

Global Summary of Statistics Analysis

March 14, 2018

Table 1: Summary of Kruskal-Wallis rank test results

	chi.square	df	p.value	Sig
SpendingTime:LikeFightingGames	3.896	1	0.048	*
SpendingTime:LikeFictionGames	4.649	1	0.031	*
SpendingTime:LikeNovelGames	4.891	1	0.027	*
Interest/Enjoyment:LikeDomainContent	6.133	1	0.013	*
Perceived Choice:LikePuzzleGames	5.834	1	0.016	*
Perceived Competence:AcademicDegree	6.312	2	0.043	*
Perceived Competence:KnownDomainContent	4.257	1	0.039	*
Perceived Competence:LikePlatformerGames	4.960	1	0.026	*
Perceived Competence:LikeNovelGames	4.333	1	0.037	*
Value/Usefulness:LikeDomainContent	4.489	1	0.034	*
Value/Usefulness:LikeShooterGames	4.489	1	0.034	*
Value/Usefulness:LikeStrategyGames	4.302	1	0.038	*
Intrinsic Motivation:LikeDomainContent	4.182	1	0.041	*

GainScore = Improv. Learning Score

Signif. codes: 0 “***” 0.01 “*” 0.05

Table 2: Descriptive statistic of the pair wilcoxon analysis

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p-value	r	magnitude
SpendingTime										
LikeFightingGames	no	33	15	21.82	720.0	159.0	-1.97	0.024	0.285	small
LikeFightingGames	yes	15	27	30.40	456.0	159.0	-1.97	0.024	0.285	small
LikeFictionGames	no	29	15	20.98	608.5	173.5	-2.16	0.015	0.311	medium
LikeFictionGames	yes	19	25	29.87	567.5	173.5	-2.16	0.015	0.311	medium
LikeNovelGames	no	39	15	22.36	872.0	92.0	-2.21	0.013	0.319	medium
LikeNovelGames	yes	9	25	33.78	304.0	92.0	-2.21	0.013	0.319	medium
Interest/Enjoyment										
LikeDomainContent	no	26	4.25	20.25	526.5	175.5	-2.48	0.006	0.354	medium
LikeDomainContent	yes	23	5.50	30.37	698.5	175.5	-2.48	0.006	0.354	medium
Perceived Choice										
LikePuzzleGames	no	19	6.75	16.97	322.5	132.5	-2.42	0.008	0.373	medium
LikePuzzleGames	yes	23	7.00	25.24	580.5	132.5	-2.42	0.008	0.373	medium
Perceived Competence										
AcademicDegree	basic-school	10	3.42	13.60	136.0	81.0	-2.50	0.006	0.376	medium
AcademicDegree	undergraduate	34	4.92	25.12	854.0	81.0	-2.50	0.006	0.376	medium
KnownDomainContent	no	25	4.17	20.88	522.0	197.0	-2.06	0.019	0.295	small
KnownDomainContent	yes	24	5.00	29.29	703.0	197.0	-2.06	0.019	0.295	small
LikePlatformerGames	no	26	4.00	20.73	539.0	188.0	-2.23	0.013	0.318	medium
LikePlatformerGames	yes	23	5.50	29.83	686.0	188.0	-2.23	0.013	0.318	medium
LikeNovelGames	no	40	4.33	22.99	919.5	99.5	-2.08	0.018	0.297	small
LikeNovelGames	yes	9	5.50	33.94	305.5	99.5	-2.08	0.018	0.297	small
Value/Usefulness										
LikeDomainContent	no	26	4.9	20.94	544.5	193.5	-2.12	0.017	0.303	medium
LikeDomainContent	yes	23	6.0	29.59	680.5	193.5	-2.12	0.017	0.303	medium
LikeShooterGames	26	5.8	29.06	755.5	404.5	2.12	0.017	0.303	medium	
LikeShooterGames	yes	23	4.4	20.41	469.5	404.5	2.12	0.017	0.303	medium
LikeStrategyGames	no	12	4.0	17.58	211.0	133.0	-2.07	0.019	0.296	small

Table 2: *(continued)*

	Group	N	Median	Mean.Ranks	Sum.Ranks	U	Z	p.value	r	magnitude
LikeStrategyGames	yes	37	5.6	27.41	1014.0	133.0	-2.07	0.019	0.296	small
Intrinsic Motivation										
LikeDomainContent	no	26	4.67	21.08	548	197	-2.04	0.020	0.292	small
LikeDomainContent	yes	23	5.76	29.43	677	197	-2.04	0.020	0.292	small