Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound
div_topic(con)	content	85	3,69	1,000	,108	3,48
	random	83	3,81	,930	,102	3,60
	sentiment	82	4,01	,824	,091	3,83
	topics	88	4,01	,719	,077	3,86
	Total	338	3,88	,880	,048	3,79
div_sentiment(con)	content	85	3,58	,836	,091	3,40
	random	83	3,73	,828	,091	3,55
	sentiment	82	3,88	,837	,092	3,69
	topics	88	3,82	,781	,083	3,65
	Total	338	3,75	,825	,045	3,66
div_topic(req)	content	85	3,78	,905	,098	3,58
	random	83	4,00	,781	,086	3,83
	sentiment	82	4,11	,846	,093	3,92
	topics	88	3,83	,937	,100	3,63
	Total	338	3,93	,877	,048	3,83
div_sentiment(req)	content	85	3,73	,864	,094	3,54
	random	83	3,81	,818	,090	3,63
	sentiment	82	3,85	,918	,101	3,65
	topics	88	3,82	,704	,075	3,67
	Total	338	3,80	,826	,045	3,71
recommended	content	85	3,62	,899	,098	3,43
	random	83	3,40	,896	,098	3,20
	sentiment	82	3,52	,849	,094	3,34
	topics	88	3,49	,773	,082	3,32
	Total	338	3,51	,855	,047	3,42

Descriptives

		95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
div_topic(con)	content	3,91	1	5
	random	4,01	1	5
	sentiment	4,19	1	5
	topics	4,16	2	5
	Total	3,98	1	5
div_sentiment(con)	content	3,76	2	5
	random	3,92	1	5
	sentiment	4,06	1	5
	topics	3,98	2	5
	Total	3,84	1	5
div_topic(req)	content	3,97	1	5
	random	4,17	1	5
	sentiment	4,30	1	5
	topics	4,03	1	5
	Total	4,02	1	5
div_sentiment(req)	content	3,92	2	5
	random	3,99	1	5
	sentiment	4,06	1	5
	topics	3,97	2	5
	Total	3,89	1	5
recommended	content	3,82	1	5
	random	3,59	1	5
	sentiment	3,71	1	5
	topics	3,65	2	5
	Total	3,60	1	5

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
div_topic(con)	Based on Mean	6,339	3	334	<,001
	Based on Median	2,090	3	334	,101
	Based on Median and with adjusted df	2,090	3	317,161	,101
	Based on trimmed mean	4,260	3	334	,006
div_sentiment(con)	Based on Mean	1,195	3	334	,311
	Based on Median	,741	3	334	,528
	Based on Median and with adjusted df	,741	3	329,872	,528
	Based on trimmed mean	1,465	3	334	,224
div_topic(req)	Based on Mean	2,211	3	334	,087
	Based on Median	,633	3	334	,594
	Based on Median and with adjusted df	,633	3	327,481	,594
	Based on trimmed mean	,977	3	334	,404
div_sentiment(req)	Based on Mean	2,447	3	334	,064
	Based on Median	2,137	3	334	,095
	Based on Median and with adjusted df	2,137	3	329,633	,095
	Based on trimmed mean	2,431	3	334	,065
recommended	Based on Mean	,716	3	334	,543
	Based on Median	,563	3	334	,640
	Based on Median and with adjusted df	,563	3	328,600	,640
	Based on trimmed mean	,736	3	334	,531

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
div_topic(con)	Between Groups	6,327	3	2,109	2,763	,042
	Within Groups	254,939	334	,763		
	Total	261,266	337			
div_sentiment(con)	Between Groups	4,331	3	1,444	2,145	,094
	Within Groups	224,793	334	,673		
	Total	229,124	337			
div_topic(req)	Between Groups	5,943	3	1,981	2,613	,051
	Within Groups	253,208	334	,758		
	Total	259,151	337			
div_sentiment(req)	Between Groups	,692	3	,231	,336	,799
	Within Groups	229,027	334	,686		
	Total	229,719	337			
recommended	Between Groups	2,201	3	,734	1,003	,392
	Within Groups	244,272	334	,731		
	Total	246,473	337			

ANOVA Effect Sizes[a,b]

		Point Estimate	95% Confidence Interval Lower	95% Confidence Interval Upper
div_topic(con)	Eta-squared	,024	,000	,058
	Epsilon-squared	,015	-,009	,050
	Omega-squared Fixed-effect	,015	-,009	,050
	Omega-squared Random-effect	,005	-,003	,017
div_sentiment(con)	Eta-squared	,019	,000	,050
	Epsilon-squared	,010	-,009	,041
	Omega-squared Fixed-effect	,010	-,009	,041
	Omega-squared Random-effect	,003	-,003	,014
div_topic(req)	Eta-squared	,023	,000	,056
	Epsilon-squared	,014	-,009	,048
	Omega-squared Fixed-effect	,014	-,009	,048
	Omega-squared Random-effect	,005	-,003	,016
div_sentiment(req)	Eta-squared	,003	,000	,015
	Epsilon-squared	-,006	-,009	,006

ANOVA Effect Sizes[a,b]

		Point Estimate	95% Confidence Interval	
			Lower	Upper
	Omega-squared Fixed-effect	-,006	-,009	,006
	Omega-squared Random-effect	-,002	-,003	,002
recommended	Eta-squared	,009	,000	,031
	Epsilon-squared	,000	-,009	,022
	Omega-squared Fixed-effect	,000	-,009	,022
	Omega-squared Random-effect	,000	-,003	,007

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

b. Negative but less biased estimates are retained, not rounded to zero.

Post Hoc Tests

Multiple Comparisons

Dependent Variable		(I) condition_num	(J) condition_num	Mean Difference (I-J)	Std. Error
div_topic(con)	Tukey HSD	content	random	-,113	,135
			sentiment	-,318	,135
			topics	-,317	,133
		random	content	,113	,135
			sentiment	-,205	,136
			topics	-,204	,134
		sentiment	content	,318	,135
			random	,205	,136
			topics	,001	,134
		topics	content	,317	,133
			random	,204	,134
			sentiment	-,001	,134
div_sentiment(con)	Tukey HSD	content	random	-,158	,127
			sentiment	-,302	,127
			topics	-,242	,125
		random	content	,158	,127
			sentiment	-,143	,128
			topics	-,083	,126
		sentiment	content	,302	,127
			random	,143	,128
			topics	,060	,126

Multiple Comparisons

Dependent Variable		(I) condition_num	(J) condition_num	Sig.	95% ... Lower Bound
div_topic(con)	Tukey HSD	content	random	,836	-,46
			sentiment	,089	-,67
			topics	,081	-,66
		random	content	,836	-,23
			sentiment	,435	-,56
			topics	,422	-,55
		sentiment	content	,089	-,03
			random	,435	-,15
			topics	1,000	-,35
		topics	content	,081	-,03
			random	,422	-,14
			sentiment	1,000	-,35
div_sentiment(con)	Tukey HSD	content	random	,594	-,49
			sentiment	,084	-,63
			topics	,214	-,56
		random	content	,594	-,17
			sentiment	,677	-,47
			topics	,911	-,41
		sentiment	content	,084	-,03
			random	,677	-,19
			topics	,964	-,27

Multiple Comparisons

Dependent Variable		(I) condition_num	(J) condition_num	95% ... Upper Bound
div_topic(con)	Tukey HSD	content	random	,23
			sentiment	,03
			topics	,03
		random	content	,46
			sentiment	,15
			topics	,14
		sentiment	content	,67
			random	,56
			topics	,35
		topics	content	,66
			random	,55
			sentiment	,35
div_sentiment(con)	Tukey HSD	content	random	,17
			sentiment	,03
			topics	,08
		random	content	,49
			sentiment	,19
			topics	,24
		sentiment	content	,63
			random	,47
			topics	,38

Multiple Comparisons

Dependent Variable		(I) condition_num	(J) condition_num	Mean Difference (I-J)	Std. Error
		topics	content	,242	,125
			random	,083	,126
			sentiment	-,060	,126
div_topic(req)	Tukey HSD	content	random	-,224	,134
			sentiment	-,333	,135
			topics	-,053	,132
		random	content	,224	,134
			sentiment	-,110	,136
			topics	,170	,133
		sentiment	content	,333	,135
			random	,110	,136
			topics	,280	,134
		topics	content	,053	,132
			random	-,170	,133
			sentiment	-,280	,134
div_sentiment(req)	Tukey HSD	content	random	-,078	,128
			sentiment	-,124	,128
			topics	-,089	,126
		random	content	,078	,128
			sentiment	-,046	,129
			topics	-,011	,127
		sentiment	content	,124	,128
			random	,046	,129
			topics	,035	,127
		topics	content	,089	,126
			random	,011	,127
			sentiment	-,035	,127
recommended	Tukey HSD	content	random	,226	,132
			sentiment	,099	,132
			topics	,135	,130
		random	content	-,226	,132
			sentiment	-,127	,133
			topics	-,091	,131
		sentiment	content	-,099	,132
			random	,127	,133
			topics	,036	,131

Multiple Comparisons

Dependent Variable		(I) condition_num	(J) condition_num	Sig.	95% ... Lower Bound
div_topic(req)	Tukey HSD	topics	content	,214	-,08
			random	,911	-,24
			sentiment	,964	-,38
		content	random	,345	-,57
			sentiment	,066	-,68
			topics	,978	-,39
		random	content	,345	-,12
			sentiment	,850	-,46
			topics	,577	-,17
		sentiment	content	,066	-,01
			random	,850	-,24
			topics	,156	-,06
		topics	content	,978	-,29
			random	,577	-,51
			sentiment	,156	-,63
div_sentiment(req)	Tukey HSD	content	random	,929	-,41
			sentiment	,767	-,46
			topics	,895	-,41
		random	content	,929	-,25
			sentiment	,984	-,38
			topics	1,000	-,34
		sentiment	content	,767	-,21
			random	,984	-,29
			topics	,992	-,29
		topics	content	,895	-,24
			random	1,000	-,32
			sentiment	,992	-,36
recommended	Tukey HSD	content	random	,319	-,11
			sentiment	,877	-,24
			topics	,728	-,20
		random	content	,319	-,57
			sentiment	,777	-,47
			topics	,899	-,43
		sentiment	content	,877	-,44
			random	,777	-,22
			topics	,993	-,30

Multiple Comparisons

Dependent Variable		(I) condition_num	(J) condition_num	95% ... Upper Bound
		topics	content	,56
			random	,41
			sentiment	,27
div_topic(req)	Tukey HSD	content	random	,12
			sentiment	,01
			topics	,29
		random	content	,57
			sentiment	,24
			topics	,51
		sentiment	content	,68
			random	,46
			topics	,63
		topics	content	,39
			random	,17
			sentiment	,06
div_sentiment(req)	Tukey HSD	content	random	,25
			sentiment	,21
			topics	,24
		random	content	,41
			sentiment	,29
			topics	,32
		sentiment	content	,46
			random	,38
			topics	,36
		topics	content	,41
			random	,34
			sentiment	,29
recommended	Tukey HSD	content	random	,57
			sentiment	,44
			topics	,47
		random	content	,11
			sentiment	,22
			topics	,25
		sentiment	content	,24
			random	,47
			topics	,37

Multiple Comparisons

Dependent Variable	(I) condition_num	(J) condition_num	Mean Difference (I-J)	Std. Error
	topics	content	-,135	,130
		random	,091	,131
		sentiment	-,036	,131

Multiple Comparisons

Dependent Variable	(I) condition_num	(J) condition_num	Sig.	95% ... Lower Bound
	topics	content	,728	-,47
		random	,899	-,25
		sentiment	,993	-,37

Multiple Comparisons

Dependent Variable	(I) condition_num	(J) condition_num	95% ... Upper Bound
	topics	content	,20
		random	,43
		sentiment	,30

Homogeneous Subsets

div_topic(con)

	condition_num	N	Subset for alpha = 0.05 — 1
Tukey HSD[a,b]	content	85	3,69
	random	83	3,81
	topics	88	4,01
	sentiment	82	4,01
	Sig.		,086
Tukey B[a,b]	content	85	3,69
	random	83	3,81
	topics	88	4,01
	sentiment	82	4,01

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 84,439.

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

div_sentiment(con)

	condition_num	N	Subset for alpha = 0.05 1
Tukey HSD[a,b]	content	85	3,58
	random	83	3,73
	topics	88	3,82
	sentiment	82	3,88
	Sig.		,081
Tukey B[a,b]	content	85	3,58
	random	83	3,73
	topics	88	3,82
	sentiment	82	3,88

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 84,439.

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

div_topic(req)

	condition_num	N	Subset for alpha = 0.05 1
Tukey HSD[a,b]	content	85	3,78
	topics	88	3,83
	random	83	4,00
	sentiment	82	4,11
	Sig.		,064
Tukey B[a,b]	content	85	3,78
	topics	88	3,83
	random	83	4,00
	sentiment	82	4,11

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 84,439.

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

div_sentiment(req)

	condition_num	N	Subset for alpha = 0.05 1
Tukey HSD[a,b]	content	85	3,73
	random	83	3,81
	topics	88	3,82
	sentiment	82	3,85
	Sig.		,764
Tukey B[a,b]	content	85	3,73
	random	83	3,81
	topics	88	3,82
	sentiment	82	3,85

Means for groups in homogeneous subsets are displayed.

  a. Uses Harmonic Mean Sample Size = 84,439.

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

recommended

	condition_num	N	Subset for alpha = 0.05 1
Tukey HSD[a,b]	random	83	3,40
	topics	88	3,49
	sentiment	82	3,52
	content	85	3,62
	Sig.		,317
Tukey B[a,b]	random	83	3,40
	topics	88	3,49
	sentiment	82	3,52
	content	85	3,62

Means for groups in homogeneous subsets are displayed.

  a. Uses Harmonic Mean Sample Size = 84,439.

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