Supplementary Materials

Contents

S1 Introductory Remarks

For this analysis we use the *lavaan* package (Rosseel 2012) to fit structural equation models using the maximum likelihood estimator with NLMINB optimization. The structure of each model is given in the diagrams in the paper, with the information source varying between the models. The best fit model corresponds to the choice of Conservative media (Model A) as the information source, with the second best fit model corresponding to the choice of Mainstream media (Model B) as the information source. Exploratory factor analysis indicated that Mainstream medial and Liberal media were measuring the same media consumption habits, so the Liberal media was not considered separately. The combined Mainstream and Liberal media (Model C) is the worst fit. Similarly, for Conservative media, the factor analysis indicated that only one question should be used, so for that model, there is no hidden latent variable for information source. Rather, it is measured by a single survey item. We appreciate the suggestion from one reviewer to consider other choices for the information source. Model D considers Conservative and Mainstream media together, while Model E includes all information sources. As indicated in the Section S5 of the supplement, Model E is the worst fit of all 5 models, while Model D and Model C are not significantly distinguishable in terms of fit statistics.

S2 Significant Correlations for Media Sources

Survey Question on Media

Question 27: How much information do you get from the following sources? (LIKERT)

27-1 Mainstream Media (Associated Press, New York Times, Wall Street Journal, USA Today, or Washington Post)

27-2 Conservative Media (Fox News, Rush Limbaugh, Breitbart News, One America News, or The Drudge Report)

27-3 Mainstream Broadcast Media (ABC News, CBS News, NBC News, Univision)

27-4 Liberal Media (MSNBC, Vox, Vice, or Huffington Post)

27-5 Online News Aggregators (Google News or Yahoo News)

27-6 Social Media (Facebook, Twitter, WhatsApp, or YouTube)

27-7 The radio

Significant ($p < 0.05$) Spearman Correlation Coefficients with Media Source Question (Q27)

Identity	27-1	27-2	27-3	27-4	27-5	27-6	27-7
Conservative (p-value)	-0.4275478 (2.2×10^{-16})	0.4859965 (2.2×10^{-16})	-0.2547644 (7.263^{-16})	-0.361862 (2.2×10^{-16})	-0.1415368 (9.823×10^{-6})		
Liberal (p-value)	0.3821175 (2.2×10^{-16})	-03930313 (2.2×10^{-16})	0.07114212 (0.02656)	0.3506838 (2.2×10^{-16})			0.1027962 (0.001378)
Libertarian (p-value)	-0.09788481 (0.002261)	0.0788199 (0.01402)	-0.09334834 (0.003581)	-0.07483099 (0.02008)			
Nonpolitical (p-value)	-0.0701136 (0.02891)					0.1218221 (0.0001473)	
Other (p-value)			-0.06547945 (0.04125)				
Over 65 (p-value)			0.1551145 (1.557×10^{-6})			-0.1780949 (3.614×10^{-8})	
Female (p-value)	0.1075755 (0.0007573)	-0.1267613 (7.154×10^{-5})	0.1373828 (1.639×10^{-5})	0.1077401 (0.0007766)		0.08012539 (0.0125)	
Rural				-0.07069575 (0.02635)	-0.08410547 (0.008105)		0.08068725 (0.01114)

Significant ($p < 0.5$) Spearman Correlation Coefficients between Demographics and Ideology

	Over 65	Female	Rural
Conservative	0.06711169	-0.1223746	0.07420102
(p-value)	(0.03904)	(0.0001309)	(0.2024)
Liberal		0.07841319	
(p-value)		(0.01447)	
Libertarian	-0.06587415	-0.1032616	
(p-value)	(0.0428)	(0.001265)	
Nonpolitical	-0.1316539	0.06699259	-0.07170131
(p-value)	(4.873×10^{-5})	(0.03677)	(0.02487)
Other	-0.07961791		
(p-value)	(0.01431)		

S3   Exploratory Factor Analysis for Information Sources

We used a maximum likelihood estimator with the Geomin Oblique rotation method in *lavaan* to evaluate the decomposition of the responses to the media sources question (Q27) with 1, 2, and 3 factors. As seen from the fit statistics in the table below, 2 factors gives a significant reduction in the RSEA over 1 factor while still having a significant p-value for the chi-squared statistic. This combined with the correlations in the tables above justifies our choice of decomposition for our media sources question.

EFA Fit Statistics

Statistic	1-factor	2-factor	3-factor
Number of model parameters	14	20	25
chi-squared	181.658	25.536	6.604
Degrees of freedom	14	8	3
P-value (Chi-square)	0.000	0.001	0.109
Comparative Fit Index (CFI)	0.796	0.979	0.996
Tucker-Lewis Index (TLI)	0.695	0.944	0.974
Akaike (AIC)	19178.15	19034.03	19024.56
Bayesian (BIC)	19246.42	19131.56	19146.47
Sample-size adjusted Bayesian (SABIC)	19201.96	19068.04	19067.07
RMSEA	0.111	0.048	0.032

Standardized Loadings for 2 Factor EFA Model

Questions	Factor 1	Factor 2	Unique Var	Communalities
27-1	0.766		0.427	0.573
27-2	-0.301	0.318	0.852	0.148
27-3	0.559		0.683	0.317
27-4	0.595		0.574	0.426
27-5	0.273	0.447	0.670	0.330
27-6		0.653	0.577	0.423
27-7			0.964	0.036

Variance for 2 Factor EFA Model

Statistic	1-factor	2-factor	Total
Sum of sq (obliq) loadings	1.452	0.802	2.254
Proportion of Total	0.644	0.356	1.000
Proportion of Var	0.207	0.115	0.322
Cumulative Var	0.207	0.322	0.322

S4 Survey Demographics

Attribue	Response	Idaho (%)	Texas (%)	Vermont (%)	Total (%)
Age	Under 25	3.0	4.4	3.4	3.3
	25–34	10.9	12.6	11.7	11.4
	35–44	15.1	17.0	11.1	13.9
	45–54	15.1	16.3	13.4	14.6
	55–64	20.6	19.3	25.1	22.1
	65–74	25.7	17.8	26.8	25.0
	75+	9.6	12.6	8.5	9.6
Gender	Male	42.0	48.5	45.7	44.2
	Female	57.4	50.7	53.8	55.2
	Not Male or Female ID	0.6	0.7	0.6	0.6
Educational Attainment	No HS diploma	0.4	0.7	0.3	0.4
	HS diploma or equivalent	7.5	13.9	7.5	8.4
	Some college	19.6	12.4	11.7	15.7
	Associate's degree	11.7	9.5	5.3	9.1
	Bachelor's degree or higher	60.9	63.5	75.1	66.4
Political Ideology	Moderate	28.8	35.6	28.5	29.6
	Liberal	19.0	15.6	46.6	28.5
	Conservative	37.3	34.1	13.3	28.2
	Libertarian	4.1	4.4	2.5	3.6
	Nonpolitical	8.6	7.4	7.1	7.9
	Other	2.2	3.0	2.0	2.2
Race	No Answer	8.0	9.0	3.8	6.7
	American Indian or Alaska Native	0.2	0.7	0.0	0.2
	Multi-race	3.8	3.5	0.8	2.7
	Asian or Asian-American	1.1	4.2	1.1	1.5
	Black or African-American	0.2	6.9	0.8	1.4
	Native Hawaiian or Pacific Islander	0.4	0.0	0.0	0.2
	White	83.5	72.9	91.8	84.9
	Other	2.9	2.8	1.6	2.4
Ethnicity	Hispanic	4.3	11.1	0.6	3.9
	Non-Hispanic	95.7	88.9	99.4	96.1
Rurality*	Rural	36.3	27.8	55.6	41.9
	Urban	63.7	72.2	44.4	58.1
Total	(count of responses)	526	143	365	1034

* Rurality determined by address of respondent, not self-identified

S5 Model Comparison Test

We compared the models against one another based on the lavaan test statistic (chi squared) using an anova test built into the lavaan package (lavtestLRT). Below we report the chi-squared difference and the p-value for each pairwise comparison. Model A is the best fit, followed by model B, with model C having the worst fit of our three primary models. For completeness, we also compare against models D (Mainstream and Conservative Media) and E (All information sources). Model E is the worst fit of all five models, while Model D is statistically indistinguishable from Model C..

A vs B	chi-squared	difference	p-value
Model A	377.98		
Model B	475.18	97.19	7.223×10^{-3}

A vs C	chi-squared	difference	p-value
Model A	377.98		
Model C	548.13	170.15	$< 2.2 \times 10^{-16}$

B vs C	chi-squared	difference	p-value
Model B	475.18		
Model C	548.13	72.959	5.944×10^{-8}

A vs D	chi-squared	difference	p-value
Model A	377.98		
Model D	597.69	219.7	$< 2.2 \times 10^{-16}$

A vs E	chi-squared	difference	p-value
Model A	377.98		
Model E	1210.78	613.09	$< 2.2 \times 10^{-16}$

B vs D	chi-squared	difference	p-value
Model B	475.18		
Model D	597.69	122.51	$< 2.2 \times 10^{-16}$

B vs E	chi-squared	difference	p-value
Model B	475.18		
Model E	1210.78	735.6	$< 2.2 \times 10^{-16}$

C vs D	chi-squared	difference	p-value
Model C	548.13		
Model D	597.69	49.553	1

C vs E	chi-squared	difference	p-value
Model C	548.13		
Model E	1210.78	662.64	$< 2.2 \times 10^{-16}$

D vs E	chi-squared	difference	p-value
Model D	597.69		
Model E	1210.78	613.09	$< 2.2 \times 10^{-16}$

S6 Model A: Conservative Media

Model Fit Statistics: (A) Conservative Media

Number of model parameters	72
Number of observations	912 (out of 1034)
chi-squared	377.985
Degrees of freedom	93
P-value (Chi-square)	0.000
Akaike (AIC)	12590.637
Bayesian (BIC)	12937.363
Sample-size adjusted Bayesian (SABIC)	12708.701

Latent Variable Construction: (A) Conservative Media

Latent Variables	Survey Items	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Knowledge	Q24-1	1.000				0.815	0.815
	Q24-2	0.903	0.048	18.636	0.000	0.736	0.736
	Q24-3	0.709	0.046	15.563	0.000	0.578	0.578
	Q24-4	0.712	0.046	15.610	0.000	0.580	0.580
Peer Influence	Q14	1.000				0.733	0.733
	Q15	0.957	0.125	7.676	0.000	0.701	0.702
COVID Concern	Q12	1.000				0.666	0.666
	Q13	0.824	0.057	14.473	0.000	0.549	0.549
Vaccine Intention	Q22	1.000				0.817	0.818
	Q23	1.113	0.053	21.093	0.000	0.909	0.910

Path effects of key variables on Vaccine Intention (A-Conservative Media)

	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Identiy as Conservative	-0.547	0.073	-7.511	0.000	-0.669	-0.299
Over 65	0.279	0.058	4.852	0.000	0.342	0.162
Female ID	-0.224	0.055	-4.086	0.000	-0.274	-0.136
Info Source: Conservative	-0.053	0.032	-1.646	0.100	-0.064	-0.064

Regressions Statistics for (A) Conservative Media Info Sources Model

Dependent Variable	Feature	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Peer Influence	Rural	-0.170	0.059	-2.905	0.004	-0.232	-0.115
	Over 65	0.012	0.061	0.202	0.840	0.017	0.008
	Female ID	0.051	0.058	0.878	0.380	0.069	0.034
	White	0.031	0.097	0.316	0.752	0.042	0.012
	Liberal ID	-0.330	0.076	-4.341	0.000	-0.450	-0.205
	Conservative ID	-0.510	0.081	-6.299	0.000	-0.696	-0.312
	Libertarian ID	-0.291	0.160	-1.821	0.069	-0.397	-0.074
	Non-Political ID	0.187	0.119	1.581	0.114	0.256	0.067
	Other Political ID	-0.051	0.199	-0.258	0.796	-0.070	-0.010
Info Source: Conservative	Peer Inf	-0.042	0.049	-0.855	0.392	-0.031	-0.031
	Rural	-0.081	0.057	-1.426	0.154	-0.081	-0.040
	Over 65	0.103	0.059	1.745	0.081	0.103	0.049
	Female ID	-0.072	0.056	-1.276	0.202	-0.072	-0.036
	White	0.004	0.094	0.041	0.967	0.004	0.001
	Liberal ID	-0.357	0.073	-4.887	0.000	-0.357	-0.163
	Conservative ID	1.032	0.077	13.375	0.000	1.032	0.462
	Libertarian ID	0.580	0.155	3.748	0.000	0.580	0.108
	Non-Political ID	0.238	0.115	2.072	0.038	0.238	0.062
	Other Political ID	0.079	0.193	0.408	0.683	0.079	0.012
Knowledge	Info: Conservative (Q27-2)	-0.008	0.036	-0.223	0.823	-0.010	-0.010
	Rural	-0.072	0.061	-1.189	0.235	-0.089	-0.044
	Over 65	0.154	0.064	2.405	0.016	0.189	0.090
	Female ID	-0.152	0.061	-2.496	0.013	-0.187	-0.093
	White	-0.024	0.102	-0.230	0.818	-0.029	-0.009
	Liberal ID	-0.009	0.078	-0.118	0.906	-0.011	-0.005
	Conservative ID	0.172	0.088	1.964	0.050	0.212	0.095
	Libertarian ID	0.155	0.169	0.921	0.357	0.191	0.036
	Non-Political ID	0.165	0.125	1.324	0.186	0.203	0.053
	Other Political ID	0.271	0.209	1.293	0.196	0.332	0.049
COVID Concern	Info: Conservative (Q27-2)	-0.141	0.029	-4.855	0.000	-0.212	-0.212
	Rural	-0.120	0.049	-2.436	0.015	-0.180	-0.089
	Over 65	0.317	0.052	6.101	0.000	0.477	0.227
	Female ID	0.086	0.049	1.756	0.079	0.129	0.064
	White	0.087	0.082	1.058	0.290	0.131	0.039
	Liberal ID	0.336	0.063	5.290	0.000	0.505	0.230
	Conservative ID	-0.604	0.072	-8.378	0.000	-0.908	-0.406
	Libertarian ID	-1.001	0.138	-7.261	0.000	-1.504	-0.281
	Non-Political ID	-0.455	0.101	-4.506	0.000	-0.683	-0.178
	Other Political ID	0.134	0.169	0.795	0.426	0.201	0.029

Regressions Statistics for (A) Conservative Media Info Sources Model

Dependent Variable	Feature	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Vaccine Intention	Info: Conservative (Q27-2)	0.147	0.054	2.717	0.007	0.180	0.180
	Knowledge	0.033	0.034	0.978	0.328	0.033	0.033
	COVID Concern	1.411	0.258	5.467	0.000	1.149	1.149
	Rural	0.055	0.075	0.727	0.467	0.067	0.033
	Over 65	-0.168	0.108	-1.561	0.118	-0.206	-0.098
	Female ID	-0.340	0.073	-4.633	0.000	-0.416	-0.207
	White	0.099	0.118	0.835	0.404	0.121	0.036
	Liberal ID	-0.316	0.123	-2.580	0.010	-0.387	-0.177
	Conservative ID	0.355	0.181	1.963	0.050	0.435	0.195
	Libertarian ID	0.624	0.315	1.980	0.048	0.764	0.143
	Non-Political ID	0.417	0.182	2.290	0.022	0.510	0.133
	Other Political ID	-0.463	0.241	-1.923	0.054	-0.566	-0.083

S7   Confirmatory Factor Analysis for Best Fitting Model (A)

CFA Fit Statistics: (A) Conservative Media

Number of model parameters	31
Number of observations	964 (out of 1034)
chi squared (user)	246.917
Degrees of freedom (user)	35
P-value (Chi-square)(user)	0.000
chi squared (baseline)	3021.542
Degrees of freedom (baseline)	55
P-value (Chi-square)(baseline)	0.000
Comparative Fit Index (CFI)	0.929
Tucker-Lewis Index (TLI)	0.888
Loglikelihood user model (H0)	-13653.609
Loglielihood unrestricted model (H1)	-13530.150
Akaike (AIC)	27369.217
Bayesian (BIC)	27520.221
Sample-size adjusted Bayesian (SABIC)	27421.765
RMSEA	0.079
RMSEA 90% CI - upper	0.089
RMSEA 90% CI - lower	0.070

CFA Latent Variables: (A) Conservative Media

Latent Variables	Survey Items	Estimate	Std.Err	z-value	$P(> |z|)$
Knowledge	Q24-1	1.000			
	Q24-2	0.896	0.048	18.539	0.000
	Q24-3	0.734	0.046	16.033	0.000
	Q24-4	0.739	0.046	16.121	0.000
Peer Influence	Q14	1.000			
	Q15	1.740	0.381	4.566	0.000
COVID Concern	Q12	1.000			
	Q13	0.744	0.057	13.065	0.000
Info: Conservative	Q27-2	1.000			
Vaccine Intention	Q22	1.000			
	Q23	1.155	0.054	21.193	0.000

CFA Covariances: (A) Conservative Media

Latent Variables	Survey Items	Estimate	Std.Err	z-value	$P(>|z|)$
Knowledge	Peer Influence	0.043	0.019	2.278	0.023
	COVID Concern	-0.052	0.027	-1.917	0.055
	Info: Conservative	0.033	0.029	1.125	0.260
	Vaccine Intention	0.005	0.025	0.222	0.824
Peer Influence	COVID Concern	0.086	0.025	3.427	0.001
	Info: Conservative	-0.087	0.026	-3.330	0.001
	Vaccine Intention	0.071	0.022	3.246	0.001
COVID Concern	Info: Conservative	-0.362	0.033	-10.961	0.000
	Vaccine Intention	0.421	0.034	12.397	0.000
Info: Conservative	Vaccine Intention	-0.198	0.029	-6.792	0.000

S8   Model B: Mainstream Media

Model Fit Statistics: (B) Mainstream Media

Number of model parameters	75
Number of observations	910 (out of 1034)
chi squared	475.175
Degrees of freedom	111
P-value (Chi-square)	0.000
Akaike (AIC)	14973.556
Bayesian (BIC)	15334.565
Sample-size adjusted Bayesian (SABIC)	15096.375

Latent Variable Construction: (B) Mainstream Media

Latent Variables	Survey Items	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Knowledge	Q24-1	1.000				0.813	0.813
	Q24-2	0.898	0.049	18.472	0.000	0.730	0.730
	Q24-3	0.715	0.046	15.584	0.000	0.581	0.582
	Q24-4	0.717	0.046	15.618	0.000	0.583	0.583
Peer Influence	Q14	1.000				0.745	0.746
	Q15	0.928	0.121	7.656	0.000	0.691	0.692
COVID Concern	Q12	1.000				0.661	0.662
	Q13	0.845	0.058	14.678	0.000	0.559	0.559
Info Source: Mainstream	Q27-1	1.000				0.775	0.775
	Q27-3	0.686	0.056	12.150	0.000	0.531	0.532
Vaccine Intention	Q22	1.000				0.816	0.817
	Q23	1.114	0.051	21.835	0.000	0.909	0.910

Path effects of key variables on Vaccine Intention (B-Mainstream Media)

	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Identify as Conservative	-0.541	0.073	-7.438	0.000	-0.662	-0.296
Over 65	0.284	0.058	4.925	0.000	0.348	0.165
Female ID	-0.224	0.057	-3.941	0.000	-0.275	-0.136
Info Source: Mainstream	0.496	0.078	6.346	0.000	0.471	0.471

Regressions Statistics for (B) Mainstream Media Info Sources Model

Dependent Variable	Feature	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Peer Influence	Rural	-0.181	0.059	-3.045	0.002	-0.243	-0.120
	Over 65	0.008	0.062	0.134	0.893	0.011	0.005
	Female ID	0.051	0.059	0.871	0.384	0.069	0.034
	White	0.036	0.099	0.362	0.717	0.048	0.014
	Liberal ID	-0.343	0.077	-4.463	0.000	-0.460	-0.210
	Conservative ID	-0.510	0.081	-6.265	0.000	-0.684	-0.306
	Libertarian ID	-0.297	0.162	-1.837	0.066	-0.399	-0.075
	Non-Political ID	0.191	0.120	1.587	0.113	0.256	0.067
	Other Political ID	-0.061	0.202	-0.305	0.761	-0.082	-0.012
Info Source: Mainstream	Peer Inf	0.034	0.046	0.739	0.460	0.033	0.033
	Rural	-0.071	0.056	-1.258	0.208	-0.092	-0.045
	Over 65	0.171	0.059	2.925	0.003	0.221	0.105
	Female ID	0.138	0.056	2.473	0.013	0.178	0.089
	White	0.049	0.094	0.525	0.600	0.064	0.019
	Liberal ID	0.203	0.073	2.793	0.005	0.262	0.120
	Conservative ID	-0.915	0.078	-11.749	0.000	-1.181	-0.528
	Libertarian ID	-0.774	0.154	-5.014	0.000	-0.999	-0.187
	Non-Political ID	-0.467	0.114	-4.077	0.000	-0.602	-0.157
	Other Political ID	-0.420	0.192	-2.191	0.028	-0.542	-0.080
Knowledge	Info: Mainstream	-0.090	0.067	-1.344	0.179	-0.085	-0.085
	Rural	-0.079	0.061	-1.299	0.194	-0.097	-0.048
	Over 65	0.178	0.065	2.745	0.006	0.219	0.104
	Female ID	-0.141	0.062	-2.286	0.022	-0.173	-0.086
	White	-0.027	0.103	-0.267	0.789	-0.034	-0.010
	Liberal ID	0.011	0.078	0.146	0.884	0.014	0.006
	Conservative ID	0.082	0.101	0.814	0.416	0.101	0.045
	Libertarian ID	0.076	0.175	0.434	0.664	0.093	0.017
	Non-Political ID	0.121	0.128	0.948	0.343	0.149	0.039
	Other Political ID	0.233	0.211	1.106	0.269	0.287	0.042
COVID Concern	Info: Mainstream	0.425	0.069	6.175	0.000	0.498	0.498
	Rural	-0.074	0.049	-1.497	0.134	-0.111	-0.055
	Over 65	0.224	0.053	4.246	0.000	0.339	0.161
	Female ID	0.038	0.050	0.773	0.439	0.058	0.029
	White	0.071	0.083	0.859	0.390	0.107	0.032
	Liberal ID	0.304	0.064	4.778	0.000	0.460	0.210
	Conservative ID	-0.351	0.089	-3.950	0.000	-0.531	-0.237
	Libertarian ID	-0.737	0.145	-5.078	0.000	-1.113	-0.208
	Non-Political ID	-0.289	0.105	-2.762	0.006	-0.436	-0.114
	Other Political ID	0.303	0.170	1.775	0.076	0.457	0.067

Regressions Statistics for (B) Mainstream Media Info Sources Model

Dependent Variable	Feature	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Vaccine Intention	Info: Mainstream	-0.106	0.189	-0.562	0.574	-0.101	-0.101
	Knowledge	0.046	0.034	1.337	0.181	0.045	0.045
	COVID Concern	1.427	0.381	3.743	0.000	1.156	1.156
	Rural	0.032	0.075	0.427	0.670	0.039	0.019
	Over 65	-0.130	0.111	-1.169	0.242	-0.159	-0.075
	Female ID	-0.331	0.073	-4.547	0.000	-0.405	-0.202
	White	0.103	0.121	0.850	0.395	0.126	0.037
	Liberal ID	-0.353	0.144	-2.454	0.014	-0.432	-0.197
	Conservative ID	0.419	0.168	2.502	0.012	0.513	0.229
	Libertarian ID	0.625	0.334	1.870	0.062	0.766	0.143
	Non-Political ID	0.405	0.180	2.255	0.024	0.496	0.130
	Other Political ID	-0.498	0.270	-1.843	0.065	-0.611	-0.090

S9   Model C: Mainstream and Liberal Media

Model Fit Statistics: (C) Mainstream + Liberal Media Information Sources

Number of model parameters	77
Number of observations	904 (out of 1034)
chi squared	548.135
Degrees of freedom	131
P-value (Chi-square)	0.000
Akaike (AIC)	17171.349
Bayesian (BIC)	17541.475
Sample-size adjusted Bayesian (SABIC)	17296.935

Latent Variable Construction: (C) Mainstream + Liberal Media Information Sources

Latent Variables	Survey Items	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Knowledge	Q24-1	1.000				0.812	0.813
	Q24-2	0.898	0.049	18.406	0.000	0.729	0.730
	Q24-3	0.718	0.046	15.569	0.000	0.583	0.583
	Q24-4	0.718	0.046	15.585	0.000	0.584	0.584
Peer Influence	Q14	1.000				0.753	0.754
	Q15	0.910	0.120	7.604	0.000	0.686	0.686
COVID Concern	Q12	1.000				0.668	0.668
	Q13	0.848	0.058	14.690	0.000	0.566	0.567
Info Source: Mainstream + Liberal	Q27-1	1.000				0.772	0.772
	Q27-3	0.700	0.051	13.791	0.000	0.540	0.540
	Q27-4	0.790	0.052	15.280	0.000	0.610	0.610
Vaccine Intention	Q22	1.000				0.816	0.816
	Q23	1.112	0.052	21.346	0.000	0.907	0.907

Path effects of key variables on Vaccine Intention (C-Mainstream+Liberal Media)

	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Identify as Conservative	-0.530	0.073	-7.236	0.000	-0.649	-0.290
Over 65	0.276	0.058	4.755	0.000	0.339	0.161
Female ID	-0.208	0.056	-3.694	0.000	-0.255	-0.127
Info Source: Mainstream + Liberal	0.456	0.065	6.994	0.000	0.431	0.431

Regressions Statistics for (C) Mainstream + Liberal Media Info Sources Model

Dependent Variable	Feature	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Peer Influence	Rural	-0.194	0.060	-3.226	0.001	-0.258	-0.127
	Over 65	-0.002	0.062	-0.027	0.978	-0.002	-0.001
	Female ID	0.060	0.059	1.019	0.308	0.080	0.040
	White	0.030	0.100	0.304	0.761	0.040	0.012
	Liberal ID	-0.357	0.078	-4.608	0.000	-0.475	-0.217
	Conservative ID	-0.513	0.082	-6.264	0.000	-0.681	-0.304
	Libertarian ID	-0.305	0.163	-1.867	0.062	-0.405	-0.076
	Non-Political ID	0.161	0.122	1.320	0.187	0.214	0.056
	Other Political ID	-0.075	0.203	-0.370	0.711	-0.100	-0.015
Info Source: Mainstream + Liberal	Peer Inf	0.004	0.043	0.086	0.931	0.004	0.004
	Rural	-0.095	0.053	-1.808	0.071	-0.124	-0.061
	Over 65	0.185	0.055	3.370	0.001	0.240	0.114
	Female ID	0.147	0.052	2.813	0.005	0.190	0.095
	White	-0.050	0.088	-0.567	0.571	-0.064	-0.019
	Liberal ID	0.286	0.068	4.201	0.000	0.370	0.169
	Conservative ID	-0.900	0.074	-12.131	0.000	-1.166	-0.521
	Libertarian ID	-0.729	0.144	-5.061	0.000	-0.944	-0.177
	Non-Political ID	-0.388	0.107	-3.615	0.000	-0.502	-0.131
	Other Political ID	-0.337	0.178	-1.891	0.059	-0.437	-0.064
Knowledge	Info:Mainstream + Liberal	-0.109	0.066	-1.666	0.096	-0.104	-0.104
	Rural	-0.079	0.061	-1.288	0.198	-0.097	-0.048
	Over 65	0.184	0.065	2.821	0.005	0.227	0.108
	Female ID	-0.134	0.062	-2.175	0.030	-0.165	-0.082
	White	-0.034	0.103	-0.336	0.737	-0.042	-0.013
	Liberal ID	0.022	0.079	0.280	0.779	0.027	0.013
	Conservative ID	0.067	0.099	0.678	0.498	0.083	0.037
	Libertarian ID	0.064	0.174	0.367	0.713	0.078	0.015
	Non-Political ID	0.124	0.128	0.976	0.329	0.153	0.040
	Other Political ID	0.232	0.210	1.106	0.269	0.286	0.042
COVID Concern	Info: Mainstream + Liberal	0.396	0.058	6.798	0.000	0.457	0.457
	Rural	-0.064	0.049	-1.302	0.193	-0.096	-0.047
	Over 65	0.218	0.053	4.136	0.000	0.326	0.155
	Female ID	0.047	0.050	0.952	0.341	0.071	0.035
	White	0.115	0.082	1.394	0.163	0.172	0.051
	Liberal ID	0.276	0.064	4.295	0.000	0.414	0.189
	Conservative ID	-0.380	0.082	-4.647	0.000	-0.568	-0.254
	Libertarian ID	-0.784	0.141	-5.548	0.000	-1.173	-0.220
	Non-Political ID	-0.337	0.103	-3.280	0.001	-0.505	-0.131
	Other Political ID	0.259	0.169	1.536	0.124	0.388	0.057

Regressions Statistics for (C) Mainstream + Liberal Media Info Sources Model, Continued

Dependent Variable	Feature	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Vaccine Intention	Info: Mainstream + Liberal	-0.049	0.140	-0.350	0.727	-0.046	-0.046
	Knowledge	0.047	0.034	1.371	0.170	0.047	0.047
	COVID Concern	1.290	0.289	4.458	0.000	1.056	1.056
	Rural	0.020	0.069	0.289	0.772	0.024	0.012
	Over 65	-0.098	0.093	-1.053	0.293	-0.120	-0.057
	Female ID	-0.329	0.069	-4.773	0.000	-0.403	-0.201
	White	0.106	0.116	0.916	0.360	0.130	0.038
	Liberal ID	-0.309	0.115	-2.684	0.007	-0.378	-0.173
	Conservative ID	0.368	0.147	2.504	0.012	0.451	0.202
	Libertarian ID	0.530	0.286	1.852	0.064	0.650	0.122
	Non-Political ID	0.368	0.166	2.211	0.027	0.451	0.117
	Other Political ID	-0.458	0.240	-1.906	0.057	-0.562	-0.083

S10 Model D: Mainstream and Conservative Media

Model Fit Statistics: (D) Mainstream + Conservative Media Information Sources

Number of model parameters	77
Number of observations	908 (out of 1034)
chi squared	617.802
Degrees of freedom	131
P-value (Chi-square)	0.000
Akaike (AIC)	17271.170
Bayesian (BIC)	17641.636
Sample-size adjusted Bayesian (SABIC)	17397.095

Latent Variable Construction: (D) Mainstream + Conservative Media Information Sources

Latent Variables	Survey Items	Estimate	Std.Err	z-value	$P(> |z|)$	Std.lv	Std.all
Knowledge	Q24-1	1.000				0.816	0.816
	Q24-2	0.903	0.048	18.657	0.000	0.737	0.737
	Q24-3	0.708	0.046	15.550	0.000	0.578	0.578
	Q24-4	0.709	0.046	15.567	0.000	0.578	0.579
Peer Influence	Q14	1.000				0.725	0.725
	Q15	0.980	0.123	7.950	0.000	0.710	0.711
COVID Concern	Q12	1.000				0.668	0.668
	Q13	0.832	0.056	14.893	0.000	0.554	0.555
Info Source: Mainstream + Conservative	Q27-1	1.000				0.528	0.529
	Q27-2	-1.024	0.073	-14.068	0.000	-0.541	-0.541
	Q27-3	0.614	0.065	9.466	0.000	0.324	0.325
Vaccine Intention	Q22	1.000				0.811	0.811
	Q23	1.129	0.053	21.412	0.000	0.915	0.916

We note that the contribution of conservative media to this information source latent variable has a negative sign.

Path effects of key variables on Vaccine Intention (D-Mainstream+Conservative Media)

	Estimate	Std.Err	z-value	$P(> |z|)$	Std.lv	Std.all
Identify as Conservative	-0.538	0.072	-7.443	0.000	-0.664	-0.297
Over 65	0.279	0.057	4.874	0.000	0.344	0.163
Female ID	-0.257	0.058	-4.449	0.000	-0.317	-0.155
Info Source: Mainstream + Conservative	7.952	8.763	0.907	0.364	5.183	5.183

Although the coefficient of the information source is large in this model, the error is even larger, indicating that combining these responses on information source obscures the relationship between information source and vaccine intention.

Regressions Statistics for (D) Mainstream + Conservative Media Info Sources Model

Dependent Variable	Feature	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Peer Influence	Rural	-0.168	0.058	-2.896	0.004	-0.232	-0.115
	Over 65	0.015	0.060	0.255	0.799	0.021	0.010
	Female ID	0.054	0.057	0.934	0.350	0.074	0.037
	White	0.039	0.097	0.407	0.684	0.054	0.016
	Liberal ID	-0.320	0.075	-4.258	0.000	-0.442	-0.202
	Conservative ID	-0.503	0.080	-6.247	0.000	-0.694	-0.310
	Libertarian ID	-0.285	0.158	-1.799	0.072	-0.393	-0.073
	Non-Political ID	0.185	0.117	1.579	0.114	0.256	0.067
	Other Political ID	-0.042	0.197	-0.212	0.832	-0.058	-0.008
Info Source: Mainstream + Conservative	Peer Inf	0.012	0.014	0.837	0.403	0.016	0.016
	Rural	-0.012	0.038	-0.324	0.746	-0.024	-0.012
	Over 65	0.062	0.040	1.523	0.128	0.116	0.055
	Female ID	0.114	0.039	2.941	0.003	0.215	0.107
	White	0.014	0.065	0.216	0.829	0.026	0.008
	Liberal ID	0.243	0.050	4.874	0.000	0.460	0.210
	Conservative ID	-0.991	0.063	-15.611	0.000	-1.876	-0.839
	Libertarian ID	-0.710	0.109	-6.519	0.000	-1.345	-0.252
	Non-Political ID	-0.357	0.080	-4.482	0.000	-0.657	-0.176
	Other Political ID	-0.295	0.132	-2.226	0.026	-0.558	-0.082
Knowledge	Info:Mainstream + Conservative	-0.284	0.167	-1.706	0.088	-0.184	-0.184
	Rural	-0.077	0.062	-1.244	0.214	-0.094	-0.047
	Over 65	0.177	0.066	2.683	0.007	0.217	0.103
	Female ID	-0.120	0.065	-1.859	0.063	-0.147	-0.073
	White	-0.029	0.104	-0.278	0.781	-0.036	-0.010
	Liberal ID	0.059	0.088	0.668	0.504	0.072	0.033
	Conservative ID	-0.117	0.184	-0.637	0.524	-0.144	-0.064
	Libertarian ID	-0.054	0.207	-0.263	0.793	-0.067	-0.012
	Non-Political ID	0.061	0.139	0.436	0.663	0.074	0.019
	Other Political ID	0.183	0.218	0.839	0.401	0.224	0.033
COVID Concern	Info: Mainstream + Conservative	8.845	9.706	0.911	0.362	7.012	7.012
	Rural	0.019	0.356	0.052	0.958	0.028	0.014
	Over 65	-0.245	0.690	-0.355	0.722	-0.368	-0.175
	Female ID	-0.911	1.155	-0.789	0.430	-1.368	-0.681
	White	-0.034	0.570	-0.060	0.952	-0.052	-0.015
	Liberal ID	-1.730	2.357	-0.734	0.463	-2.597	1.186
	Conservative ID	8.067	9.679	0.833	0.405	12.108	5.415
	Libertarian ID	5.235	6.982	0.750	0.453	7.858	1.471
	Non-Political ID	2.650	3.503	0.757	0.449	3.978	1.040
	Other Political ID	2.734	3.075	0.889	0.374	4.103	0.602

Regressions Statistics for (D) Mainstream + Conservative Media Info Sources Model, Continued

Dependent Variable	Feature	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Vaccine Intention	Info: Mainstream + Conservative	0.630	0.269	2.343	0.019	0.411	0.411
	Knowledge	0.057	0.038	1.504	0.133	0.057	0.057
	COVID Concern	0.830	0.155	5.348	0.000	0.682	0.682
	Rural	-0.010	0.060	-0.171	0.864	0.013	0.006
	Over 65	-0.019	0.072	-0.256	0.798	-0.023	-0.011
	Female ID	-0.355	0.064	-5.523	0.000	-0.437	-0.218
	White	0.142	0.099	1.432	0.152	0.175	0.051
	Liberal ID	-0.297	0.091	-3.244	0.001	-0.366	-0.167
	Conservative ID	0.703	0.229	3.073	0.002	0.867	0.388
	Libertarian ID	0.530	0.223	2.376	0.017	0.654	0.122
	Non-Political ID	0.386	0.141	2.741	0.006	0.476	0.125
	Other Political ID	-0.193	0.220	-0.876	0.381	-0.238	-0.035

S11 Model E: All Media

Model Fit Statistics: (E) All Information Sources

Number of model parameters	85
Number of observations	889 (out of 1034)
chi squared	1210.778
Degrees of freedom	221
P-value (Chi-square)	0.000
Akaike (AIC)	26822.817
Bayesian (BIC)	27229.976
Sample-size adjusted Bayesian (SABIC)	26960.032

Latent Variable Construction: (E) All Information Sources

Latent Variables	Survey Items	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Knowledge	Q24-1	1.000				0.817	0.817
	Q24-2	0.898	0.049	18.389	0.000	0.733	0.734
	Q24-3	0.707	0.046	15.367	0.000	0.578	0.578
	Q24-4	0.709	0.046	15.410	0.000	0.579	0.580
Peer Influence	Q14	1.000				0.741	0.742
	Q15	0.938	0.123	7.598	0.000	0.695	0.696
COVID Concern	Q12	1.000				0.666	0.667
	Q13	0.850	0.058	14.683	0.000	0.567	0.567
Info Source: All Sources	Q27-1	1.000				0.727	0.727
	Q27-2	-0.580	0.053	-11.037	0.000	-0.422	-0.422
	Q27-3	0.687	0.053	12.956	0.000	0.499	0.500
	Q27-4	0.795	0.054	14.821	0.000	0.578	0.578
	Q27-5	0.360	0.052	6.923	0.000	0.261	0.262
	Q27-6	0.074	0.052	1.453	0.151	0.054	0.054
	Q27-7	0.166	0.052	3.210	0.001	0.121	0.121
Vaccine Intention	Q22	1.000				0.817	0.817
	Q23	1.119	0.052	21.430	0.000	0.914	0.914

Path effects of key variables on Vaccine Intention (E-All Info)

	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Identify as Conservative	-0.530	0.074	-7.199	0.000	-0.649	-0.290
Over 65	0.265	0.059	4.513	0.000	0.324	0.153
Female ID	-0.226	0.058	-3.881	0.000	-0.276	-0.137
Info Source: All Sources	0.591	0.085	6.921	0.000	0.526	0.526

Regressions Statistics for (E) All Info Sources Model

Dependent Variable	Feature	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Peer Influence	Rural	-0.187	0.060	-3.109	0.002	-0.252	-0.124
	Over 65	0.015	0.062	0.243	0.808	0.020	0.010
	Female ID	0.060	0.059	1.023	0.306	0.082	0.041
	White	0.039	0.099	0.395	0.693	0.053	0.016
	Liberal ID	-0.347	0.078	-4.480	0.000	-0.469	-0.214
	Conservative ID	-0.515	0.082	-6.252	0.000	-0.695	-0.311
	Libertarian ID	-0.301	0.161	-1.865	0.062	-0.406	-0.077
	Non-Political ID	0.161	0.122	1.318	0.188	0.217	0.056
	Other Political ID	-0.065	0.201	-0.326	0.744	-0.088	-0.013
Info Source: All Sources	Peer Inf	0.023	0.039	0.586	0.558	0.023	0.023
	Rural	-0.080	0.048	-1.652	0.099	-0.110	-0.054
	Over 65	0.117	0.050	2.332	0.020	0.162	0.076
	Female ID	0.110	0.048	2.303	0.021	0.151	0.075
	White	-0.076	0.080	-0.957	0.339	-0.105	-0.031
	Liberal ID	0.327	0.062	5.240	0.000	0.450	0.206
	Conservative ID	-0.965	0.070	-13.766	0.000	-1.327	-0.594
	Libertarian ID	-0.707	0.131	-5.398	0.000	-0.973	-0.184
	Non-Political ID	-0.357	0.099	-3.621	0.000	-0.491	-0.127
	Other Political ID	-0.323	0.162	-1.996	0.046	-0.444	-0.066
Knowledge	Info: All Sources	-0.095	0.082	-1.156	0.247	-0.085	-0.085
	Rural	-0.076	0.062	-1.217	0.224	-0.093	-0.046
	Over 65	0.183	0.066	2.773	0.006	0.224	0.106
	Female ID	-0.132	0.062	-2.118	0.034	-0.162	-0.081
	White	-0.044	0.104	-0.422	0.673	-0.054	-0.016
	Liberal ID	0.017	0.083	0.206	0.837	0.021	0.010
	Conservative ID	0.081	0.114	0.715	0.474	0.100	0.045
	Libertarian ID	0.081	0.178	0.456	0.649	0.099	0.019
	Non-Political ID	0.154	0.131	1.178	0.239	0.188	0.049
	Other Political ID	0.235	0.211	1.113	0.266	0.288	0.043
COVID Concern	Info: All Sources	0.556	0.077	7.914	0.000	0.607	0.607
	Rural	-0.052	0.050	-1.040	0.298	-0.078	-0.039
	Over 65	0.219	0.054	4.080	0.000	0.328	0.155
	Female ID	0.040	0.050	0.786	0.432	0.059	0.030
	White	0.133	0.084	1.590	0.112	0.200	0.059
	Liberal ID	0.205	0.068	3.028	0.002	0.307	0.140
	Conservative ID	-0.204	0.097	-2.108	0.035	-0.306	-0.137
	Libertarian ID	-0.671	0.146	-4.598	0.000	-1.008	-0.190
	Non-Political ID	-0.314	0.106	-2.954	0.003	-0.471	-0.122
	Other Political ID	0.302	0.171	1.765	0.078	0.453	0.067

Regressions Statistics for (E) All Info Sources Model, Continued

Dependent Variable	Feature	Estimate	Std.Err	z-value	$P(>|z|)$	Std.lv	Std.all
Vaccine Intention	Info: All Sources	-0.188	0.252	-0.744	0.457	-0.167	-0.167
	Knowledge	0.043	0.034	1.258	0.208	0.043	0.043
	COVID Concern	1.408	0.392	3.597	0.000	1.149	1.149
	Rural	0.016	0.073	0.223	0.823	0.020	0.010
	Over 65	-0.121	0.112	-1.082	0.279	-0.148	-0.070
	Female ID	-0.331	0.073	-4.519	0.000	-0.405	-0.202
	White	0.098	0.130	0.754	0.451	0.120	0.035
	Liberal ID	-0.301	0.120	-2.518	0.012	-0.369	-0.169
	Conservative ID	0.332	0.145	2.293	0.022	0.406	0.182
	Libertarian ID	0.556	0.319	1.744	0.081	0.681	0.129
	Non-Political ID	0.393	0.188	2.088	0.037	0.481	0.124
	Other Political ID	-0.505	0.271	-1.863	0.062	-0.618	-0.092