Summary of nonparametric statistics analysis for the latent trait estimates of Intrinsic Motivation in the first study for signed up students

October 1, 2018

Table 1: Summary of Scheirer-Ray-Hare results for the latent trait estimates of Intrinsic Motivation in the first study for signed up students

	Df	Sum Sq	H	p.value	Sig
Type					
Type:Type	1	2088.600	6.848	0.009	**
Type:CLRole	1	34.127	0.112	0.738	
Type:Type:CLRole	1	10.693	0.035	0.851	
Type:Residuals	56	15861.581			

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

Table 2: Descriptive statistic of the pair wilcoxon analysis for the latent trait estimates of Intrinsic Motivation 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	−0.42	24.60	738	273	−2.62	0.004	0.338	medium
Type.less.2	ont-gamified	30	0.00	36.40	1092	273	−2.62	0.004	0.338	medium
Type.two.sided.1	non-gamified	30	−0.42	24.60	738	273	−2.62	0.008	0.338	medium
Type.two.sided.2	ont-gamified	30	0.00	36.40	1092	273	−2.62	0.008	0.338	medium
Type:CLRole.less.1	non-gamified.Master	16	−0.42	12.50	200	64	−2.21	0.013	0.398	medium
Type:CLRole.less.2	ont-gamified.Apprentice	15	0.29	19.73	296	64	−2.21	0.013	0.398	medium
Type:CLRole.two.sided.1	non-gamified.Master	16	−0.42	12.50	200	64	−2.21	0.027	0.398	medium
Type:CLRole.two.sided.2	ont-gamified.Apprentice	15	0.29	19.73	296	64	−2.21	0.027	0.398	medium
Type:CLRole.less.11	non-gamified.Master	16	−0.42	12.88	206	70	−1.98	0.025	0.355	medium
Type:CLRole.less.21	ont-gamified.Master	15	−0.05	19.33	290	70	−1.98	0.025	0.355	medium
Type:CLRole.two.sided.11	non-gamified.Master	16	−0.42	12.88	206	70	−1.98	0.049	0.355	medium
Type:CLRole.two.sided.21	ont-gamified.Master	15	−0.05	19.33	290	70	−1.98	0.049	0.355	medium

Table 3: Full descriptive statistic of the pair wilcoxon analysis for the latent trait estimates of Intrinsic Motivation 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	−0.42	24.60	738	273	−2.62	0.004	0.338	medium
Type.less.2	ont-gamified	30	0.00	36.40	1092	273	−2.62	0.004	0.338	medium
Type.greater.1	non-gamified	30	−0.42	24.60	738	273	−2.62	0.996	0.338	medium
Type.greater.2	ont-gamified	30	0.00	36.40	1092	273	−2.62	0.996	0.338	medium
Type.two.sided.1	non-gamified	30	−0.42	24.60	738	273	−2.62	0.008	0.338	medium
Type.two.sided.2	ont-gamified	30	0.00	36.40	1092	273	−2.62	0.008	0.338	medium
Type:CLRole.less.1	non-gamified.Apprentice	14	−0.36	15.93	223	118	0.25	0.605	0.046	none
Type:CLRole.less.2	non-gamified.Master	16	−0.42	15.12	242	118	0.25	0.605	0.046	none
Type:CLRole.greater.1	non-gamified.Apprentice	14	−0.36	15.93	223	118	0.25	0.411	0.046	none
Type:CLRole.greater.2	non-gamified.Master	16	−0.42	15.12	242	118	0.25	0.411	0.046	none
Type:CLRole.two.sided.1	non-gamified.Apprentice	14	−0.36	15.93	223	118	0.25	0.822	0.046	none
Type:CLRole.two.sided.2	non-gamified.Master	16	−0.42	15.12	242	118	0.25	0.822	0.046	none
Type:CLRole.less.11	non-gamified.Apprentice	14	−0.36	12.43	174	69	−1.57	0.061	0.292	small
Type:CLRole.less.21	ont-gamified.Apprentice	15	0.29	17.40	261	69	−1.57	0.061	0.292	small
Type:CLRole.greater.11	non-gamified.Apprentice	14	−0.36	12.43	174	69	−1.57	0.944	0.292	small
Type:CLRole.greater.21	ont-gamified.Apprentice	15	0.29	17.40	261	69	−1.57	0.944	0.292	small
Type:CLRole.two.sided.11	non-gamified.Apprentice	14	−0.36	12.43	174	69	−1.57	0.123	0.292	small
Type:CLRole.two.sided.21	ont-gamified.Apprentice	15	0.29	17.40	261	69	−1.57	0.123	0.292	small
Type:CLRole.less.12	non-gamified.Apprentice	14	−0.36	12.50	175	70	−1.53	0.067	0.284	small
Type:CLRole.less.22	ont-gamified.Master	15	−0.05	17.33	260	70	−1.53	0.067	0.284	small
Type:CLRole.greater.12	non-gamified.Apprentice	14	−0.36	12.50	175	70	−1.53	0.939	0.284	small
Type:CLRole.greater.22	ont-gamified.Master	15	−0.05	17.33	260	70	−1.53	0.939	0.284	small
Type:CLRole.two.sided.12	non-gamified.Apprentice	14	−0.36	12.50	175	70	−1.53	0.134	0.284	small
Type:CLRole.two.sided.22	ont-gamified.Master	15	−0.05	17.33	260	70	−1.53	0.134	0.284	small
Type:CLRole.less.13	non-gamified.Master	16	−0.42	12.50	200	64	−2.21	0.013	0.398	medium
Type:CLRole.less.23	ont-gamified.Apprentice	15	0.29	19.73	296	64	−2.21	0.013	0.398	medium
Type:CLRole.greater.13	non-gamified.Master	16	−0.42	12.50	200	64	−2.21	0.988	0.398	medium
Type:CLRole.greater.23	ont-gamified.Apprentice	15	0.29	19.73	296	64	−2.21	0.988	0.398	medium
Type:CLRole.two.sided.13	non-gamified.Master	16	−0.42	12.50	200	64	−2.21	0.027	0.398	medium
Type:CLRole.two.sided.23	ont-gamified.Apprentice	15	0.29	19.73	296	64	−2.21	0.027	0.398	medium
Type:CLRole.less.14	non-gamified.Master	16	−0.42	12.88	206	70	−1.98	0.025	0.355	medium
Type:CLRole.less.24	ont-gamified.Master	15	−0.05	19.33	290	70	−1.98	0.025	0.355	medium
Type:CLRole.greater.14	non-gamified.Master	16	−0.42	12.88	206	70	−1.98	0.978	0.355	medium
Type:CLRole.greater.24	ont-gamified.Master	15	−0.05	19.33	290	70	−1.98	0.978	0.355	medium
Type:CLRole.two.sided.14	non-gamified.Master	16	−0.42	12.88	206	70	−1.98	0.049	0.355	medium
Type:CLRole.two.sided.24	ont-gamified.Master	15	−0.05	19.33	290	70	−1.98	0.049	0.355	medium
Type:CLRole.less.15	ont-gamified.Apprentice	15	0.29	15.60	234	114	0.06	0.533	0.011	none
Type:CLRole.less.25	ont-gamified.Master	15	−0.05	15.40	231	114	0.06	0.533	0.011	none
Type:CLRole.greater.15	ont-gamified.Apprentice	15	0.29	15.60	234	114	0.06	0.484	0.011	none

Table 3: *(continued)*

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.greater.25	ont-gamified.Master	15	−0.05	15.40	231	114	0.06	0.484	0.011	none

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
Type:CLRole.two.sided.15	ont-gamified.Apprentice	15	0.29	15.60	234	114	0.06	0.967	0.011	none
Type:CLRole.two.sided.25	ont-gamified.Master	15	−0.05	15.40	231	114	0.06	0.967	0.011	none