# **General Linear Model**

# Notes

Output Created		07-SEP-2022 17:33:59		
Comments				
Input	Data	C: \Users\Student\OneDrive - University of Kent\URSS\Experiment 1 - Spell or No Spell\Statistical Analysis\Final_All_Results .sav		
	Active Dataset	DataSet1		
	Filter	<none></none>		
	Weight	<none></none>		
	Split File	<none></none>		
	N of Rows in Working Data File	6134198		
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.		
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.		
Syntax		GLM Roberta_Result by Pre_Processed Spell_Checked /EMMEANS = TABLES (Pre_Processed*Spell_Checked) COMPARE (Pre_Processed).		
Resources	Processor Time	00:00:09.08		
	Elapsed Time	00:00:08.78		

## **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

# **Tests of Between-Subjects Effects**

Dependent Variable: Roberta\_Result

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1327.949 <sup>a</sup>	13	102.150	1885.237	.000
Intercept	3249365.553	1	3249365.553	59968945.44	.000
Pre_Processed	839.132	1	839.132	15486.666	.000
Spell_Checked	473.467	6	78.911	1456.351	.000
Pre_Processed * Spell_Checked	15.351	6	2.559	47.219	<.001
Error	332375.466	6134184	.054		
Total	3583068.969	6134198			
Corrected Total	333703.415	6134197			

a. R Squared = .004 (Adjusted R Squared = .004)

## **Estimated Marginal Means**

Pre\_Processed \* Spell\_Checked

#### **Estimates**

Dependent Variable: Roberta\_Result

•					
				95% Confide	ence Interval
Pre_Processed	Spell_Checked	Mean	Std. Error	Lower Bound	Upper Bound
False	None	.754	.000	.753	.754
	Symspell	.740	.000	.739	.740
	Symspell_Compound	.741	.000	.740	.742
	Symspell_Compound_Urba	.742	.000	.741	.743
	Symspell_Urban	.742	.000	.742	.743
	TextBlob	.722	.000	.721	.722
	TextBlob_Urban	.736	.000	.735	.737
True	None	.735	.000	.734	.735
	Symspell	.713	.000	.712	.714
	Symspell_Compound	.715	.000	.714	.715
	Symspell_Compound_Urba n	.716	.000	.715	.716
	Symspell_Urban	.717	.000	.716	.718
	TextBlob	.702	.000	.701	.702
	TextBlob_Urban	.716	.000	.715	.717

## **Pairwise Comparisons**

Dependent Variable: Roberta\_Result

						95% Confidence Interval for Difference <sup>b</sup>	
Spell_Checked	(I) Pre_Processed	(J) Pre_Processed	Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	Lower Bound	Upper Bound
None	False	True	.019*	.000	.000	.018	.020
	True	False	019 <sup>*</sup>	.000	.000	020	018
Symspell	False	True	.027*	.000	.000	.026	.028
	True	False	027*	.000	.000	028	026
Symspell_Compound	False	True	.026*	.000	.000	.025	.027
	True	False	026*	.000	.000	027	025
Symspell_Compound_Urba n	False	True	.026*	.000	.000	.025	.027
	True	False	026*	.000	.000	027	025
Symspell_Urban	False	True	.025*	.000	.000	.024	.026
	True	False	025*	.000	.000	026	024
TextBlob	False	True	.020*	.000	.000	.019	.021
	True	False	020 <sup>*</sup>	.000	.000	021	019
TextBlob_Urban	False	True	.020*	.000	.000	.019	.021
	True	False	020 <sup>*</sup>	.000	.000	021	019

Based on estimated marginal means

<sup>\*.</sup> The mean difference is significant at the .050 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

#### **Univariate Tests**

Dependent Variable: Roberta\_Result

Spell_Checked		Sum of Squares	df	Mean Square	F	Sig.
None	Contrast	80.666	1	80.666	1488.736	.000
	Error	332375.466	6134184	.054		
Symspell	Contrast	154.437	1	154.437	2850.221	.000
	Error	332375.466	6134184	.054		
Symspell_Compound	Contrast	151.757	1	151.757	2800.770	.000
	Error	332375.466	6134184	.054		
Symspell_Compound_Urba	Contrast	152.902	1	152.902	2821.903	.000
n	Error	332375.466	6134184	.054		
Symspell_Urban	Contrast	137.885	1	137.885	2544.745	.000
	Error	332375.466	6134184	.054		
TextBlob	Contrast	87.849	1	87.849	1621.301	.000
	Error	332375.466	6134184	.054		
TextBlob_Urban	Contrast	88.987	1	88.987	1642.302	.000
	Error	332375.466	6134184	.054		

Each F tests the simple effects of Pre\_Processed within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.