Regression 1

Notes

Output Created		03-APR-2025 21:59:39
Comments		
Input	Data	D:\Final Dataset\Cleaned Data\Cleaned_Amazon_ReviewContent.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	8817
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE /CRITERIA=PIN(.05) POUT(.10) TOLERANCE(.0001) /NOORIGIN /DEPENDENT

		HelpfulCounts /METHOD=ENTER ReviewScore AmazonYN ReviewAgeDays Verified WC tone_pos emotion allure Sarcasm Humor.
Resources	Processor Time	00:00:00.13
	Elapsed Time	00:00:00.14
	Memory Required	47920 bytes
	Additional Memory Required for Residual Plots	0 bytes

[DataSet1]

Descriptive Statistics

	Mean	Std. Deviation	N
HelpfulCounts	7.40	62.414	8817
ReviewScore	3.03	1.510	8817
AmazonYN	.59	.492	8817
ReviewAgeDays	316.81	360.774	8817
Verified	.88	.319	8817
WC	94.11	96.762	8817
tone_pos	4.3630	4.26643	8817
emotion	1.7409	3.09805	8817
allure	8.2930	4.78146	8817
Sarcasm	39.0599	6.49986	8817
Humor	26.71124	11.681300	8817

Correlations

		HelpfulCounts	ReviewScore	AmazonYN	ReviewAgeDays
Pearson Correlation	HelpfulCounts	1.000	.035	.032	.158
	ReviewScore	.035	1.000	-.055	-.044
	AmazonYN	.032	-.055	1.000	.155
	ReviewAgeDays	.158	-.044	.155	1.000
	Verified	.033	.066	-.100	.032
	WC	.249	-.073	.031	.264
	tone_pos	-.037	.373	-.047	-.122
	emotion	-.027	.139	-.039	-.060
	allure	-.030	.153	-.012	-.062
	Sarcasm	-.051	.089	-.010	-.156
	Humor	.033	.100	.031	.104
Sig. (1-tailed)	HelpfulCounts	.	<.001	.001	<.001
	ReviewScore	.001	.	.000	.000
	AmazonYN	.001	.000	.	.000
	ReviewAgeDays	.000	.000	.000	.
	Verified	.001	.000	.000	.001
	WC	.000	.000	.002	.000
	tone_pos	.000	.000	.000	.000
	emotion	.005	.000	.000	.000
	allure	.003	.000	.139	.000
	Sarcasm	.000	.000	.176	.000
	Humor	.001	.000	.002	.000
N	HelpfulCounts	8817	8817	8817	8817
	ReviewScore	8817	8817	8817	8817
	AmazonYN	8817	8817	8817	8817
	ReviewAgeDays	8817	8817	8817	8817
	Verified	8817	8817	8817	8817
	WC	8817	8817	8817	8817
	tone_pos	8817	8817	8817	8817
	emotion	8817	8817	8817	8817
	allure	8817	8817	8817	8817
	Sarcasm	8817	8817	8817	8817

| | Humor | 8817 | 8817 | 8817 | 8817 |

Correlations

		Verified	WC	tone_pos	emotion	allure
Pearson Correlation	HelpfulCounts	.033	.249	-.037	-.027	-.030
	ReviewScore	.066	-.073	.373	.139	.153
	AmazonYN	-.100	.031	-.047	-.039	-.012
	ReviewAgeDays	.032	.264	-.122	-.060	-.062
	Verified	1.000	-.002	.047	.028	.001
	WC	-.002	1.000	-.271	-.166	-.163
	tone_pos	.047	-.271	1.000	.490	.363
	emotion	.028	-.166	.490	1.000	.176
	allure	.001	-.163	.363	.176	1.000
	Sarcasm	.012	-.340	.299	.180	.166
	Humor	.005	.163	.016	-.027	.086
Sig. (1-tailed)	HelpfulCounts	.001	<.001	<.001	.005	.003
	ReviewScore	.000	.000	.000	.000	.000
	AmazonYN	.000	.002	.000	.000	.139
	ReviewAgeDays	.001	.000	.000	.000	.000
	Verified	.	.411	.000	.005	.473
	WC	.411	.	.000	.000	.000
	tone_pos	.000	.000	.	.000	.000
	emotion	.005	.000	.000	.	.000
	allure	.473	.000	.000	.000	.
	Sarcasm	.123	.000	.000	.000	.000
	Humor	.307	.000	.069	.005	.000
N	HelpfulCounts	8817	8817	8817	8817	8817
	ReviewScore	8817	8817	8817	8817	8817
	AmazonYN	8817	8817	8817	8817	8817
	ReviewAgeDays	8817	8817	8817	8817	8817
	Verified	8817	8817	8817	8817	8817
	WC	8817	8817	8817	8817	8817
	tone_pos	8817	8817	8817	8817	8817

		8817	8817	8817	8817	8817
	emotion	8817	8817	8817	8817	8817
	allure	8817	8817	8817	8817	8817
	Sarcasm	8817	8817	8817	8817	8817
	Humor	8817	8817	8817	8817	8817

Correlations

		Sarcasm	Humor
Pearson Correlation	HelpfulCounts	-.051	.033
	ReviewScore	.089	.100
	AmazonYN	-.010	.031
	ReviewAgeDays	-.156	.104
	Verified	.012	.005
	WC	-.340	.163
	tone_pos	.299	.016
	emotion	.180	-.027
	allure	.166	.086
	Sarcasm	1.000	.049
	Humor	.049	1.000
Sig. (1-tailed)	HelpfulCounts	<.001	<.001
	ReviewScore	.000	.000
	AmazonYN	.176	.002
	ReviewAgeDays	.000	.000
	Verified	.123	.307
	WC	.000	.000
	tone_pos	.000	.069
	emotion	.000	.005
	allure	.000	.000
	Sarcasm	.	.000
	Humor	.000	.
N	HelpfulCounts	8817	8817
	ReviewScore	8817	8817
	AmazonYN	8817	8817
	ReviewAgeDays	8817	8817

		8817	8817
	Verified	8817	8817
	WC	8817	8817
	tone_pos	8817	8817
	emotion	8817	8817
	allure	8817	8817
	Sarcasm	8817	8817
	Humor	8817	8817

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Humor, Verified, emotion, AmazonYN, Sarcasm, ReviewScore, ReviewAgeDays, allure, WC, tone_pos[b]	.	Enter

a. Dependent Variable: HelpfulCounts

b. All requested variables entered.

Model Summary

					Change Statistics		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.278[a]	.077	.076	59.986	.077	73.798	10

Model Summary

	Change Statistics	
Model	df2	Sig. F Change
1	8806	<.001

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2655484.948	10	265548.495	73.798	<.001[b]
	Residual	31686768.294	8806	3598.316		
	Total	34342253.242	8816			

a. Dependent Variable: HelpfulCounts

b. Predictors: (Constant), Humor, Verified, emotion, AmazonYN, Sarcasm,
ReviewScore, ReviewAgeDays, allure, WC, tone_pos

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-38.519	5.076		-7.589	<.001
	ReviewScore	2.120	.460	.051	4.606	<.001
	AmazonYN	2.057	1.324	.016	1.553	.120
	ReviewAgeDays	.018	.002	.102	9.441	<.001
	Verified	5.386	2.017	.028	2.670	.008
	WC	.159	.007	.247	21.312	<.001
	tone_pos	.149	.199	.010	.748	.455
	emotion	-.021	.237	-.001	-.090	.928
	allure	.013	.145	.001	.089	.929
	Sarcasm	.408	.108	.042	3.762	<.001

Humor	-.138	.057	-.026	-2.443	.015

Coefficients[a]

		Collinearity Statistics	
Model		Tolerance	VIF
1	(Constant)		
	ReviewScore	.845	1.183
	AmazonYN	.962	1.040
	ReviewAgeDays	.895	1.117
	Verified	.983	1.018
	WC	.783	1.278
	tone_pos	.568	1.760
	emotion	.755	1.325
	allure	.854	1.172
	Sarcasm	.823	1.216
	Humor	.935	1.069

a. Dependent Variable: HelpfulCounts

Collinearity Diagnostics[a]

				Variance Proportions		
Model	Dimension	Eigenvalue	Condition Index	(Constant)	ReviewScore	AmazonYN
1	1	7.842	1.000	.00	.00	.00
	2	1.049	2.735	.00	.00	.01
	3	.531	3.841	.00	.01	.00
	4	.426	4.288	.00	.00	.39
	5	.365	4.637	.00	.01	.44
	6	.243	5.679	.00	.00	.07
	7	.196	6.330	.00	.19	.00
	8	.138	7.547	.00	.00	.00
	9	.135	7.608	.00	.72	.00

| | 10 | .065 | 11.022 | .05 | .04 | .06 |
| | 11 | .010 | 27.908 | .95 | .02 | .01 |

Collinearity Diagnostics[a]

Variance Proportions

Model	Dimension	ReviewAgeDays	Verified	WC	tone_pos	emotion	allure
1	1	.00	.00	.00	.00	.00	.00
	2	.06	.00	.07	.06	.22	.00
	3	.36	.00	.06	.00	.40	.02
	4	.17	.00	.37	.00	.01	.00
	5	.39	.00	.12	.05	.14	.02
	6	.00	.05	.22	.56	.18	.00
	7	.00	.02	.02	.02	.00	.78
	8	.00	.23	.02	.00	.00	.01
	9	.00	.09	.00	.28	.04	.11
	10	.00	.54	.00	.00	.00	.05
	11	.01	.05	.10	.03	.00	.01

Collinearity Diagnostics[a]

Variance Proportions

Model	Dimension	Sarcasm	Humor
1	1	.00	.00
	2	.00	.00
	3	.00	.00
	4	.00	.00
	5	.00	.00
	6	.00	.03
	7	.00	.00
	8	.00	.75
	9	.00	.07
	10	.14	.14
	11	.85	.00

a. Dependent Variable: HelpfulCounts

Regression 2

Notes

Output Created		03-APR-2025 22:00:55
Comments		
Input	Data	D:\Final Dataset\Cleaned Data\Cleaned_Amazon_ ReviewContent.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	8817
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE

	/CRITERIA=PIN(.05) POUT(.10) TOLERANCE(.0001) /NOORIGIN /DEPENDENT HelpfulCounts /METHOD=ENTER ReviewScore AmazonYN ReviewAgeDays Verified WC tone_pos emotion Sarcasm Humor.
Resources	Processor Time	00:00:00.17
	Elapsed Time	00:00:00.24
	Memory Required	46960 bytes
	Additional Memory Required for Residual Plots	0 bytes

Descriptive Statistics

	Mean	Std. Deviation	N
HelpfulCounts	7.40	62.414	8817
ReviewScore	3.03	1.510	8817
AmazonYN	.59	.492	8817
ReviewAgeDays	316.81	360.774	8817
Verified	.88	.319	8817
WC	94.11	96.762	8817
tone_pos	4.3630	4.26643	8817
emotion	1.7409	3.09805	8817
Sarcasm	39.0599	6.49986	8817
Humor	26.71124	11.681300	8817

Correlations

	HelpfulCount	ReviewScor	AmazonY	ReviewAgeDa

		s	e	N	ys
Pearson Correlation	HelpfulCounts	1.000	.035	.032	.158
	ReviewScore	.035	1.000	-.055	-.044
	AmazonYN	.032	-.055	1.000	.155
	ReviewAgeDays	.158	-.044	.155	1.000
	Verified	.033	.066	-.100	.032
	WC	.249	-.073	.031	.264
	tone_pos	-.037	.373	-.047	-.122
	emotion	-.027	.139	-.039	-.060
	Sarcasm	-.051	.089	-.010	-.156
	Humor	.033	.100	.031	.104
Sig. (1-tailed)	HelpfulCounts	.	<.001	.001	<.001
	ReviewScore	.001	.	.000	.000
	AmazonYN	.001	.000	.	.000
	ReviewAgeDays	.000	.000	.000	.
	Verified	.001	.000	.000	.001
	WC	.000	.000	.002	.000
	tone_pos	.000	.000	.000	.000
	emotion	.005	.000	.000	.000
	Sarcasm	.000	.000	.176	.000
	Humor	.001	.000	.002	.000
N	HelpfulCounts	8817	8817	8817	8817
	ReviewScore	8817	8817	8817	8817
	AmazonYN	8817	8817	8817	8817
	ReviewAgeDays	8817	8817	8817	8817
	Verified	8817	8817	8817	8817
	WC	8817	8817	8817	8817
	tone_pos	8817	8817	8817	8817
	emotion	8817	8817	8817	8817
	Sarcasm	8817	8817	8817	8817
	Humor	8817	8817	8817	8817

Correlations

	Verified	WC	tone_pos	emotion	Sarcasm

Pearson Correlation	HelpfulCounts	.033	.249	-.037	-.027	-.051
	ReviewScore	.066	-.073	.373	.139	.089
	AmazonYN	-.100	.031	-.047	-.039	-.010
	ReviewAgeDays	.032	.264	-.122	-.060	-.156
	Verified	1.000	-.002	.047	.028	.012
	WC	-.002	1.000	-.271	-.166	-.340
	tone_pos	.047	-.271	1.000	.490	.299
	emotion	.028	-.166	.490	1.000	.180
	Sarcasm	.012	-.340	.299	.180	1.000
	Humor	.005	.163	.016	-.027	.049
Sig. (1-tailed)	HelpfulCounts	.001	<.001	<.001	.005	<.001
	ReviewScore	.000	.000	.000	.000	.000
	AmazonYN	.000	.002	.000	.000	.176
	ReviewAgeDays	.001	.000	.000	.000	.000
	Verified	.	.411	.000	.005	.123
	WC	.411	.	.000	.000	.000
	tone_pos	.000	.000	.	.000	.000
	emotion	.005	.000	.000	.	.000
	Sarcasm	.123	.000	.000	.000	.
	Humor	.307	.000	.069	.005	.000
N	HelpfulCounts	8817	8817	8817	8817	8817
	ReviewScore	8817	8817	8817	8817	8817
	AmazonYN	8817	8817	8817	8817	8817
	ReviewAgeDays	8817	8817	8817	8817	8817
	Verified	8817	8817	8817	8817	8817
	WC	8817	8817	8817	8817	8817
	tone_pos	8817	8817	8817	8817	8817
	emotion	8817	8817	8817	8817	8817
	Sarcasm	8817	8817	8817	8817	8817
	Humor	8817	8817	8817	8817	8817

Correlations

Humor

Pearson Correlation	HelpfulCounts	.033	
	ReviewScore	.100	
	AmazonYN	.031	
	ReviewAgeDays	.104	
	Verified	.005	
	WC	.163	
	tone_pos	.016	
	emotion	-.027	
	Sarcasm	.049	
	Humor	1.000	
Sig. (1-tailed)	HelpfulCounts	<.001	
	ReviewScore	.000	
	AmazonYN	.002	
	ReviewAgeDays	.000	
	Verified	.307	
	WC	.000	
	tone_pos	.069	
	emotion	.005	
	Sarcasm	.000	
	Humor	.	
N	HelpfulCounts	8817	
	ReviewScore	8817	
	AmazonYN	8817	
	ReviewAgeDays	8817	
	Verified	8817	
	WC	8817	
	tone_pos	8817	
	emotion	8817	
	Sarcasm	8817	
	Humor	8817	

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method

| | 1 | Humor, Verified, emotion, AmazonYN, Sarcasm, ReviewScore, ReviewAgeDays, WC, tone_pos[b] | | . Enter |

a. Dependent Variable: HelpfulCounts

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1
1	.278[a]	.077	.076	59.983	.077	82.006	9

Model Summary

	Change Statistics	
Model	df2	Sig. F Change
1	8807	<.001

a. Predictors: (Constant), Humor, Verified, emotion, AmazonYN, Sarcasm, ReviewScore, ReviewAgeDays, WC, tone_pos

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2655456.550	9	295050.728	82.006	<.001[b]

Residual	31686796.692	8807	3597.910		
Total	34342253.242	8816			

a. Dependent Variable: HelpfulCounts

b. Predictors: (Constant), Humor, Verified, emotion, AmazonYN, Sarcasm, ReviewScore, ReviewAgeDays, WC, tone_pos

Coefficients[a]

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-38.454	5.022		-7.656	<.001
	ReviewScore	2.120	.460	.051	4.608	<.001
	AmazonYN	2.058	1.324	.016	1.554	.120
	ReviewAgeDays	.018	.002	.102	9.441	<.001
	Verified	5.383	2.017	.028	2.669	.008
	WC	.159	.007	.247	21.361	<.001
	tone_pos	.153	.192	.010	.800	.424
	emotion	-.021	.237	-.001	-.090	.928
	Sarcasm	.408	.108	.042	3.768	<.001
	Humor	-.138	.056	-.026	-2.446	.014

Coefficients[a]

		Collinearity Statistics	
Model		Tolerance	VIF
1	(Constant)		
	ReviewScore	.845	1.183
	AmazonYN	.962	1.040
	ReviewAgeDays	.895	1.117
	Verified	.983	1.017
	WC	.787	1.271
	tone_pos	.611	1.636

emotion	.755	1.325
Sarcasm	.824	1.214
Humor	.943	1.060

a. Dependent Variable: HelpfulCounts

Collinearity Diagnostics[a]

				Variance Proportions		
Model	Dimension	Eigenvalue	Condition Index	(Constant)	ReviewScore	AmazonYN
1	1	7.066	1.000	.00	.00	.01
	2	1.036	2.611	.00	.00	.01
	3	.513	3.712	.00	.02	.01
	4	.426	4.071	.00	.00	.40
	5	.359	4.437	.00	.02	.43
	6	.243	5.391	.00	.01	.07
	7	.142	7.062	.00	.70	.01
	8	.137	7.172	.00	.19	.00
	9	.067	10.282	.05	.03	.07
	10	.010	26.413	.95	.02	.01

Collinearity Diagnostics[a]

Variance Proportions

Model	Dimension	ReviewAgeDays	Verified	WC	tone_pos	emotion	Sarcasm
1	1	.01	.00	.00	.00	.00	.00
	2	.06	.00	.07	.06	.24	.00
	3	.42	.01	.06	.01	.35	.00
	4	.16	.00	.37	.00	.01	.00
	5	.34	.00	.15	.07	.17	.00
	6	.00	.05	.22	.61	.18	.00
	7	.00	.00	.00	.17	.02	.00
	8	.00	.31	.02	.05	.02	.00

		.00	.57	.00	.01	.00	.12
9							
10		.01	.05	.10	.02	.00	.87

Collinearity Diagnostics[a]

		Variance Proportions
Model	Dimension	Humor
1	1	.00
	2	.00
	3	.01
	4	.00
	5	.00
	6	.03
	7	.33
	8	.45
	9	.18
	10	.00

a. Dependent Variable: HelpfulCounts

Regression 3

Notes

Output Created	03-APR-2025 22:01:27

Comments		
Input	Data	D:\Final Dataset\Cleaned Data\Cleaned_Amazon_ReviewContent.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	8817
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE /CRITERIA=PIN(.05) POUT(.10) TOLERANCE(.0001) /NOORIGIN /DEPENDENT HelpfulCounts /METHOD=ENTER ReviewScore AmazonYN ReviewAgeDays Verified WC tone_pos Sarcasm Humor.
Resources	Processor Time	00:00:00.14

Elapsed Time		00:00:00.18
Memory Required	46048 bytes	
Additional Memory Required for Residual Plots	0 bytes	

Descriptive Statistics

	Mean	Std. Deviation	N
HelpfulCounts	7.40	62.414	8817
ReviewScore	3.03	1.510	8817
AmazonYN	.59	.492	8817
ReviewAgeDays	316.81	360.774	8817
Verified	.88	.319	8817
WC	94.11	96.762	8817
tone_pos	4.3630	4.26643	8817
Sarcasm	39.0599	6.49986	8817
Humor	26.71124	11.681300	8817

Correlations

		HelpfulCounts	ReviewScore	AmazonYN	ReviewAgeDays
Pearson Correlation	HelpfulCounts	1.000	.035	.032	.158
	ReviewScore	.035	1.000	-.055	-.044
	AmazonYN	.032	-.055	1.000	.155
	ReviewAgeDays	.158	-.044	.155	1.000
	Verified	.033	.066	-.100	.032
	WC	.249	-.073	.031	.264
	tone_pos	-.037	.373	-.047	-.122
	Sarcasm	-.051	.089	-.010	-.156
	Humor	.033	.100	.031	.104
Sig. (1-tailed)	HelpfulCounts	.	<.001	.001	<.001
	ReviewScore	.001	.	.000	.000
	AmazonYN	.001	.000	.	.000

	ReviewAgeDays	.000	.000	.000	.
	Verified	.001	.000	.000	.001
	WC	.000	.000	.002	.000
	tone_pos	.000	.000	.000	.000
	Sarcasm	.000	.000	.176	.000
	Humor	.001	.000	.002	.000
N	HelpfulCounts	8817	8817	8817	8817
	ReviewScore	8817	8817	8817	8817
	AmazonYN	8817	8817	8817	8817
	ReviewAgeDays	8817	8817	8817	8817
	Verified	8817	8817	8817	8817
	WC	8817	8817	8817	8817
	tone_pos	8817	8817	8817	8817
	Sarcasm	8817	8817	8817	8817
	Humor	8817	8817	8817	8817

Correlations

		Verified	WC	tone_pos	Sarcasm	Humor
Pearson Correlation	HelpfulCounts	.033	.249	-.037	-.051	.033
	ReviewScore	.066	-.073	.373	.089	.100
	AmazonYN	-.100	.031	-.047	-.010	.031
	ReviewAgeDays	.032	.264	-.122	-.156	.104
	Verified	1.000	-.002	.047	.012	.005
	WC	-.002	1.000	-.271	-.340	.163
	tone_pos	.047	-.271	1.000	.299	.016
	Sarcasm	.012	-.340	.299	1.000	.049
	Humor	.005	.163	.016	.049	1.000
Sig. (1-tailed)	HelpfulCounts	.001	<.001	<.001	<.001	<.001
	ReviewScore	.000	.000	.000	.000	.000
	AmazonYN	.000	.002	.000	.176	.002
	ReviewAgeDays	.001	.000	.000	.000	.000
	Verified	.	.411	.000	.123	.307
	WC	.411	.	.000	.000	.000

	tone_pos	.000	.000	.	.000	.069
	Sarcasm	.123	.000	.000	.	.000
	Humor	.307	.000	.069	.000	.
N	HelpfulCounts	8817	8817	8817	8817	8817
	ReviewScore	8817	8817	8817	8817	8817
	AmazonYN	8817	8817	8817	8817	8817
	ReviewAgeDays	8817	8817	8817	8817	8817
	Verified	8817	8817	8817	8817	8817
	WC	8817	8817	8817	8817	8817
	tone_pos	8817	8817	8817	8817	8817
	Sarcasm	8817	8817	8817	8817	8817
	Humor	8817	8817	8817	8817	8817

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Humor, Verified, tone_pos, AmazonYN, ReviewAgeDays, Sarcasm, ReviewScore, WC[b]	.	Enter

a. Dependent Variable: HelpfulCounts

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.278[a]	.077	.076	59.979	.077	92.266	8

Model Summary

Change Statistics

Model	df2	Sig. F Change
1	8808	<.001

a. Predictors: (Constant), Humor, Verified, tone_pos, AmazonYN, ReviewAgeDays, Sarcasm, ReviewScore, WC

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2655427.109	8	331928.389	92.266	<.001[b]
	Residual	31686826.133	8808	3597.505		
	Total	34342253.242	8816			

a. Dependent Variable: HelpfulCounts

b. Predictors: (Constant), Humor, Verified, tone_pos, AmazonYN, ReviewAgeDays, Sarcasm, ReviewScore, WC

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-38.457	5.022		-7.658	<.001
	ReviewScore	2.122	.459	.051	4.619	<.001
	AmazonYN	2.060	1.324	.016	1.556	.120
	ReviewAgeDays	.018	.002	.102	9.441	<.001
	Verified	5.382	2.017	.028	2.669	.008
	WC	.159	.007	.247	21.371	<.001

	.146	.172	.010	.848	.396
tone_pos	.146	.172	.010	.848	.396
Sarcasm	.408	.108	.042	3.767	<.001
Humor	-.138	.056	-.026	-2.444	.015

Coefficients[a]

		Collinearity Statistics	
Model		Tolerance	VIF
1	(Constant)		
	ReviewScore	.848	1.180
	AmazonYN	.962	1.039
	ReviewAgeDays	.895	1.117
	Verified	.983	1.017
	WC	.787	1.270
	tone_pos	.761	1.314
	Sarcasm	.825	1.213
	Humor	.944	1.059

a. Dependent Variable: HelpfulCounts

Collinearity Diagnostics[a]

				Variance Proportions		
Model	Dimension	Eigenvalue	Condition Index	(Constant)	ReviewScore	AmazonYN
1	1	6.779	1.000	.00	.00	.01
	2	.769	2.970	.00	.01	.01
	3	.430	3.973	.00	.00	.25
	4	.394	4.147	.00	.00	.51
	5	.269	5.024	.00	.00	.15
	6	.144	6.851	.00	.90	.01
	7	.138	7.000	.00	.02	.00
	8	.067	10.062	.05	.03	.07
	9	.010	25.870	.95	.02	.01

Collinearity Diagnostics[a]

Variance Proportions

Model	Dimension	ReviewAgeDays	Verified	WC	tone_pos	Sarcasm	Humor
1	1	.01	.00	.00	.00	.00	.00
	2	.18	.00	.16	.17	.00	.00
	3	.38	.00	.33	.01	.00	.01
	4	.43	.00	.00	.13	.00	.00
	5	.01	.05	.38	.50	.00	.03
	6	.00	.03	.00	.15	.00	.12
	7	.00	.28	.02	.00	.00	.66
	8	.00	.58	.00	.01	.12	.18
	9	.01	.05	.10	.03	.87	.00

a. Dependent Variable: HelpfulCounts

Regression 4

Notes

Output Created		03-APR-2025 22:02:50
Comments		
Input	Data	D:\Final Dataset\Cleaned Data\Cleaned_Amazon_ReviewContent.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>

	N of Rows in Working Data File	8817
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE /CRITERIA=PIN(.05) POUT(.10) TOLERANCE(.0001) /NOORIGIN /DEPENDENT HelpfulCounts /METHOD=ENTER ReviewScore AmazonYN ReviewAgeDays Verified WC Sarcasm Humor.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.25
	Memory Required	45216 bytes
	Additional Memory Required for Residual Plots	0 bytes

Descriptive Statistics

	Mean	Std. Deviation	N

HelpfulCounts	7.40	62.414	8817
ReviewScore	3.03	1.510	8817
AmazonYN	.59	.492	8817
ReviewAgeDays	316.81	360.774	8817
Verified	.88	.319	8817
WC	94.11	96.762	8817
Sarcasm	39.0599	6.49986	8817
Humor	26.71124	11.681300	8817

Correlations

		HelpfulCounts	ReviewScore	AmazonYN	ReviewAgeDays
Pearson Correlation	HelpfulCounts	1.000	.035	.032	.158
	ReviewScore	.035	1.000	-.055	-.044
	AmazonYN	.032	-.055	1.000	.155
	ReviewAgeDays	.158	-.044	.155	1.000
	Verified	.033	.066	-.100	.032
	WC	.249	-.073	.031	.264
	Sarcasm	-.051	.089	-.010	-.156
	Humor	.033	.100	.031	.104
Sig. (1-tailed)	HelpfulCounts	.	<.001	.001	<.001
	ReviewScore	.001	.	.000	.000
	AmazonYN	.001	.000	.	.000
	ReviewAgeDays	.000	.000	.000	.
	Verified	.001	.000	.000	.001
	WC	.000	.000	.002	.000
	Sarcasm	.000	.000	.176	.000
	Humor	.001	.000	.002	.000
N	HelpfulCounts	8817	8817	8817	8817
	ReviewScore	8817	8817	8817	8817
	AmazonYN	8817	8817	8817	8817
	ReviewAgeDays	8817	8817	8817	8817
	Verified	8817	8817	8817	8817

WC	8817	8817	8817	8817
Sarcasm	8817	8817	8817	8817
Humor	8817	8817	8817	8817

Correlations

		Verified	WC	Sarcasm	Humor
Pearson Correlation	HelpfulCounts	.033	.249	-.051	.033
	ReviewScore	.066	-.073	.089	.100
	AmazonYN	-.100	.031	-.010	.031
	ReviewAgeDays	.032	.264	-.156	.104
	Verified	1.000	-.002	.012	.005
	WC	-.002	1.000	-.340	.163
	Sarcasm	.012	-.340	1.000	.049
	Humor	.005	.163	.049	1.000
Sig. (1-tailed)	HelpfulCounts	.001	<.001	<.001	<.001
	ReviewScore	.000	.000	.000	.000
	AmazonYN	.000	.002	.176	.002
	ReviewAgeDays	.001	.000	.000	.000
	Verified	.	.411	.123	.307
	WC	.411	.	.000	.000
	Sarcasm	.123	.000	.	.000
	Humor	.307	.000	.000	.
N	HelpfulCounts	8817	8817	8817	8817
	ReviewScore	8817	8817	8817	8817
	AmazonYN	8817	8817	8817	8817
	ReviewAgeDays	8817	8817	8817	8817
	Verified	8817	8817	8817	8817
	WC	8817	8817	8817	8817
	Sarcasm	8817	8817	8817	8817
	Humor	8817	8817	8817	8817

Variables Entered/Removed[a]

Model	Variables	Variables	Method

	Entered	Removed		
1	Humor, Verified, Sarcasm, AmazonYN, ReviewScore, ReviewAgeDays, WC[b]		.	Enter

a. Dependent Variable: HelpfulCounts

b. All requested variables entered.

Model Summary

					Change Statistics		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.278[a]	.077	.077	59.978	.077	105.348	7

Model Summary

Change Statistics

Model	df2	Sig. F Change
1	8809	<.001

a. Predictors: (Constant), Humor, Verified, Sarcasm, AmazonYN, ReviewScore, ReviewAgeDays, WC

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2652839.368	7	378977.053	105.348	<.001[b]

		B			
Residual	31689413.874	8809	3597.391		
Total	34342253.242	8816			

a. Dependent Variable: HelpfulCounts

b. Predictors: (Constant), Humor, Verified, Sarcasm, AmazonYN, ReviewScore, ReviewAgeDays, WC

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-38.924	4.992		-7.798	<.001
	ReviewScore	2.261	.429	.055	5.270	<.001
	AmazonYN	2.042	1.324	.016	1.542	.123
	ReviewAgeDays	.018	.002	.102	9.419	<.001
	Verified	5.423	2.016	.028	2.690	.007
	WC	.158	.007	.245	21.545	<.001
	Sarcasm	.427	.106	.045	4.043	<.001
	Humor	-.137	.056	-.026	-2.441	.015

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	ReviewScore	.972	1.029
	AmazonYN	.962	1.039
	ReviewAgeDays	.896	1.116
	Verified	.984	1.017
	WC	.811	1.233
	Sarcasm	.864	1.157
	Humor	.944	1.059

a. Dependent Variable: HelpfulCounts

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	(Constant)	ReviewScore	AmazonYN
					Variance Proportions	
1	1	6.251	1.000	.00	.00	.01
	2	.591	3.252	.00	.03	.00
	3	.428	3.822	.00	.00	.35
	4	.356	4.192	.00	.02	.55
	5	.158	6.294	.00	.86	.02
	6	.138	6.721	.00	.01	.00
	7	.068	9.617	.04	.06	.06
	8	.010	24.516	.95	.01	.01

Collinearity Diagnostics[a]

Variance Proportions

Model	Dimension	ReviewAgeDays	Verified	WC	Sarcasm	Humor
1	1	.01	.00	.01	.00	.00
	2	.41	.01	.22	.00	.00
	3	.23	.00	.39	.00	.00
	4	.34	.01	.21	.00	.00
	5	.00	.08	.03	.00	.12
	6	.00	.27	.02	.00	.69
	7	.00	.58	.01	.13	.18
	8	.01	.05	.13	.87	.00

a. Dependent Variable: HelpfulCounts

Regression
5

Notes

Output Created		03-APR-2025 22:03:31
Comments		
Input	Data	D:\Final Dataset\Cleaned Data\Cleaned_Amazon_ReviewContent.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	8817
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE /CRITERIA=PIN(.05) POUT(.10) TOLERANCE(.0001) /NOORIGIN /DEPENDENT HelpfulCounts

		/METHOD=ENTER ReviewScore ReviewAgeDays Verified WC Sarcasm Humor.
Resources	Processor Time	00:00:00.16
	Elapsed Time	00:00:00.18
	Memory Required	44432 bytes
	Additional Memory Required for Residual Plots	0 bytes

Descriptive Statistics

	Mean	Std. Deviation	N
HelpfulCounts	7.40	62.414	8817
ReviewScore	3.03	1.510	8817
ReviewAgeDays	316.81	360.774	8817
Verified	.88	.319	8817
WC	94.11	96.762	8817
Sarcasm	39.0599	6.49986	8817
Humor	26.71124	11.681300	8817

Correlations

		HelpfulCounts	ReviewScore	ReviewAgeDays	Verified
Pearson Correlation	HelpfulCounts	1.000	.035	.158	.033
	ReviewScore	.035	1.000	-.044	.066
	ReviewAgeDays	.158	-.044	1.000	.032
	Verified	.033	.066	.032	1.000
	WC	.249	-.073	.264	-.002
	Sarcasm	-.051	.089	-.156	.012
	Humor	.033	.100	.104	.005
Sig. (1-tailed)	HelpfulCounts	.	<.001	<.001	.001

		HelpfulCounts	ReviewScore	ReviewAgeDays	Verified
	ReviewScore	.001	.	.000	.000
	ReviewAgeDays	.000	.000	.	.001
	Verified	.001	.000	.001	.
	WC	.000	.000	.000	.411
	Sarcasm	.000	.000	.000	.123
	Humor	.001	.000	.000	.307
N	HelpfulCounts	8817	8817	8817	8817
	ReviewScore	8817	8817	8817	8817
	ReviewAgeDays	8817	8817	8817	8817
	Verified	8817	8817	8817	8817
	WC	8817	8817	8817	8817
	Sarcasm	8817	8817	8817	8817
	Humor	8817	8817	8817	8817

Correlations

		WC	Sarcasm	Humor
Pearson Correlation	HelpfulCounts	.249	-.051	.033
	ReviewScore	-.073	.089	.100
	ReviewAgeDays	.264	-.156	.104
	Verified	-.002	.012	.005
	WC	1.000	-.340	.163
	Sarcasm	-.340	1.000	.049
	Humor	.163	.049	1.000
Sig. (1-tailed)	HelpfulCounts	<.001	<.001	<.001
	ReviewScore	.000	.000	.000
	ReviewAgeDays	.000	.000	.000
	Verified	.411	.123	.307
	WC	.	.000	.000
	Sarcasm	.000	.	.000
	Humor	.000	.000	.
N	HelpfulCounts	8817	8817	8817
	ReviewScore	8817	8817	8817
	ReviewAgeDay	8817	8817	8817

	s			
	Verified	8817	8817	8817
	WC	8817	8817	8817
	Sarcasm	8817	8817	8817
	Humor	8817	8817	8817

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Humor, Verified, Sarcasm, ReviewScore, ReviewAgeDays, WC[b]	.	Enter

a. Dependent Variable: HelpfulCounts

b. All requested variables entered.

Model Summary

					Change Statistics		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1
1	.277[a]	.077	.076	59.983	.077	122.490	6

Model Summary

	Change Statistics	
Model	df2	Sig. F Change
1	8810	<.001

a. Predictors: (Constant), Humor, Verified, Sarcasm, ReviewScore,

ReviewAgeDays, WC

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2644281.008	6	440713.501	122.490	<.001[b]
	Residual	31697972.235	8810	3597.954		
	Total	34342253.242	8816			

a. Dependent Variable: HelpfulCounts

b. Predictors: (Constant), Humor, Verified, Sarcasm, ReviewScore, ReviewAgeDays, WC

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-37.609	4.919		-7.646	<.001
	ReviewScore	2.231	.429	.054	5.205	<.001
	ReviewAgeDays	.018	.002	.104	9.775	<.001
	Verified	5.102	2.006	.026	2.544	.011
	WC	.158	.007	.245	21.525	<.001
	Sarcasm	.430	.106	.045	4.065	<.001
	Humor	-.136	.056	-.025	-2.409	.016

Coefficients[a]

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	ReviewScore	.974	1.027
	ReviewAgeDays	.918	1.089

Verified	.994	1.006
WC	.811	1.233
Sarcasm	.865	1.157
Humor	.945	1.058

a. Dependent Variable: HelpfulCounts

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	(Constant)	Variance Proportions ReviewScore	ReviewAgeDays
1	1	5.633	1.000	.00	.01	.01
	2	.591	3.088	.00	.03	.42
	3	.397	3.768	.00	.00	.55
	4	.160	5.941	.00	.89	.01
	5	.138	6.378	.00	.01	.00
	6	.071	8.886	.04	.06	.00
	7	.011	23.148	.95	.01	.01

Collinearity Diagnostics[a]

		Variance Proportions			
Model	Dimension	Verified	WC	Sarcasm	Humor
1	1	.00	.01	.00	.00
	2	.01	.21	.00	.00
	3	.00	.60	.00	.00
	4	.06	.03	.00	.11
	5	.29	.02	.00	.67
	6	.59	.01	.11	.20
	7	.05	.13	.88	.00

a. Dependent Variable: HelpfulCounts