

# THE LANCET

## **Supplementary appendix**

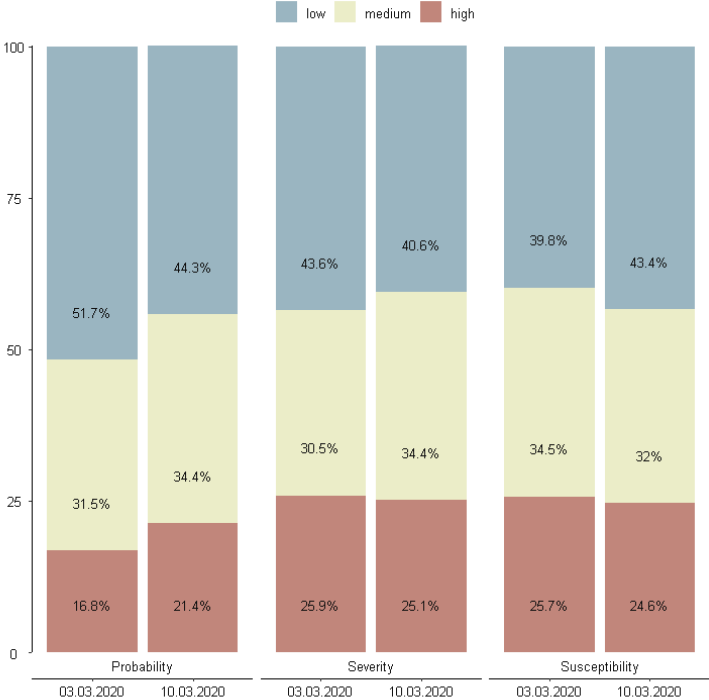
This appendix formed part of the original submission. We post it as supplied by the authors.

Supplement to: Betsch C, Wieler LH, Habersaat K, on behalf of the COSMO group. Monitoring behavioural insights related to COVID-19. *Lancet* 2020; published online April 2. [http://dx.doi.org/10.1016/S0140-6736\(20\)30729-7](http://dx.doi.org/10.1016/S0140-6736(20)30729-7).

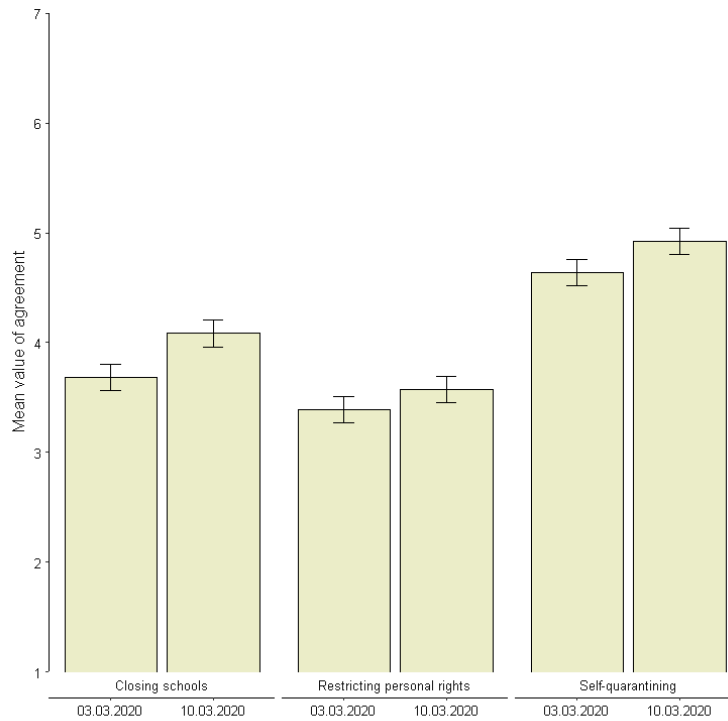
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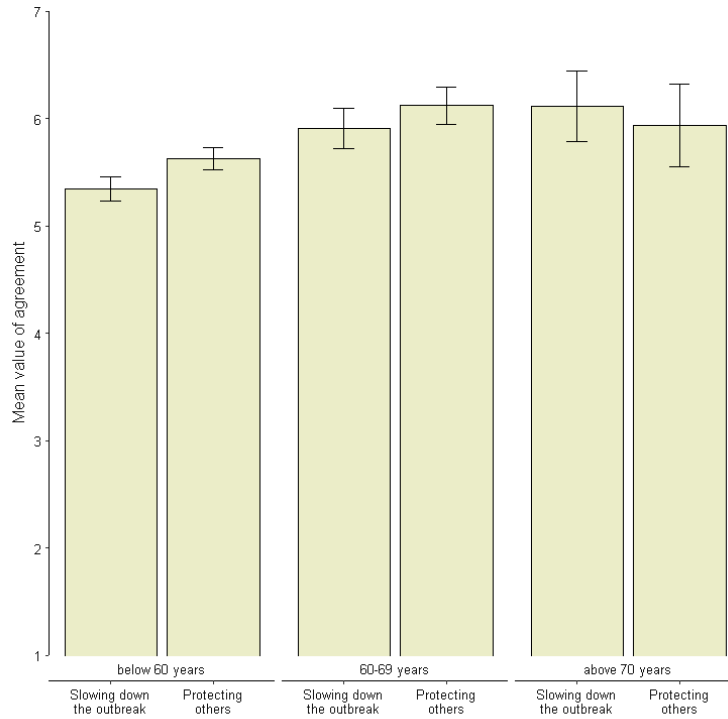
**Supplementary Figure: Examples of data analysis and interpretation based on two data collection waves (all data is from a serial cross-sectional online-study, wave 1 in week 10, wave 2 in week 11; N<sub>1</sub>=977, N<sub>2</sub>=969, representative for age x gender, federal state in Germany)**



**Figure S1A:** Risk was assessed as perceived probability to contract COVID-19, the personal susceptibility and the expected severity of the disease. The ratings on the 7-point scale were recoded so that percentages feeling high, medium, low risk could be compared. The comparison of the two measurements show that from week 10 to week 11 the perceived probability to contract COVID-19 increased while all other indicators remained stable. Further analyses (not displayed) showed that especially high-risk groups (aged 60+) felt less probability to contract COVID-19, which should guide future communication efforts.



**Figure S1B:** As in other countries, several measures were taken in Germany to contain the outbreak. Schools were closed on Friday, 13.03.2020. On the same day, the Minister of Health suggested that Germans who returned from outbreak areas self-quarantine. The data shows that mean acceptance of these two measures had increased since the week before. Knowing about this can facilitate the decision to take such measures and the communication around it. Restricting the general personal freedom is still not very accepted, however acceptance also increased from week 10 to week 11.



**Figure S1C:** Two lines of communication dominated in the media in week 11: (i) the outbreak needs to be slowed down to prevent overburdening of the health system (e.g., #flatteningthecurve on Twitter) and (ii) to protect those who are very vulnerable. The second wave of the survey asked whether participants would be willing to restrict themselves in their everyday lives given these two different explanations (within subject). The analysis showed that in general the willingness was very high, and that among the below 60 years old participants the willingness was significantly higher when the protection of others was the reason for restrictions. Thus, communication should focus on the protection of others to gain highest levels of acceptance.

<b>avoid people from outbreak areas</b>			
<i>Predictors</i>	<i>Odds Ratios</i>	<i>CI</i>	<i>p</i>
(Intercept)	0.22	0.05 – 0.87	<b>0.032</b>
age	0.99	0.98 – 1.00	0.089
severity of COVID-19	1.25	1.09 – 1.44	<b>0.002</b>
trust in authorities	0.77	0.69 – 0.87	<b>&lt;0.001</b>
psychological closeness	1.16	1.01 – 1.32	<b>0.032</b>
fast spread of COVID-19	1.11	0.98 – 1.25	0.096
perceived media-hype	0.90	0.79 – 1.01	0.078
Observations	916		
R <sup>2</sup> Tjur	0.063		

**Figure S1D:** As in other countries, media reported that people who looked as if they came from a country with a large outbreak (e.g. China, Italy) were stigmatised. The study assessed whether participants had avoided people from such countries. This gave a base-rate to estimate the extent of this behaviour (13% in week 10, 17% in week 11) and allowed regressing the behaviour on potential influencing factors. The binary logistic backwards regression as displayed here showed that those who thought COVID-19 is a severe disease, didn't trust the authorities and felt that the virus was close to them had shown such behaviour. This suggests that communication measures to stop stigmatization should not be led by the authorities but other stakeholders (journalists, NGOs ...).