Spatiotemporal Impacts of Ideology and Social Vulnerability on COVID-19: Supplemental Appendix

Erich Seamon, Jennifer-Johnson Leung, Craig Miller, Ben Ridenhour 01/30/2023

Contents

Table T2: United States: Regression Model Results	2
Part 3: Regression Modeling Summarized Model Results	3
Table T12	3

Table T2: United States: Regression Model Results

,	Alpha Wave		Delta Wave		Omicron Wave	
	Estimates	Adjusted P values	Estimates	Adjusted P values	Estimates	Adjusted P values
Intercept	-7.73313	0	-7.05210	0	-7.49889	0
Socioeconomic	0.04435	1	-0.03913	1	0.05413	1
Household Composition & Disability	0.26958	2.84e-07	0.28751	3.83e-09	0.36952	1.7e-14
Housing Type & Transportation	0.11719	0.57	0.20256	5.18e-05	-0.09546	1
Unemployed	0.86481	5.59e-13	-0.06978	1	0.33055	1
Food Insecurity	-1.22957	6.24e-47	1.02947	1.21e-31	0.04276	1
Broadband Access	2.87818	2.49e-60	-0.99263	3.65e-06	1.17898	2.31e-08
Diabetes	0.71078	2.65e-13	1.30850	4.96e-48	0.49088	1.89e-05
Obesity	-0.22955	1	-0.49613	2.47e-06	0.27717	0.381
Population Density	0.09549	6.62e-42	-0.01686	1	0.05980	8.87e-14
Associations	1.46995	2.52e-18	-0.94949	6.9e-07	0.23206	1
Age over 65	0.00000	1.03e-18	0.00000	1	0.00000	7.46e-13
Democratic Voting Pct	-0.62271	1.3e-11	-1.41023	1.77e-59	-0.98851	5.87e-27
Vaccination Rate	-0.08105	1	-0.29546	1	-0.35674	0.368
Minority Status and Language	0.44996	1.88e-19	-0.32104	4.78e-10	-0.24493	4.06e-05
Uninsured Adults	-0.10371	1	1.25487	3.2e-89	-0.56820	1.15e-15

Note:

Bold = significant value

ia La	Alpha Wave	Delta Wave	Omicron Wave
Pseudo R2	0.416	0.675	0.505

Part 3: Regression Modeling Summarized Model Results

Table T12

Regions	Alpha	AlphaR2	Delta	DeltaR2	Omicron	OmicronR2	Map
Regions 1-2	Vaccination Rate, Minority Status	0.5		0.5	Food Insecurity, Voting, Uninsured Adults	0.5	
Region 3		0.5		0.5		0.5	
Region 4	Diabetes, Age over 65+, Vaccination Rate	0.5	Food Insecurity, Diabetes, Voting	0.5	Diabetes, Population Density	0.5	
Region 5	Housing Type, Population Density, Social Associations, Age over 65+, Voting	0.5	Diabetes, Vaccination Rate	0.5	Diabetes, Vaccination Rate	0.5	
Region 6	Socioeconomics, Household Composition, Broadband Access, Age over 65+, Uninsured Adults	0.5	Household Composition, Housing Type, Voting, Vaccination Rate, Uninsured Adults	0.5	Socioeconomics, Household Composition, Uninsured Adults	0.5	
Region 7	Socioeconomics, Food Insecurity, Social Associations, Age over 65+, Uninsured Adults	0.5	Broadband Access, Population Density, Voting, Minority Status	0.5	Diabetes, Minority Status	0.5	
Region 8	Food Insecurity, Social Associations	0.5	Household Composition, Unemployment, Obesity, Age over 65+, Vaccination Rate	0.5	Household Composition	0.5	
Region 9	Age over 65+, Voting	0.5	Vaccination Rate	0.5	Voting, Uninsured Adults	0.5	
Region 10	Population Density, Voting	0.5	Obesity, Voting	0.5		0.5	