Table S1 Univariate analysis of the association between SES factors and change in search index

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **HDI** | |  | **GNPPP** | |  | **Education** | |  | **Life Expectancy** | |
|  | Ratio of RR (95% CI) | p-value |  | Ratio of RR (95% CI) | p-value |  | Ratio of RR (95% CI) | p-value |  | Ratio of RR (95% CI) | p-value |
| **Pre-pandemic** |  |  |  |  |  |  |  |  |  |  |  |
| Yearly change Jan 1 2016 - Dec 30 2019 | 1.01 (0.99, 1.02) | .2929 |  | 1.00 (0.99, 1.02) | .7306 |  | 1.01 (0.99, 1. | .3665 |  | 1.01 (1.00, 1.03) | .1459 |
| **Initial COVID-19 Wave** |  |  |  |  |  |  |  |  |  |  |  |
| Level Change on Dec 31 2019 | 1.09 (1.05, 1.12) | <.0001 |  | 1.06 (1.02, 1.09) | .0009 |  | 1.09 (1.06, 1.13) | <.0001 |  | 1.07 (1.04, 1.11) | <.0001 |
| Level change Jan 18  (HHT announced) - Jan 25 2020 (lockdown) | 1.04 (1.01, 1.08) | .0395 |  | 0.96 (0.92, 0.99) | .0232 |  | 1.06 (1.02, 1.10) | .0015 |  | 1.06 (1.02, 1.10) | .0015 |
| Weekly change Jan 25 - Jun 10 2020 | 1.00 (0.99, 1.00) | .0012 |  | 1.00 (1.00, 1.00) | .2014 |  | 1.00 (0.99, 1.00) | .0002 |  | 1.00 (0.99, 1.00) | .0003 |
| **Beijing Outbreak** |  |  |  |  |  |  |  |  |  |  |  |
| Level change Jun 11- Jun 17 2020 | 1.06 (1.02, 1.10) | .0009 |  | 1.05 (1.01, 1.09) | .0052 |  | 1.07 (1.03, 1.10) | .0002 |  | 1.05 (1.01, 1.08) | .0085 |
| Weekly change Jun 17 - Oct 11 2020 | 0.99 (0.99, 0.99) | <.0001 |  | 0.99 (0.99, 1.00) | <.0001 |  | 0.99 (0.99, 0.99) | <.0001 |  | 0.99 (0.99, 0.99) | <.0001 |
| **Qingdao Outbreak** |  |  |  |  |  |  |  |  |  |  |  |
| Level Change on Oct 12th | 1.04 (1.00, 1.08) | .0324 |  | 1.05 (1.01, 1.09) | .0112 |  | 1.04 (1.00, 1.08) | .0632 |  | 1.03 (0.99, 1.07) | .1577 |
| Weekly change in winter wave  Oct 12 2020 - Jan 3 2021 | 1.00 (0.99, 1.00) | .7459 |  | 1.00 (0.99, 1.00) | .0445 |  | 1.00 (1.00, 1.01) | .6399 |  | 1.00 (0.99, 1.01) | .3456 |
| **Shijiazhuang Outbreak** |  |  |  |  |  |  |  |  |  |  |  |
| Level change Jan 3- Jan 7 2021 | 1.11 (1.06, 1.16) | <.0001 |  | 1.05 (1.00, 1.10) | .0362 |  | 1.11 (1.06, 1.16) | <.0001 |  | 1.12 (1.07, 1.17) | <.0001 |
| Weekly change Jan 7- Mar 15 2021 | 0.98 (0.97, 0.99) | <.0001 |  | 0.99 (0.98, 1.00) | .0023 |  | 0.98 (0.94, 0.99) | <.0001 |  | 0.98 (0.97, 0.98) | <.0001 |



**Figure S1.** Baidu search index by regional HDI over time.