

## Supplementary materials

**Table S1.** Engagement in avoidance and recommended behaviors due to the novel coronavirus outbreak

|   | Wuhan<br>(N=510)<br>N(%) | Shanghai<br>(N=501)<br>N(%) | P-value |
|---|--------------------------|-----------------------------|---------|
| Last week, I have ... because of the outbreak |                          |                             |         |
| Avoided eating out                            | 488 (95.7)               | 487 (97.2)                  | 0.193   |
| Avoided using public transport                | 487 (95.5)               | 467 (93.2)                  | 0.117   |
| Reduced going to public areas                 | 479 (93.9)               | 479 (95.6)                  | 0.229   |
| Rescheduled travel plan                       | 468 (91.8)               | 451 (90.0)                  | 0.335   |
| Increased surface cleaning                    | 456 (89.4)               | 390 (77.8)                  | <0.001  |
| Maintained better indoor ventilation          | 499 (97.8)               | 488 (97.4)                  | 0.648   |

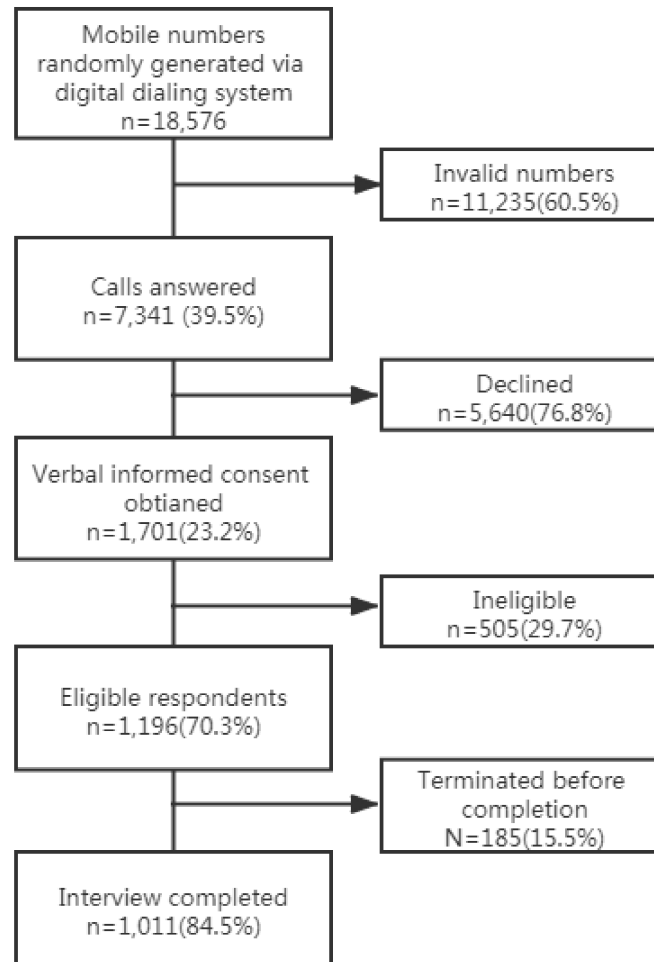
**Table S2.** Perceived severity compared with SARS by age groups

|                             | Wuhan                 |                                 |         | Shanghai              |                                 |         |
|-----------------------------|-----------------------|---------------------------------|---------|-----------------------|---------------------------------|---------|
|                             | Aged 18-39<br>(N=250) | Aged 40<br>and above<br>(N=260) | P-value | Aged 18-39<br>(N=251) | Aged 40<br>and above<br>(N=250) | P-value |
|                             | N (%)                 | N (%)                           |         | N (%)                 | N (%)                           |         |
| Severity compared with SARS |                       |                                 | 0.136   |                       |                                 | <0.001  |
| Much lower                  | 6 (2.4)               | 7 (2.7)                         |         | 8 (3.2)               | 4 (1.6)                         |         |
| Lower                       | 25 (10.0)             | 41 (15.8)                       |         | 52 (20.7)             | 23 (9.2)                        |         |
| Even                        | 75 (30.0)             | 56 (21.5)                       |         | 81 (32.3)             | 55 (22.0)                       |         |
| Higher                      | 76 (30.4)             | 82 (31.5)                       |         | 50 (19.9)             | 77 (30.8)                       |         |
| Much higher                 | 68 (27.2)             | 74 (28.5)                       |         | 60 (23.9)             | 91 (36.4)                       |         |

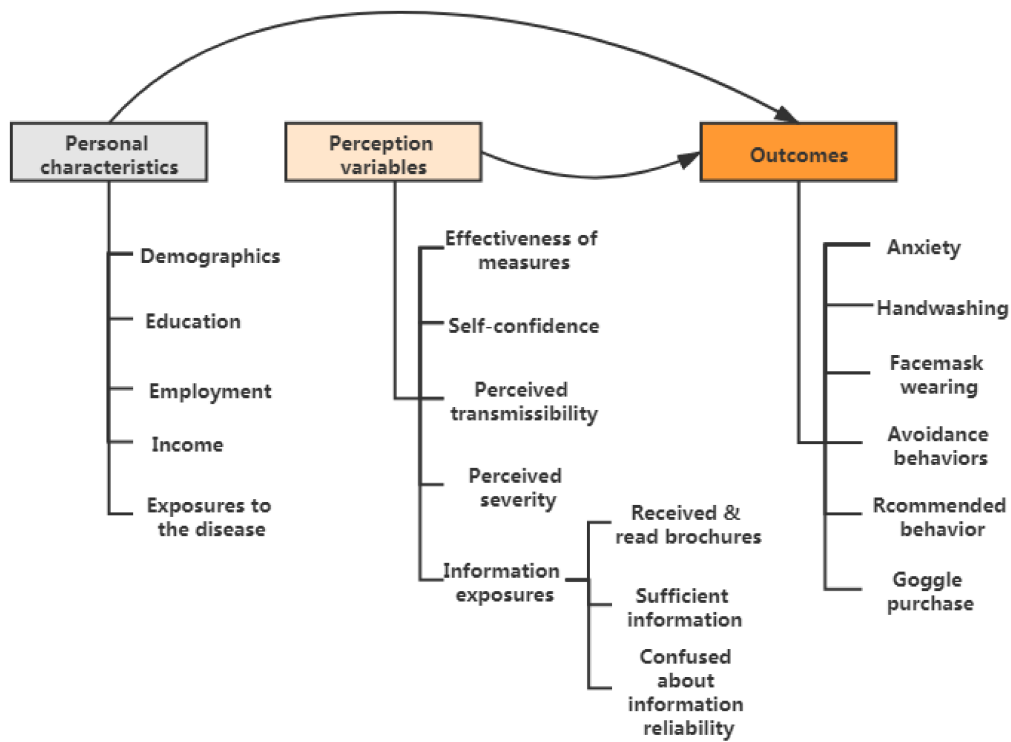
**Table S3.** Perception factors associated with changes in face mask wearing and handwashing, odds ratios (95% CI)

| Perception factors                             | More often to<br>wear a face mask<br>when went out | More often to<br>wash hands immediately<br>when returned | Longer<br>handwashing<br>duration | Purchased<br>goggles |
|--|--|--|-----------------------------------|----------------------|
|  | OR (95% CI)<br>(1)                                 | OR (95% CI)<br>(2)                                       | OR (95% CI)<br>(3)                | OR (95% CI)<br>(4)   |
| Perceived efficacy of washing hands frequently | ---  | 1.1 (0.7-1.6)  | 1.1 (0.8-1.6)                     | --                   |
| Perceived efficacy of wearing a face mask      | 0.7 (0.3-1.6)                                      | --   | --                                | --                   |
| Perceived risk                                 | 1.1 (0.8-1.3)                                      | 1.1 (1.0-1.3)  | 1.2* (1.0-1.4)                    | 1.1 (0.9-1.3)        |
| Perceived severity if contacted                | 0.8 (0.7-1.0)                                      | 1.0 (0.9-1.2)  | 0.9 (0.8-1.0)                     | 1.0 (0.9-1.2)        |
| Transmissibility compared to SARS (in 2003)    | 1.3** (1.0-1.7)                                    | 1.2* (1.0-1.5)   | 1.3** (1.1-1.6)                   | 1.0 (0.8-1.2)        |
| Harm to body compared to SARS (in 2003)        | 0.8 (0.7-1.0)                                      | 0.9 (0.7-1.0)  | 1.0 (0.9-1.1)                     | 1.2* (1.0-1.4)       |
| Self-confidence                                | 0.9 (0.6-1.2)                                      | 0.9 (0.8-1.2)  | 1.0 (0.8-1.1)                     | 1.1(0.9-1.3)         |
| Received and read information brochure         | 1.9 (0.9-4.0)                                      | 2.0* (1.1-3.7)   | 1.1 (0.6-1.8)                     | 0.8 (0.4-1.4)        |
| Confused about information reliability         | 1.2 (1.0-1.5)                                      | 1.2* (1.0-1.4)   | 1.1 (1.0-1.2)                     | 1.0 (0.9-1.1)        |
| Sufficient information                         | 1.0 (0.8-1.3)                                      | 0.9 (0.8-1.1)  | 1.2 (1.0-1.4)                     | 0.9 (0.7-1.1)        |

Notes: Each column presents a separate multivariable logistic regression result. \* for significance at the 5% level; \*\* for significance at the 1% level.

**Figure S1.** Participant recruitment flowcharts

**Figure S2.** Hypothetical links among variables examined.



**Notes:** The arrow curves in the figure represent hypothetical links from a group of variables to another.