Generalized Regression for nps_response_value+1

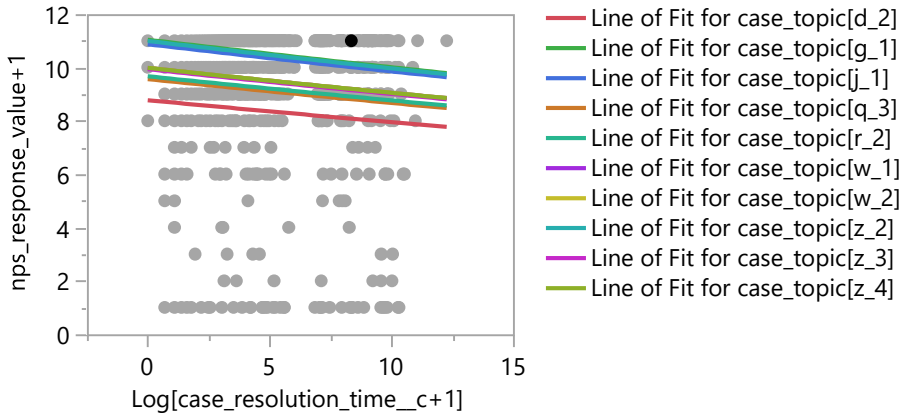
Model Comparison

Show	Response Distribution	Estimation Method	Validation Method	Nonzero Parameters	AICc	BIC	Generalized RSquare
☐	Normal	Standard Least Squares	None	12	8506.9858	8573.3966	0.0372808
☐	Normal	Lasso	Holdback	12	5964.212	6026.2626	0.0352709
☐	Normal	Elastic Net	Holdback	12	5964.212	6026.2626	0.0352709
☐	Gamma	Lasso	Holdback	10	7041.6073	7093.3469	0.040595
☑	Gamma	Elastic Net	Holdback	10	7041.6074	7093.347	0.0405949
☐	Exponential	Lasso	Holdback	10	8735.8227	8787.5622	0.0019536
☐	Exponential	Elastic Net	Holdback	10	8735.8227	8787.5622	0.0019536

Gamma Elastic Net with Holdback Validation

Regression Plot

Training



Model Summary

Response	nps_response_value+1
Distribution	Gamma
Estimation Method	Elastic Net
Validation Method	Holdback with Early Stopping
Mean Model Link	Log
Dispersion Model Link	Identity

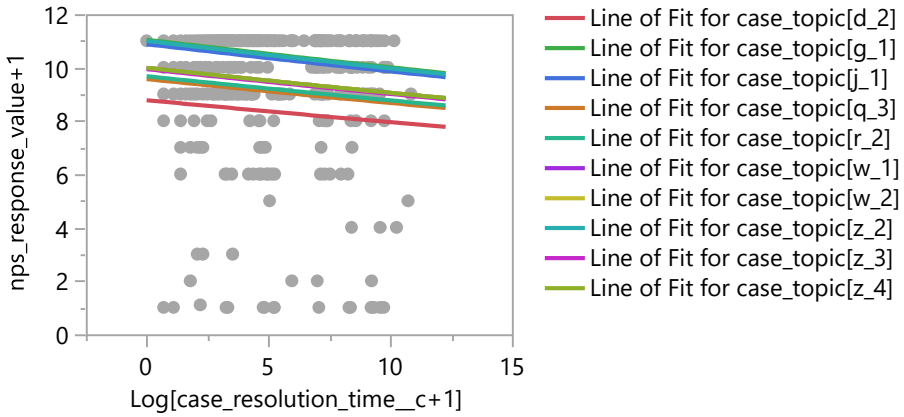
Measure	Training	Validation
Number of rows	1327	570
Sum of Frequencies	1327	570
-LogLikelihood	3510.7201	1499.7772
Number of Parameters	10	10
BIC	7093.347	3063.0108
AICc	7041.6074	3019.948
Generalized RSquare	0.0405949	0.0390801
Lambda Penalty	0.1371767	.

Estimation Details

Elastic Net Alpha	0.99
Number of Grid Points	150
Minimum Penalty Fraction	0
Grid Scale	Square Root

Validation Generalized RSquare
.
0.0373914
0.0373914
0.0390781
0.0390801
0.0021013
0.0021013

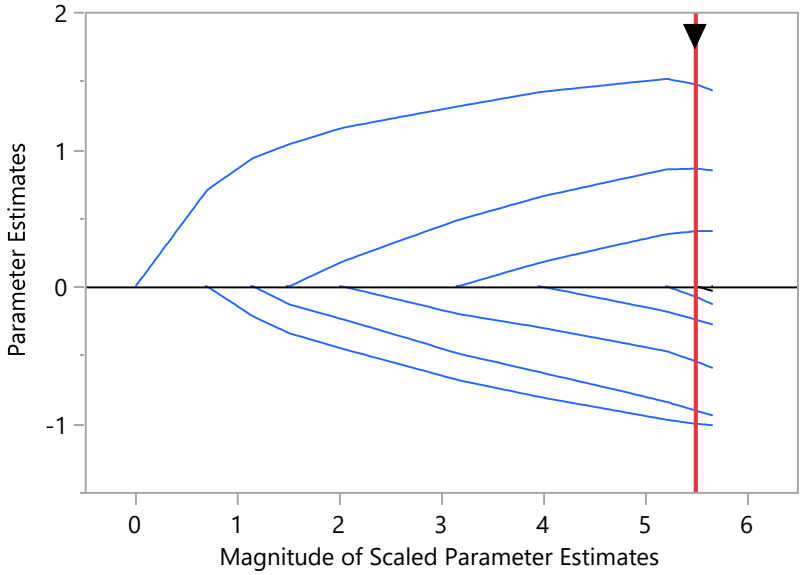
Validation



Generalized Regression for nps_response_value+1

Gamma Elastic Net with Holdback Validation

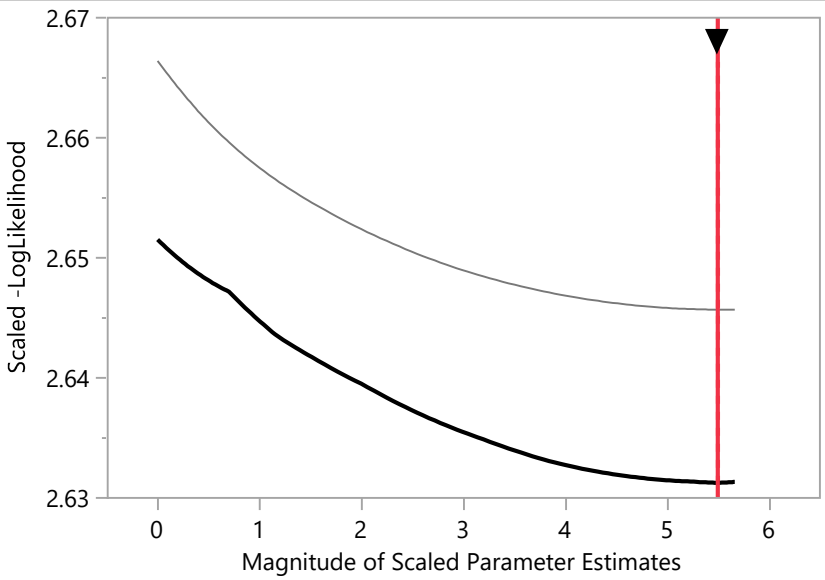
Solution Path



Parameter Estimates for Original Predictors

Term	Estimate	Std Error	Wald ChiSquare	Prob > ChiSquare	Lower 95%	Upper 95%
Intercept	2.3005871	0.0430487	2855.9921	<.0001*	2.2162132	2.3849611
Log[case_resolution_time__c+1]	-0.009823	0.0052034	3.5639314	0.0590	-0.020022	0.0003753
case_topic[d_2-z_4]	-0.129109	0.1048785	1.5154496	0.2183	-0.334667	0.0764489
case_topic[g_1-z_4]	0.100757	0.048104	4.3872013	0.0362*	0.0064748	0.1950391
case_topic[j_1-z_4]	0.0852971	0.0433252	3.8760392	0.0490*	0.0003813	0.1702128
case_topic[q_3-z_4]	-0.042749	0.0548714	0.6069503	0.4359	-0.150295	0.0647973
case_topic[r_2-z_4]	-0.031668	0.0848037	0.1394509	0.7088	-0.197881	0.1345439
case_topic[w_1-z_4]	0	0	0	1.0000	0	0
case_topic[w_2-z_4]	0	0	0	1.0000	0	0
case_topic[z_2-z_4]	0.0966595	0.0509229	3.6029961	0.0577	-0.003147	0.1964665
case_topic[z_3-z_4]	-0.004754	0.0483707	0.0096608	0.9217	-0.099559	0.0900505

Gamma Distribution Parameters	Estimate	Std Error	Wald ChiSquare	Prob > ChiSquare	Lower 95%	Upper 95%
Dispersion	1.3005776	0.1256458	107.14615	<.0001*	1.0543164	1.5468389


2.67
2.66
2.65
2.64
2.63
Scaled -LogLikelihood
0
1
2
3
4
5
6
Magnitude of Scaled Parameter Estimates
Legend
Validation
Training
Reset Solution

Generalized Regression for nps_response_value+1

Gamma Elastic Net with Holdback Validation

Prediction Expression

$$\text{Exp}\left(\begin{array}{l} 2.300587124 \\ +\,-0.009823206 \bullet \text{Log}\left(\text{case\_resolution\_time\_\_c} + 1\right) \\ +\,\text{Match}\left(\text{case\_topic}, \begin{array}{ll} \text{"d\_2"} & \Rightarrow -0.129109247 \\ \text{"g\_1"} & \Rightarrow 0.1007569798 \\ \text{"j\_1"} & \Rightarrow 0.0852970834 \\ \text{"q\_3"} & \Rightarrow -0.042748672 \\ \text{"r\_2"} & \Rightarrow -0.031668361 \\ \text{"w\_1"} & \Rightarrow 0 \\ \text{"w\_2"} & \Rightarrow 0 \\ \text{"z\_2"} & \Rightarrow 0.0966595427 \\ \text{"z\_3"} & \Rightarrow -0.004754327 \\ \text{"z\_4"} & \Rightarrow 0 \\ \text{else} & \Rightarrow . \end{array}\right) \end{array}\right)$$