Oneway

Descriptives

ndcg ndcg

| | | | | | 95% Confidence Interval for Mean |
|-----------|------|--------------|----------------|--------------|-------------------------------------|
| | N | Mean | Std. Deviation | Std. Error | Lower Bound |
| content | 1269 | ,67865086120 | ,25525577052 | ,00716547125 | ,66459337732 |
| random | 974 | ,60675498254 | ,26733647403 | ,00856601316 | ,58994499490 |
| sentiment | 1025 | ,69551245570 | ,25147671148 | ,00785481281 | ,68009908731 |
| topics | 1128 | ,69825544381 | ,25703373949 | ,00765306822 | ,68323957943 |
| Total | 4396 | ,67168328107 | ,25991928459 | ,00392021297 | ,66399768827 |

Descriptives

ndcg ndcg

| | 95% Confidence Interval for Mean | | |
|-----------|-------------------------------------|--------------|--------------|
| | Upper Bound | Minimum | Maximum |
| content | ,69270834508 | ,35620718711 | 1,0000000000 |
| random | ,62356497019 | ,17810359355 | 1,0000000000 |
| sentiment | ,71092582410 | ,35620718711 | 1,0000000000 |
| topics | ,71327130820 | ,35620718711 | 1,0000000000 |
| Total | ,67936887387 | ,17810359355 | 1,000000000 |

ANOVA

ndcg ndcg

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|------|-------------|--------|-------|
| Between Groups | 5,546 | 3 | 1,849 | 27,867 | <,001 |
| Within Groups | 291,371 | 4392 | ,066 | | |
| Total | 296,918 | 4395 | | | |

ANOVA Effect Sizes^a

| | | | 95% Confidence Interval | |
|-----------|---------------------------------|----------------|-------------------------|-------|
| | | Point Estimate | Lower | Upper |
| ndcg ndcg | Eta-squared | ,019 | ,011 | ,027 |
| | Epsilon-squared | ,018 | ,011 | ,026 |
| | Omega-squared Fixed-effect | ,018 | ,010 | ,026 |
| | Omega-squared Random- effect | ,006 | ,004 | ,009 |

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

Post Hoc Tests

Multiple Comparisons

Dependent Variable: ndcg ndcg

| Beperident Variable. Hadg Hadg | | | | | | |
|--------------------------------|-------------------|-------------------|---------------------------|--------------|-------|--|
| | | | Mean Difference | | | |
| | (I) condition_int | (J) condition_int | (I-J) | Std. Error | Sig. | |
| Tukey HSD | content | random | ,0718958787* | ,01097227386 | <,001 | |
| | | sentiment | -,0168615945 | ,01081673661 | ,402 | |
| | | topics | -,0196045826 | ,01054000817 | ,246 | |
| | random | content | -,0718958787* | ,01097227386 | <,001 | |
| | | sentiment | -,0887574732 [*] | ,01152543372 | <,001 | |
| | | topics | -,0915004613 [*] | ,01126612639 | <,001 | |
| | sentiment | content | ,01686159450 | ,01081673661 | ,402 | |
| | | random | ,0887574732* | ,01152543372 | <,001 | |
| | | topics | -,0027429881 | ,01111470202 | ,995 | |
| | topics | content | ,01960458261 | ,01054000817 | ,246 | |
| | | random | ,0915004613* | ,01126612639 | <,001 | |
| | | sentiment | ,00274298811 | ,01111470202 | ,995 | |
| Bonferroni | content | random | ,0718958787* | ,01097227386 | <,001 | |
| | | sentiment | -,0168615945 | ,01081673661 | ,715 | |
| | | topics | -,0196045826 | ,01054000817 | ,378 | |
| | random | content | -,0718958787* | ,01097227386 | <,001 | |
| | | sentiment | -,0887574732 [*] | ,01152543372 | <,001 | |
| | | topics | -,0915004613 [*] | ,01126612639 | <,001 | |
| | sentiment | content | ,01686159450 | ,01081673661 | ,715 | |
| | | random | ,0887574732* | ,01152543372 | <,001 | |
| | | topics | -,0027429881 | ,01111470202 | 1,000 | |
| | topics | content | ,01960458261 | ,01054000817 | ,378 | |
| | | random | ,0915004613 [*] | ,01126612639 | <,001 | |
| | | sentiment | ,00274298811 | ,01111470202 | 1,000 | |

Multiple Comparisons

Dependent Variable: ndcg ndcg

| _ эрэ | . aa.g | 95% Confidence Interval | | |
|------------|-------------------|-------------------------|--------------|--------------|
| | (I) condition_int | (J) condition int | Lower Bound | Upper Bound |
| Tukey HSD | content | random | ,04369696535 | ,10009479197 |
| | | sentiment | -,0446607747 | ,01093758566 |
| | | topics | -,0466925664 | ,00748340120 |
| | random | content | -,1000947920 | -,0436969654 |
| | | sentiment | -,1183780158 | -,0591369305 |
| | | topics | -,1204545801 | -,0625463424 |
| | sentiment | content | -,0109375857 | ,04466077466 |
| | | random | ,05913693048 | ,11837801584 |
| | | topics | -,0313079440 | ,02582196776 |
| | topics | content | -,0074834012 | ,04669256642 |
| | | random | ,06254634242 | ,12045458011 |
| | | sentiment | -,0258219678 | ,03130794398 |
| Bonferroni | content | random | ,04293507506 | ,10085668225 |
| | | sentiment | -,0454118648 | ,01168867578 |
| | | topics | -,0474244411 | ,00821527592 |
| | random | content | -,1008566823 | -,0429350751 |
| | | sentiment | -,1191783163 | -,0583366300 |
| | | topics | -,1212368749 | -,0617640477 |
| | sentiment | content | -,0116886758 | ,04541186479 |
| | | random | ,05833663000 | ,11917831632 |
| | | topics | -,0320797242 | ,02659374795 |
| | topics | content | -,0082152759 | ,04742444114 |
| | | random | ,06176404767 | ,12123687487 |
| | | sentiment | -,0265937479 | ,03207972416 |

^{*.} The mean difference is significant at the 0.05 level.

Homogeneous Subsets

ndcg ndcg

| | | | Subset for alpha = 0.05 | | |
|--------------------------|---------------|------|-------------------------|--------------|--|
| | condition_int | N | 1 | 2 | |
| Tukey HSD ^{a,b} | random | 974 | ,60675498254 | | |
| | content | 1269 | | ,67865086120 | |
| | sentiment | 1025 | | ,69551245570 | |
| | topics | 1128 | | ,69825544381 | |
| | Sig. | | 1,000 | ,285 | |

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 1087,888.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.