CLRole.greater.11	non-gamified.Apprentice	12	5.17	12.75	153.0	75.0	0.17	0.438	0.036	none
Type:CLRole.greater.21	ont-gamified. Apprentice	12	5.00	12.25	147.0	75.0	0.17	0.438	0.036	none
Type:CLRole.two.sided.11	non-gamified.Apprentice	12	5.17	12.75	153.0	75.0	0.17	0.875	0.036	none
Type:CLRole.two.sided.21	ont-gamified.Apprentice	12	5.00	12.25	147.0	75.0	0.17	0.875	0.036	none
Type:CLRole.less.12	non-gamified.Apprentice	12	5.17	8.83	106.0	28.0	0.49	0.691	0.122	small
Type:CLRole.less.22	ont-gamified.Master	4	4.67	7.50	30.0	28.0	0.49	0.691	0.122	small
Type:CLRole.greater.12	non-gamified.Apprentice	12	5.17	8.83	106.0	28.0	0.49	0.333	0.122	small
Type:CLRole.greater.22	ont-gamified.Master	4	4.67	7.50	30.0	28.0	0.49	0.333	0.122	small
Type:CLRole.two.sided.12	non-gamified.Apprentice	12	5.17	8.83	106.0	28.0	0.49	0.658	0.122	small
Type:CLRole.two.sided.22	ont-gamified.Master	4	4.67	7.50	30.0	28.0	0.49	0.658	0.122	small
Type:CLRole.less.13	non-gamified.Master	2	5.50	8.75	17.5	14.5	0.46	0.725	0.123	small
Type:CLRole.less.23	ont-gamified. Apprentice	$12^{-}$	5.00	7.29	87.5	14.5	0.46	0.725	0.123	small
Type:CLRole.greater.13	non-gamified.Master	2	5.50	8.75	17.5	14.5	0.46	0.363	0.123	small
Type:CLRole.greater.23	ont-gamified. Apprentice	$1\overline{2}$	5.00	7.29	87.5	14.5	0.46	0.363	0.123	small
Type:CLRole.two.sided.13	non-gamified.Master	2	5.50	8.75	17.5	14.5	0.46	0.703	0.123	small
Type:CLRole.two.sided.23	ont-gamified. Apprentice	$12^{-}$	5.00	7.29	87.5	14.5	0.46	0.703	0.123	small
Type:CLRole.less.14	non-gamified.Master	2	5.50	3.75	7.5	4.5	0.23	0.667	0.096	none
Type:CLRole.less.24	ont-gamified.Master	$\overline{4}$	4.67	3.38	13.5	4.5	0.23	0.667	0.096	none
Type:CLRole.greater.14	non-gamified.Master	2	5.50	3.75	7.5	4.5	0.23	0.467	0.096	none
Type:CLRole.greater.24	ont-gamified.Master	$\frac{2}{4}$	4.67	3.38	13.5	4.5	0.23	0.467	0.096	none
Type:CLRole.two.sided.14	non-gamified.Master	2	5.50	3.75	7.5	4.5	0.23	0.933	0.096	none
Type:CLRole.two.sided.24	ont-gamified.Master	$\frac{2}{4}$	4.67	3.38	13.5	4.5	0.23	0.933	0.096	none
Type:CLRole.less.15	ont-gamified.Apprentice	12	5.00	8.54	102.5	24.5	0.06	0.552	0.015	none
Type:CLRole.less.25	ont-gamified.Master	4	4.67	8.38	33.5	24.5	0.06	0.552	0.015	none
Type:CLRole.greater.15	ont-gamified.Apprentice	12	5.00	8.54	102.5	24.5	0.06	0.512	0.015	none
Type:CLRole.greater.25	ont-gamified.Master	4	4.67	8.38	33.5	$\frac{24.5}{24.5}$	0.06	0.512	0.015	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	12	5.00	8.54	102.5	24.5	0.06	0.982	0.015	none
Type:CLRole.two.sided.25	ont-gamified.Master	4	4.67	8.38	33.5	24.5	0.06	0.982	0.015	none