Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound
precision	content	988	,059	,0492	,0016	,056
	open	840	,051	,0500	,0017	,048
	random	782	,033	,0472	,0017	,030
	reflective	858	,058	,0494	,0017	,055
	Total	3468	,051	,0500	,0008	,049
ndcg	content	988	,34055330212	,34678188320	,01103260142	,31890325164
	open	840	,31635048425	,34287719148	,01183038705	,29312985382
	random	782	,18559107732	,29783546086	,01065057434	,16468393496
	reflective	858	,33391809630	,34193863250	,01167359244	,31100591684
	Total	3468	,29810698337	,33961270939	,00576692615	,28680006848

Descriptives

		95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
precision	content	,062	,0	,1
	open	,054	,0	,1
	random	,037	,0	,1
	reflective	,061	,0	,1
	Total	,053	,0	,1
ndcg	content	,36220335259	,00000000000	1,0000000000
	open	,33957111467	,00000000000	1,0000000000
	random	,20649821967	,00000000000	1,0000000000
	reflective	,35683027575	,00000000000	1,0000000000
	Total	,30941389827	,00000000000	1,0000000000

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
precision	Based on Mean	49,112	3	3464	<,001
	Based on Median	13,864	3	3464	<,001
	Based on Median and with adjusted df	13,864	3	3458,093	<,001
	Based on trimmed mean	49,112	3	3464	<,001
ndcg	Based on Mean	17,996	3	3464	<,001
	Based on Median	55,033	3	3464	<,001
	Based on Median and with adjusted df	55,033	3	2665,747	<,001
	Based on trimmed mean	24,447	3	3464	<,001

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
precision	Between Groups	,346	3	,115	47,988	<,001
	Within Groups	8,321	3464	,002		
	Total	8,667	3467			
ndcg	Between Groups	13,060	3	4,353	38,985	<,001
	Within Groups	386,813	3464	,112		
	Total	399,873	3467			

ANOVA Effect Sizes[a]

			95% Confidence Interval	
		Point Estimate	Lower	Upper
precision	Eta-squared	,040	,028	,053
	Epsilon-squared	,039	,027	,052
	Omega-squared Fixed-effect	,039	,027	,052
	Omega-squared Random-effect	,013	,009	,018
ndcg	Eta-squared	,033	,022	,044
	Epsilon-squared	,032	,021	,044
	Omega-squared Fixed-effect	,032	,021	,044
	Omega-squared Random-effect	,011	,007	,015

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

Post Hoc Tests

Multiple Comparisons

Dependent Variable		(I) engine	(J) engine	Mean Difference (I-J)	Std. Error	Sig.
precision	Tukey HSD	content	open	,0080*	,0023	,003
			random	,0255*	,0023	<,001
			reflective	,0010	,0023	,973
		open	content	-,0080*	,0023	,003
			random	,0176*	,0024	<,001
			reflective	-,0070*	,0024	,018
		random	content	-,0255*	,0023	<,001
			open	-,0176*	,0024	<,001
			reflective	-,0245*	,0024	<,001
		reflective	content	-,0010	,0023	,973
			open	,0070*	,0024	,018
			random	,0245*	,0024	<,001
ndcg	Tukey HSD	content	open	,02420281787	,01568308156	,412
			random	,1549622248*	,01599433562	<,001
			reflective	,00663520582	,01559391464	,974
		open	content	-,0242028179	,01568308156	,412
			random	,1307594069*	,01660518911	<,001
			reflective	-,0175676121	,01621985534	,700
		random	content	-,1549622248*	,01599433562	<,001
			open	-,1307594069*	,01660518911	<,001
			reflective	-,1483270190*	,01652099973	<,001
		reflective	content	-,0066352058	,01559391464	,974
			open	,01756761205	,01621985534	,700
			random	,1483270190*	,01652099973	<,001

Multiple Comparisons

Dependent Variable		(I) engine	(J) engine	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
precision	Tukey HSD	content	open	,002	,014
			random	,020	,032
			reflective	-,005	,007
		open	content	-,014	-,002
			random	,011	,024
			reflective	-,013	-,001
		random	content	-,032	-,020
			open	-,024	-,011
			reflective	-,031	-,018
		reflective	content	-,007	,005
			open	,001	,013
			random	,018	,031
ndcg	Tukey HSD	content	open	-,0161070783	,06451271408
			random	,11385231878	,19607213082
			reflective	-,0334455065	,04671591818
		open	content	-,0645127141	,01610707834
			random	,08807943698	,17343937688
			reflective	-,0592571667	,02412194258
		random	content	-,1960721308	-,1138523188
			open	-,1734393769	-,0880794370
			reflective	-,1907905987	-,1058634392
		reflective	content	-,0467159182	,03344550654
			open	-,0241219426	,05925716668
			random	,10586343923	,19079059874

*. The mean difference is significant at the 0.05 level.

Homogeneous Subsets

precision

	engine	N	Subset for alpha = 0.05		
			1	2	3
Tukey HSD[a,b]	random	782	,033		
	open	840		,051	
	reflective	858			,058
	content	988			,059
	Sig.		1,000	1,000	,976
Tukey B[a,b]	random	782	,033		
	open	840		,051	
	reflective	858			,058
	content	988			,059

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 860,790.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

ndcg

	engine	N	Subset for alpha = 0.05	
			1	2
Tukey HSD[a,b]	random	782	,18559107732	
	open	840		,31635048425
	reflective	858		,33391809630
	content	988		,34055330212
	Sig.		1,000	,436
Tukey B[a,b]	random	782	,18559107732	
	open	840		,31635048425
	reflective	858		,33391809630
	content	988		,34055330212

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 860,790.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.