Online Appendices

Table A1

Coding Reliability

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 2009 | | 2013 | |
|  | TV | Newspaper | TV | Newspaper |
| Politics | .78 | .81 | .71 | .77 |
|  | (n = 57) | (n = 108) | (n = 62) | (n = 59) |
| Polity | .57 | .86 | .86 | 1.00 |
|  | (n = 8) | (n = 112) | (n = 6) | (n = 8) |
| Policy | .72 | .83 | .83 | .74 |
|  | (n = 87) | (n = 95) | (n = 81) | (n = 98) |
| Weighted average | .73  (n=152) | .83  (n=315) | .78  (n=149) | .76  (n=165) |

*Note.* Krippendorff’s alpha. Numbers extracted from GLES methods report. Original reliability testing data not accessible for computation of confidence intervals or alternative coefficients of coding reliability.

Table A2

Correlations Between Press, TV, and Public Agendas

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 2009 | | | 2013 | | |
|  |  | Press | TV | Public | Press | TV | Public |
| 2009 | Press | --- | .940 \*\*\* | .503 \*\* | .857 \*\*\* | .876 \*\*\* | .148 |
| TV |  | --- | .494 \*\* | .890 \*\*\* | .942 \*\*\* | .125 |
| Public |  |  | --- | .355 \* | .415 \* | .675 \*\*\* |
| 2013 | Press |  |  |  | --- | .971 \*\*\* | .108 |
| TV |  |  |  |  | --- | .159 |
| Public |  |  |  |  |  | --- |

*Note.* Pearson’s product-moment correlation coefficient.

\* p<.05; \*\* p<.01; \*\*\* p<.001

Table A3

An example of extracting baselines and spikes of public salience “International Conflict”

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Raw data | Baseline (initial) | Coverage above baseline | Cumul. coverage above baseline | Spike  size | Spike (yes/no) | Spike number | Baseline (final) | Description | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1 | 0.000 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 | (1) is the raw data as measured: day 44: 0.192 weighted issue mentions per person concerned an international conflict issue  (2) Baseline for calculating the spikes: 0.044 is the average share of issue mentions concerning international relations issues. Everything above that baseline is a potential spike in public salience.  (3) How much is (1) higher than (2) on the respective day? If (1) is lower than (2), (3) is set to 0 (no negative numbers possible).  (4) (3) is cumulated for phases during which (3) is greater than 0 (i.e. (1) is greater than (2)).  (5) the highest value of (4) in a phase (that is a potential spike, i.e. continuous above-average public salience)  (6) Yes/no: Is the phase of above-average coverage large enough to be conceived as a spike?  (7) Number of the spike  (8) Initial baseline minus size of the (in this case: two) spike(s). |
| 2 | 0.037 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 3 | 0.017 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 4 | 0.035 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 5 | 0.080 | 0.044 | 0.036 | 0.036 | 0.036 | 0 |  | 0.033 |
| 6 | 0.033 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 7 | 0.009 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 8 | 0.040 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 9 | 0.021 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 10 | 0.006 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 11 | 0.018 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 12 | 0.034 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 13 | 0.054 | 0.044 | 0.010 | 0.010 | 0.037 | 0 |  | 0.033 |
| 14 | 0.071 | 0.044 | 0.037 | 0.037 | 0.037 | 0 |  | 0.033 |
| 15 | 0.022 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 16 | 0.018 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 17 | 0.025 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 18 | 0.023 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 19 | 0.051 | 0.044 | 0.007 | 0.007 | 0.007 | 0 |  | 0.033 |
| 20 | 0.043 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 21 | 0.010 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 22 | 0.043 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 23 | 0.021 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 24 | 0.052 | 0.044 | 0.008 | 0.008 | 0.008 | 0 |  | 0.033 |
| 25 | 0.000 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 26 | 0.023 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 27 | 0.001 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 28 | 0.019 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 29 | 0.016 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 30 | 0.023 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 31 | 0.010 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 32 | 0.006 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 33 | 0.033 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 34 | 0.046 | 0.044 | 0.002 | 0.002 | 0.002 | 0 |  | 0.033 |
| 35 | 0.003 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 36 | 0.045 | 0.044 | 0.001 | 0.001 | 0.001 | 0 |  | 0.033 |
| 37 | 0.000 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 38 | 0.034 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 39 | 0.013 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 40 | 0.039 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 41 | 0.108 | 0.044 | 0.064 | 0.064 | 0.440 | 1 | 1 | 0.033 |
| 42 | 0.137 | 0.044 | 0.157 | 0.157 | 0.440 | 1 | 1 | 0.033 |
| 43 | 0.109 | 0.044 | 0.222 | 0.222 | 0.440 | 1 | 1 | 0.033 |
| 44 | 0.192 | 0.044 | 0.370 | 0.370 | 0.440 | 1 | 1 | 0.033 |
| 45 | 0.114 | 0.044 | 0.440 | 0.440 | 0.440 | 1 | 1 | 0.033 |
| 46 | 0.030 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 47 | 0.066 | 0.044 | 0.022 | 0.022 | 0.039 | 0 |  | 0.033 |
| 48 | 0.062 | 0.044 | 0.039 | 0.039 | 0.039 | 0 |  | 0.033 |
| 49 | 0.024 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 50 | 0.078 | 0.044 | 0.034 | 0.034 | 0.223 | 1 | 2 | 0.033 |
| 51 | 0.054 | 0.044 | 0.044 | 0.044 | 0.223 | 1 | 2 | 0.033 |
| 52 | 0.064 | 0.044 | 0.064 | 0.064 | 0.223 | 1 | 2 | 0.033 |
| 53 | 0.055 | 0.044 | 0.075 | 0.075 | 0.223 | 1 | 2 | 0.033 |
| 54 | 0.079 | 0.044 | 0.109 | 0.109 | 0.223 | 1 | 2 | 0.033 |
| 55 | 0.113 | 0.044 | 0.177 | 0.177 | 0.223 | 1 | 2 | 0.033 |
| 56 | 0.090 | 0.044 | 0.223 | 0.223 | 0.223 | 1 | 2 | 0.033 |
| 57 | 0.026 | 0.044 | 0.000 | 0.000 | 0.000 | 0 |  | 0.033 |
| 58 | 0.055 | 0.044 | 0.011 | 0.011 | 0.046 | 0 |  | 0.033 |
| 59 | 0.047 | 0.044 | 0.013 | 0.013 | 0.046 | 0 |  | 0.033 |
| 60 | 0.077 | 0.044 | 0.046 | 0.046 | 0.046 | 0 |  | 0.033 |

*Note.* Raw data: Number of weighted issue mentions per person per day.

Table A4

Media and Public Salience by Issue and Year

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2009 | | | | 2013 | | | | Total salience | |
|  | TV | NP | Public | | TV | NP | Public | | Media | Public |
|  | (n=1800) | (n=1793) | avg | max | (n=2028) | (n=2212) | avg | max | (n=7833) | avg |
| Economic Crisis | 1043 | 643 | 0.318 | 0.450 | 784 | 604 | 0.088 | 0.165 | 3074 | 0.203 |
| Political Alienation | 150 | 287 | 0.079 | 0.183 | 139 | 204 | 0.091 | 0.234 | 780 | 0.085 |
| Intelligence Service | 19 | 10 | 0.002 | 0.018 | 206 | 247 | 0.052 | 0.153 | 482 | 0.027 |
| International Conflict | 65 | 98 | 0.040 | 0.159 | 138 | 150 | 0.032 | 0.114 | 451 | 0.036 |
| Defense | 51 | 127 | 0.002 | 0.024 | 112 | 90 | 0.003 | 0.027 | 380 | 0.003 |
| Taxes | 46 | 51 | 0.029 | 0.085 | 98 | 154 | 0.025 | 0.064 | 349 | 0.027 |
| Economy | 126 | 194 | 0.134 | 0.227 | 2 | 22 | 0.037 | 0.090 | 344 | 0.086 |
| Infrastructure | 19 | 16 | 0.002 | 0.012 | 99 | 101 | 0.016 | 0.045 | 235 | 0.009 |
| Health | 23 | 48 | 0.042 | 0.088 | 61 | 75 | 0.027 | 0.056 | 207 | 0.035 |
| Domestic Security | 28 | 26 | 0.009 | 0.056 | 36 | 94 | 0.010 | 0.045 | 184 | 0.010 |
| Extremism | 76 | 25 | 0.005 | 0.025 | 21 | 53 | 0.006 | 0.031 | 175 | 0.005 |
| International Relations | 42 | 65 | 0.007 | 0.027 | 18 | 43 | 0.007 | 0.025 | 168 | 0.007 |
| Income | 10 | 16 | 0.074 | 0.143 | 92 | 45 | 0.225 | 0.381 | 163 | 0.150 |
| Labor / Employment | 34 | 59 | 0.497 | 0.605 | 30 | 30 | 0.215 | 0.329 | 153 | 0.356 |
| Family | 10 | 10 | 0.040 | 0.130 | 51 | 44 | 0.063 | 0.171 | 115 | 0.051 |
| European Union | 7 | 32 | 0.003 | 0.014 | 35 | 32 | 0.036 | 0.093 | 106 | 0.019 |
| Energy | 15 | 19 | 0.010 | 0.037 | 20 | 47 | 0.066 | 0.152 | 101 | 0.038 |
| Migration | 1 | 12 | 0.014 | 0.036 | 17 | 40 | 0.059 | 0.131 | 70 | 0.037 |
| Pensions | 5 | 10 | 0.026 | 0.132 | 12 | 38 | 0.079 | 0.185 | 65 | 0.052 |
| Budget | 6 | 17 | 0.069 | 0.128 | 7 | 33 | 0.067 | 0.120 | 63 | 0.068 |
| Education | 7 | 15 | 0.114 | 0.196 | 6 | 18 | 0.099 | 0.173 | 46 | 0.107 |
| (Ecology) | 1 | 0 | 0.034 | 0.073 | 19 | 20 | 0.020 | 0.053 | 40 | 0.027 |
| (Crime) | 14 | 5 | 0.005 | 0.039 | 3 | 9 | 0.002 | 0.018 | 31 | 0.003 |
| (International Terrorism) | 2 | 5 | 0.001 | 0.013 | 12 | 10 | 0.001 | 0.012 | 29 | 0.001 |
| (Climate) | 0 | 3 | 0.008 | 0.031 | 7 | 5 | 0.003 | 0.028 | 15 | 0.005 |
| (Housing) | 0 | 0 | 0.001 | 0.009 | 3 | 4 | 0.007 | 0.033 | 7 | 0.004 |

*Note.* Media salience: total number of news stories; public salience: percentage of issue mentions.

Table A5

Development in media salience: key parameters

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Media salience descriptors | | | | Public salience descriptors | | | |
|  | Spike momentum | | Issue baseline | | Spike momentum | | Issue baseline | |
|  | 2009 | 2013 | 2009 | 2013 | 2009 | 2013 | 2009 | 2013 |
| Issue | News stories per spike (n) | | News stories per day (n) | | Issue mentions per person per spike (n) | | Issue mentions per person per day (n) | |
| 01 Labor | 45.35 | 11.00 | 0.79 | 0.51 | 0.68 | 0.32 | 0.51 | 0.21 |
| 02 Education | 3.90 | 3.68 | 0.30 | 0.27 | 0.17 | 0.15 | 0.10 | 0.09 |
| 03 Income | 4.13 | 16.02 | 0.36 | 0.76 | 0.18 | 0.43 | 0.07 | 0.20 |
| 04 Taxes | 20.46 | 23.97 | 0.93 | 2.08 | 0.00 | 0.00 | 0.03 | 0.03 |
| 05 Energy | 6.72 | 8.70 | 0.23 | 0.43 | 0.00 | 0.18 | 0.01 | 0.06 |
| 06 European Union | 3.65 | 11.36 | 0.35 | 0.44 | 0.00 | 0.17 | 0.00 | 0.03 |
| 07 Extremism | 11.41 | 11.71 | 1.11 | 0.52 | 0.00 | 0.00 | 0.00 | 0.01 |
| 08 Family | 4.83 | 11.29 | 0.17 | 0.82 | 0.00 | 0.20 | 0.04 | 0.07 |
| 09 Intelligence Serv. | 8.79 | 33.66 | 0.19 | 3.80 | 0.00 | 0.50 | 0.00 | 0.03 |
| 10 Health | 12.24 | 13.29 | 0.57 | 0.93 | 0.26 | 0.00 | 0.04 | 0.03 |
| 11 Budget | 3.85 | 8.87 | 0.32 | 0.30 | 0.19 | 0.20 | 0.07 | 0.06 |
| 12 Infrastructure | 5.25 | 24.44 | 0.32 | 1.69 | 0.00 | 0.00 | 0.00 | 0.01 |
| 13 Domestic Security | 10.40 | 29.07 | 0.55 | 0.96 | 0.00 | 0.00 | 0.01 | 0.01 |
| 14 Int. Conflict | 92.27 | 23.34 | 1.18 | 2.60 | 0.33 | 0.25 | 0.03 | 0.02 |
| 15 Int. Relations | 14.95 | 9.02 | 0.79 | 0.45 | 0.00 | 0.00 | 0.01 | 0.01 |
| 16 Economic crisis | 141.40 | 105.47 | 21.03 | 14.29 | 0.46 | 0.19 | 0.28 | 0.08 |
| 17 Migration | 3.57 | 8.87 | 0.16 | 0.41 | 0.00 | 0.43 | 0.01 | 0.06 |
| 18 Pensions | 4.50 | 12.17 | 0.18 | 0.34 | 0.22 | 0.51 | 0.03 | 0.07 |
| 19 Pol. Alienation | 32.01 | 25.56 | 5.68 | 3.55 | 0.17 | 0.24 | 0.08 | 0.08 |
| 20 Defense | 19.10 | 30.56 | 2.33 | 1.47 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21 Election | 6.67 | 7.15 | 0.67 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 Economy | 28.44 | 5.22 | 3.91 | 0.18 | 0.20 | 0.00 | 0.12 | 0.04 |
| Mean | 21.99 | 19.75 | 1.92 | 1.69 | .13 | .17 | .07 | .05 |
| SD | 32.66 | 20.59 | 4.38 | 2.93 | .18 | .17 | .12 | .06 |

*Note.* Media salience: number of news stories per day; public salience: share of issue mentions per day.

Table A6

Occurrence of media-led, simultaneous, and public-led agenda relations, and estimates of strength of agenda relations.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Granger causality/cIRF test results | | | | | | | | | | | | | | | |
|  | TV | | | | | | | | Newspapers | | | | | | | |
|  | 2009 | | | | 2013 | | | | 2009 | | | | 2013 | | | |
| Issue | M | S | P | Stre­ngth | M | S | P | Stre­ngth | M | S | P | Stre­ngth | M | S | P | Stre­ngth |
| 01 Int. Conflict | +4 |  | –10 | .514\*\* |  |  | +10 | .336 | +3 |  | –14 | .532\*\* |  |  | –14 | .360 |
| 02 Intellig. Serv. |  |  |  | .000 | +8 | +0 | +6 | .120\*\* | +13 |  |  | .502\*\* | +2 | +0 |  | .133\* |
| 03 Extremism | +14 |  | +14 | .032\* |  | +0 |  | .309 |  |  |  | .008 | +7 | +0 |  | .334\* |
| 04 Domestic Security |  |  |  | .222 |  |  |  | .158 | –9 |  |  | .000 | +10 |  |  | .217\*\* |
| 05 Labor |  |  |  | .190 |  | +0 |  | .118 |  |  |  | .000 |  |  |  | .130 |
| 06 Migration |  | –0 |  | .024 | +5 |  |  | .215\*\* |  | –0 | –12 | .000 |  |  |  | .191 |
| 07 Family |  |  | –10 | .010 | +7 | +0 | –8 | .221\* | +10 | +0 |  | .044\*\* |  | +0 | –11 | .154 |
| 08 Economic crisis |  |  | –10 | .117 |  |  |  | .133 |  |  | –14 | .000 |  |  | +11 | .169 |
| 09 Defense |  | +0 | +2 | .020 | +11 |  | –9 | .121\*\* |  |  | –9 | .029 | +10 | +0 |  | .221\*\* |
| 10 European Union |  |  | –12 | .179 |  |  |  | .188 |  |  | +11 | .000 | –8 |  |  | .000 |
| 11 Taxes |  | +0 |  | .138 | +5 |  |  | .053\*\* |  |  | –11 | .077 |  |  |  | .052 |
| 12 Economy |  |  |  | .000 |  |  |  | .000 | +14 |  |  | .296\*\* | –10 |  |  | .000 |
| 13 Budget |  | +0 | –14 | .176 |  |  |  | .057 |  | –0 | +3 | .000 |  |  | +13 | .041 |
| 14 Health | +1 |  |  | .157\*\* |  |  |  | .104 |  | –0 |  | .000 |  |  | +10 | .000 |
| 15 Int. Relations | –14 |  |  | .000 |  |  |  | .086 | +14 | +0 |  | .154\*\* |  | –0 |  | .000 |
| 16 Pensions | +2 |  |  | .049\*\* | +3 |  | +11 | .093\*\* |  |  |  | .000 |  | +0 |  | .057 |
| 17 Election |  | +0 |  | .144 | –6 | –0 |  | .000 |  |  | +6 | .033 |  |  | +3 | .000 |
| 18 Income | +4 | +0 |  | .020\* |  | –0 |  | .000 |  |  |  | .000 | +7 |  |  | .106\* |
| 19 Education | –4 | –0 |  | .000 | +9 |  |  | .122\* |  | –0 |  | .000 |  |  |  | .000 |
| 20 Energy | –14 |  |  | .000 |  |  |  | .057 |  | –0 |  | .000 |  |  |  | .046 |
| 21 Pol. Alienation |  |  | +5 | .000 | +9 |  |  | .076\* | –2 | –0 | +4 | .000 |  | –0 | +10 | .000 |
| 22 Infrastructure |  |  |  | .000 |  |  |  | .052 | –11 |  |  | .000 |  |  |  | .000 |

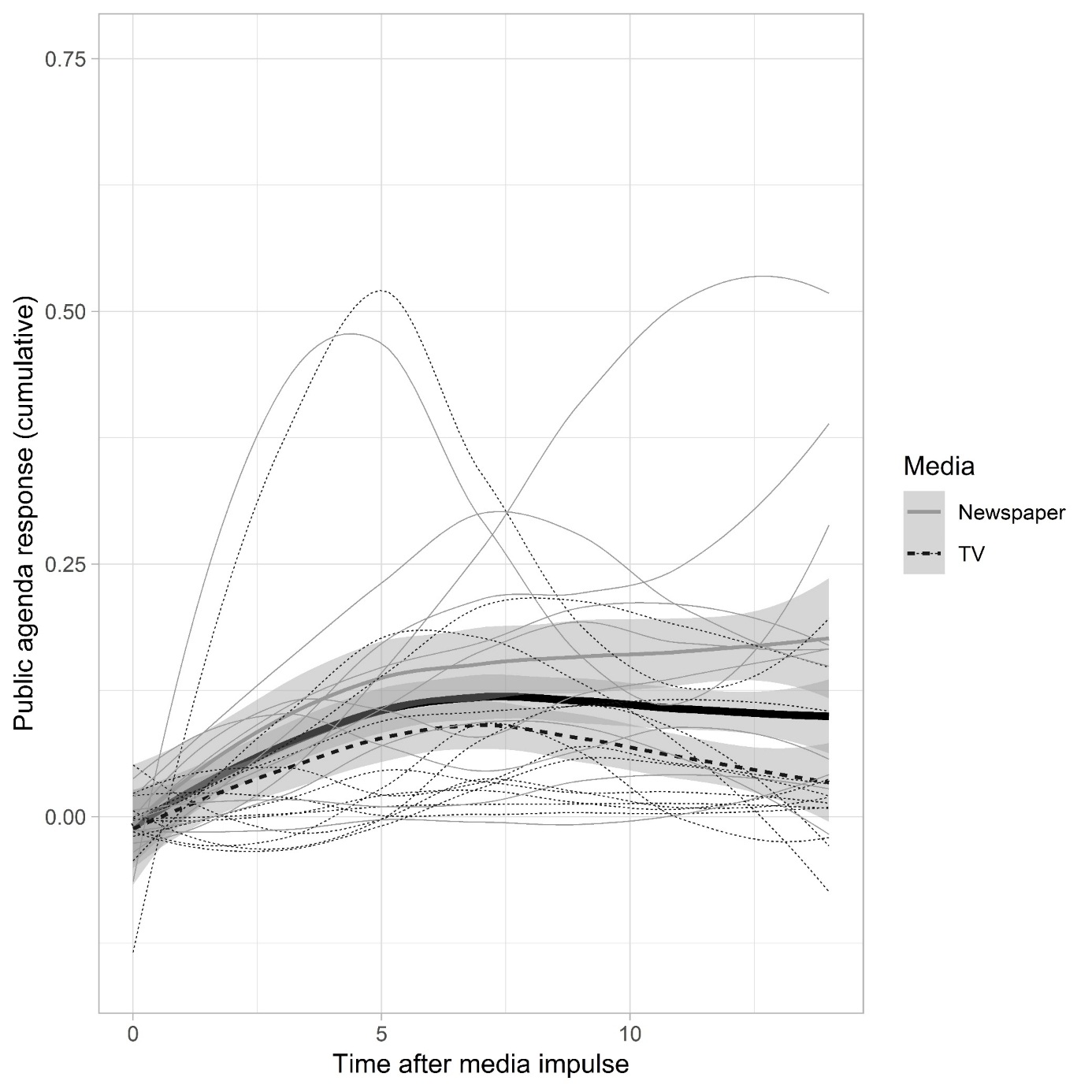
*Note.* Sorted by summed strengths of agenda-setting effects. Column “M”: Granger-causality test for the hypothesis that the media lead, and the public follows; “S”: Granger-causality test for the hypothesis that there is a simultaneous/instantaneous relation between media and public salience; “P”: Granger-causality test for the hypothesis that the public leads, and the media follow; “+”: Significant Granger causality test with positive cIRF; “–” significant Granger causality test with negative cIRF; Numbers behind “+” and “–“ give the number of days after which the cIRF is maximal, i.e. effects are strongest. *Strength*: Absolute estimate of the strength of the positive, media-led agenda relations (“agenda-setting effects”). In later stages of the analysis, it is standardized to range 1-100 and then logarithmized for further analyses. Brackets behind issue labels: number of instances there was a significant positive media-led agenda relation (=a media agenda-setting effect)

\* p<.05; \*\* p<.01 for media salience granger-causing positive effects on public salience.

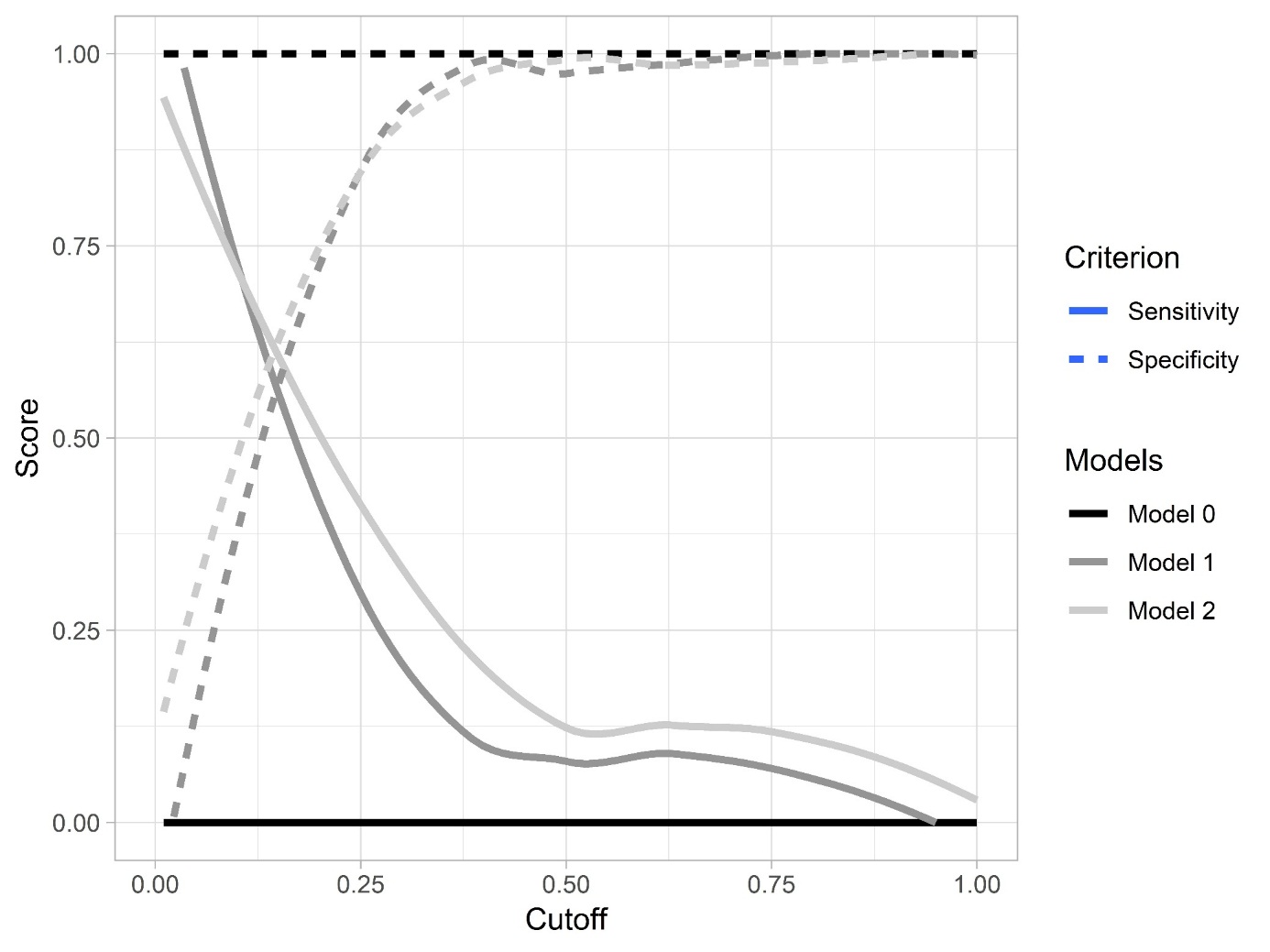
Ein Bild, das Text, Karte enthält.

Automatisch generierte Beschreibung

*Figure A1.* Effects of baseline in media (left column) and public salience (right column) on likelihood (top row) and strength (bottom row) of agenda-setting effects. Estimate from model (3): thick line and confidence region; year-specific estimates: slim lines.



*Figure A2.* Cumulative impulse-response functions for the 23 issues with positive, media-led agenda relations, aggregated by media type and globally; individual time series overplot the aggregated data. The peak is where cumulative agenda-setting effects of a media salience impulse is at its maximum.



*Figure A3.* Sensitivity and specificity of predictions of occurrence of agenda-setting effects.