Univariate Analysis of Variance - VADER

Between-Subjects Factors

| | === | Value Label | N |
|---------------|--------------------------|-------------|---------|
| Pre_Processed | 0 | False | 3067099 |
| | 1 | True | 3067099 |
| Spell_Checked | None | | 876314 |
| | Symspell | | 876314 |
| | Symspell_Compound | | 876314 |
| | Symspell_Compound_Urba n | | 876314 |
| | Symspell_Urban | | 876314 |
| | TextBlob | | 876314 |
| | TextBlob_Urban | | 876314 |

Descriptive Statistics

Dependent Variable: VADER_Result

| Pre_Processed | Spell_Checked | Mean | Std. Deviation | N |
|---------------|-----------------------------|---------|----------------|---------|
| False | None | .589966 | .2813448 | 438157 |
| | Symspell | .586319 | .2845094 | 438157 |
| | Symspell_Compound | .593961 | .2775128 | 438157 |
| | Symspell_Compound_Urba | .595231 | .2781151 | 438157 |
| | Symspell_Urban | .587605 | .2845571 | 438157 |
| | TextBlob | .578778 | .2904053 | 438157 |
| | TextBlob_Urban | .581465 | .2922602 | 438157 |
| | Total | .587618 | .2842047 | 3067099 |
| True | None | .595171 | .2796352 | 438157 |
| | Symspell | .591084 | .2829005 | 438157 |
| | Symspell_Compound | .598651 | .2757892 | 438157 |
| | Symspell_Compound_Urba n | .600028 | .2762914 | 438157 |

Descriptive Statistics

Dependent Variable: VADER_Result

| Pre_Processed | Spell_Checked | Mean | Std. Deviation | N |
|---------------|------------------------|---------|----------------|---------|
| | Symspell_Urban | .592627 | .2828048 | 438157 |
| | TextBlob | .583412 | .2890505 | 438157 |
| | TextBlob_Urban | .586570 | .2908883 | 438157 |
| | Total | .592506 | .2825876 | 3067099 |
| Total | None | .592568 | .2805032 | 876314 |
| | Symspell | .588701 | .2837159 | 876314 |
| | Symspell_Compound | .596306 | .2766622 | 876314 |
| | Symspell_Compound_Urba | .597629 | .2772150 | 876314 |
| | Symspell_Urban | .590116 | .2836932 | 876314 |
| | TextBlob | .581095 | .2897378 | 876314 |
| | TextBlob_Urban | .584018 | .2915861 | 876314 |
| | Total | .590062 | .2834078 | 6134198 |

Tests of Between-Subjects Effects

Dependent Variable: VADER_Result

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-------------------------------|----------------------------|---------|-------------|-------------|-------|
| Corrected Model | 230.664 ^a | 13 | 17.743 | 221.012 | .000 |
| Intercept | 2135762.817 | 1 | 2135762.817 | 26603073.28 | .000 |
| Pre_Processed | 36.644 | 1 | 36.644 | 456.437 | <.001 |
| Spell_Checked | 193.956 | 6 | 32.326 | 402.653 | .000 |
| Pre_Processed * Spell_Checked | .064 | 6 | .011 | .133 | .992 |
| Error | 492467.993 | 6134184 | .080 | | |
| Total | 2628461.473 | 6134198 | | | |
| Corrected Total | 492698.657 | 6134197 | | | |

a. R Squared = .000 (Adjusted R Squared = .000)

Pre_Processed * Spell_Checked

Dependent Variable: VADER_Result

| | | | | 95% Confidence Interval | | |
|---------------|--------------------------|------|------------|-------------------------|-------------|--|
| Pre_Processed | Spell_Checked | Mean | Std. Error | Lower Bound | Upper Bound | |
| False | None | .590 | .000 | .589 | .591 | |
| | Symspell | .586 | .000 | .585 | .587 | |
| | Symspell_Compound | .594 | .000 | .593 | .595 | |
| | Symspell_Compound_Urba n | .595 | .000 | .594 | .596 | |
| | Symspell_Urban | .588 | .000 | .587 | .588 | |
| | TextBlob | .579 | .000 | .578 | .580 | |
| | TextBlob_Urban | .581 | .000 | .581 | .582 | |
| True | None | .595 | .000 | .594 | .596 | |
| | Symspell | .591 | .000 | .590 | .592 | |
| | Symspell_Compound | .599 | .000 | .598 | .599 | |
| | Symspell_Compound_Urba n | .600 | .000 | .599 | .601 | |
| | Symspell_Urban | .593 | .000 | .592 | .593 | |
| | TextBlob | .583 | .000 | .583 | .584 | |
| | TextBlob_Urban | .587 | .000 | .586 | .587 | |

Post Hoc Tests

Spell_Checked

Multiple Comparisons

Dependent Variable: VADER_Result

Tukey HSD

| | | | | | 95% Confide | ence Interval |
|------------------------|------------------------|--------------------------|------------|-------|-------------|---------------|
| (I) Spell_Checked | (J) Spell_Checked | Mean Difference (I-J) | Std. Error | Sig. | Lower Bound | Upper Bound |
| None | Symspell Symspell | .003867* | .0004281 | .000 | .002605 | .005129 |
| | Symspell_Compound | 003738 [*] | .0004281 | .000 | 005000 | 002476 |
| | Symspell_Compound_Urba | 005061 [*] | .0004281 | .000 | 006323 | 003799 |
| | Symspell_Urban | .002452* | .0004281 | <.001 | .001190 | .003714 |
| | TextBlob | .011473* | .0004281 | .000 | .010211 | .012736 |
| | TextBlob_Urban | .008551* | .0004281 | .000 | .007289 | .009813 |
| Symspell | None | 003867 [*] | .0004281 | .000 | 005129 | 002605 |
| | Symspell_Compound | 007605 [*] | .0004281 | .000 | 008867 | 006343 |
| | Symspell_Compound_Urba | 008928 [*] | .0004281 | .000 | 010190 | 007666 |
| | Symspell_Urban | 001415 [*] | .0004281 | .017 | 002677 | 000153 |
| | TextBlob | .007607* | .0004281 | .000 | .006345 | .008869 |
| | TextBlob_Urban | .004684* | .0004281 | .000 | .003422 | .005946 |
| Symspell_Compound | None | .003738* | .0004281 | .000 | .002476 | .005000 |
| | Symspell | .007605* | .0004281 | .000 | .006343 | .008867 |
| | Symspell_Compound_Urba | 001323 [*] | .0004281 | .033 | 002585 | 000061 |
| | Symspell_Urban | .006190* | .0004281 | .000 | .004928 | .007452 |
| | TextBlob | .015211* | .0004281 | .000 | .013949 | .016473 |
| | TextBlob_Urban | .012288* | .0004281 | .000 | .011026 | .013550 |
| Symspell_Compound_Urba | None | .005061* | .0004281 | .000 | .003799 | .006323 |
| n | Symspell | .008928* | .0004281 | .000 | .007666 | .010190 |

Multiple Comparisons

Dependent Variable: VADER_Result

Tukey HSD

| | | Mean | | | 95% Confide | ence Interval |
|-------------------|------------------------|----------------------|------------|-------|-------------|---------------|
| (I) Spell_Checked | (J) Spell_Checked | Difference (I-J) | Std. Error | Sig. | Lower Bound | Upper Bound |
| | Symspell_Compound | .001323* | .0004281 | .033 | .000061 | .002585 |
| | Symspell_Urban | .007513* | .0004281 | .000 | .006251 | .008775 |
| | TextBlob | .016535 [*] | .0004281 | .000 | .015272 | .017797 |
| | TextBlob_Urban | .013612 [*] | .0004281 | .000 | .012350 | .014874 |
| Symspell_Urban | None | 002452 [*] | .0004281 | <.001 | 003714 | 001190 |
| | Symspell | .001415* | .0004281 | .017 | .000153 | .002677 |
| | Symspell_Compound | 006190 [*] | .0004281 | .000 | 007452 | 004928 |
| | Symspell_Compound_Urba | 007513 [*] | .0004281 | .000 | 008775 | 006251 |
| | TextBlob | .009021* | .0004281 | .000 | .007759 | .010283 |
| | TextBlob_Urban | .006098* | .0004281 | .000 | .004836 | .007360 |
| TextBlob | None | 011473 [*] | .0004281 | .000 | 012736 | 010211 |
| | Symspell | 007607 [*] | .0004281 | .000 | 008869 | 006345 |
| | Symspell_Compound | 015211 [*] | .0004281 | .000 | 016473 | 013949 |
| | Symspell_Compound_Urba | 016535 [*] | .0004281 | .000 | 017797 | 015272 |
| | Symspell_Urban | 009021 [*] | .0004281 | .000 | 010283 | 007759 |
| | TextBlob_Urban | 002923 [*] | .0004281 | .000 | 004185 | 001661 |
| TextBlob_Urban | None | 008551 [*] | .0004281 | .000 | 009813 | 007289 |
| | Symspell | 004684 [*] | .0004281 | .000 | 005946 | 003422 |
| | Symspell_Compound | 012288 [*] | .0004281 | .000 | 013550 | 011026 |
| | Symspell_Compound_Urba | 013612 [*] | .0004281 | .000 | 014874 | 012350 |
| | Symspell_Urban | 006098 [*] | .0004281 | .000 | 007360 | 004836 |
| | TextBlob | .002923* | .0004281 | .000 | .001661 | .004185 |

Based on observed means.

The error term is Mean Square(Error) = .080.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

VADER_Result

Tukey HSD^{a,b}

| | | | | Subset | | | | |
|--------------------------|--------|---------|---------|---------|---------|---------|---------|---------|
| Spell_Checked | N | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| TextBlob | 876314 | .581095 | | | | | | |
| TextBlob_Urban | 876314 | | .584018 | | | | | |
| Symspell | 876314 | | | .588701 | | | | |
| Symspell_Urban | 876314 | | | | .590116 | | | |
| None | 876314 | | | | | .592568 | | |
| Symspell_Compound | 876314 | | | | | | .596306 | |
| Symspell_Compound_Urba n | 876314 | | | | | | | .597629 |
| Sig. | | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |

Means for groups in homogeneous subsets are displayed.

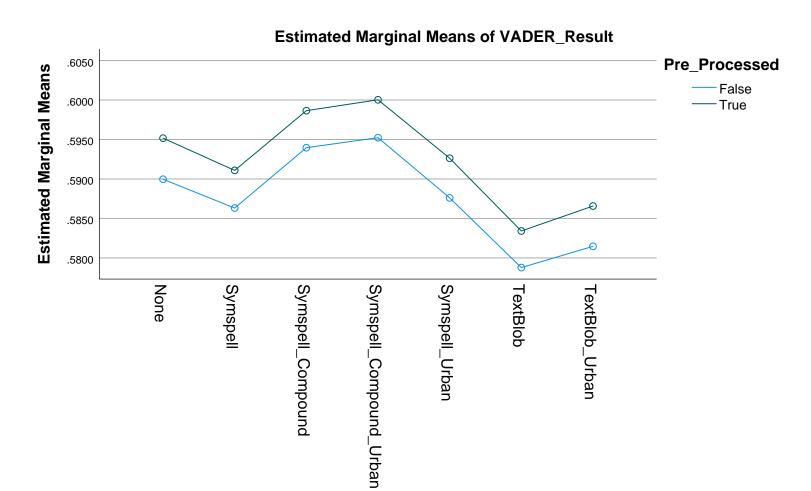
Based on observed means.

The error term is Mean Square(Error) = .080.

a. Uses Harmonic Mean Sample Size = 876314.000.

b. Alpha = .05.

Profile Plots



Snell Checked

Estimated Marginal Means of VADER_Result

