

## Appendix

### Appendix 1. Justification control variables

Several central control variables were added in an attempt to avoid reporting spurious correlations amongst factors. First, someone's overall presumptions of the traits of others might play a central role. Therefore, *general trust in other people* is added as such general perceptions might play a key role in people's comparative (risk) assessment. For example, trust in others could possibly affect how others' preventive actions are evaluated, which might affect the perceived level of risk for others. Next, people might be differently affected by the pandemic, both in terms of indirect risk experience and financial losses. Such factors might determine how people perceived their personal risk or how serious they take the public-health crisis. The second control variable added is *indirect risk experience*— i.e., whether people personally know someone who has been infected. Since indirect experience with public-health problems might make it easier for individuals to imagine themselves as being at risk, which could influence the level of optimism bias (Kim & Niederdeppe, 2013), we include indirect risk experience with COVID-19. Third, people's *affected income* is factored into the analyses. The extent to which one expects that their income is affected might strongly relate to, for example, people's risk perception regarding the financial consequences of the virus, which is part of our measure for optimistic bias of personal risk. Fourth, we added political ideology since the COVID-19 pandemic partly became a politicized issue. Numerous debates took place where liberals and conservatives were unable to see eye-to-eye regarding, for example, the appropriate measures that needed to be taken or the seriousness of the pandemic. Finally, because people could be differently affected by the virus when infected, because of overall health condition or availability of care, we added several *demographic factors* – i.e., age, education, and gender – as controls variables in our model.

## Reference

Kim, H. K., & Niederdeppe, J. (2013). Exploring optimistic bias and the integrative model of behavioral prediction in the context of a campus influenza outbreak. *Journal of health communication, 18*(2), 206-222.

**Appendix 2. Analyses split per country****Table A2.1** Regression analyses relating optimistic bias to media use and perceptions per country

	The Netherlands		US		UK		Germany	
Mean (SD)								
Optimistic bias risk perception	10.43 (10.93)		9.55 (11.86)		9.20 (12.37)		11.73 (12.33)	
Information seeking	.22 (.33)	-.4202967 .861979	.39 (.38)	-.3500416 1.133602	.57 <sup>†</sup> (.30)	-.013557 1.159892	1.03** (.33)	.3826652 1.66869
General media use	.15 (.47)	-.7801508 1.080272	-.31 (.45)	-1.196432 .5767754	-.95* (.41)	-1.751504 -.1389605	-.65 (.43)	-1.484284 .1925623
Misinformation perception	.29 (.42)	-.226349 .0284738	1.39** (.46)	.4835242 2.303922	.93* (.44)	.0749605 1.793849	-.08 (.44)	-.9477193 .7840764
Trust in others	-.22 (.62)	-1.436304 1.002121	-.62 (.57)	-1.729293 .49615	-.17 (.55)	-1.249045 .9049035	-.73 (.52)	-1.750442 .3000987
Indirect experience	-.74 (1.58)	-3.843519 2.358215	1.02 (2.74)	-4.370063 6.408881	1.63 (1.83)	-1.95893 5.213561	2.48 (2.37)	-2.18372 7.148939
Income affected	-.12*** (.02)	-.1564272 -.0742307	-.11*** (.02)	-.143234 -.0754473	-.13*** (.02)	-.1634963 -.1043239	-.15*** (.02)	-.1837354 -.1128431
Political ideology (left-winged)	.17 (.27)	-.3700354 .7056282	.13 (.22)	-.2885683 .5580412	-.45 <sup>†</sup> (.25)	-.9339668 .0374433	-.26 (.29)	-.8228152 .3051057
Gender	-2.50* (1.12)	-4.703147 -.2908039	-3.68** (1.40)	-6.439532 -.9174066	-.03 (1.05)	-2.100293 2.037315	-2.19* (1.06)	-4.280902 -.1025051
Age	-.17*** (.04)	-.2496525 -.0862052	-.07 (.05)	-.1699734 .0222468	-.13** (.05)	-.2200133 -.0411613	-.13** (.04)	-.2150423 -.0483655
Education	.94 (.80)	-.6306928 2.517649	.31 (.96)	-1.584411 2.208206	-.14 (.75)	-1.622802 1.342602	.50 (.68)	-.8340451 1.837242
Contant	21.83*** (4.93)	12.13603 31.52679	1.23 <sup>†</sup> (5.56)	-.7122411 21.17278	17.62*** (5.01)	7.772107 27.46791	2.66*** (4.94)	10.95401 30.36031

Note: Cells contain unstandardized regression coefficients, standard errors in parentheses, and confidence intervals

<sup>†</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Table A2.2** Regression analyses relating third-person perception to media use and perceptions per country

	The Netherlands		US		UK		Germany	
Mean (SD)								
Third person perception	22.70 (22.33)		20.61 (26.82)		18.84 (24.20)		26.46 (26.27)	
Information seeking	.55 (.61)	-6613992 1.753266	-88 (.80)	-2.45272 .6923894	-.02 (.56)	-1.111939 1.076884	.94 (.70)	-.4296468 2.314035
General media use	-.40 (.90)	-2.167646 1.360911	-2.13* (.93)	-3.948324 -.3041169	-3.13*** (.77)	-4.634497 -1.619641	-2.34* (.91)	-4.116076 -.5559235
Misinformation perception	4.52*** (.93)	2.696292 6.344381	6.62*** (.98)	4.69973 8.536435	5.10*** (.80)	3.540428 6.66477	4.53*** (.92)	2.730008 6.335408
Trust in others	.07 (1.18)	-2.257161 2.391111	-1.30 (1.22)	-3.694167 1.103744	.33 (1.03)	-1.691736 2.35603	-1.86 <sup>†</sup> (1.12)	-4.053395 .3308766
Indirect experience	-3.66 (2.86)	-9.290867 1.97321	-.66 (5.33)	-11.13448 9.81368	3.44 (2.98)	-2.421596 9.295108	3.12 (4.71)	-6.127195 12.37
Income affected	-.15*** (.04)	-.2290767 -.0721519	-.14*** (.04)	-.2138854 -.0698625	-.08** (.03)	-.1339484 -.0219448	-.08* (.04)	-.1531695 -.0015692
Political ideology (left-winged)	-.06 (.52)	-1.08398 .9692657	-1.36** (.46)	-2.258759 -.4609311	-.56 (.46)	-1.456499 .3448064	-1.73** (.61)	-2.930444 -.5356786
Gender	-4.05 <sup>†</sup> (2.16)	-8.301763 .1951324	-3.27 (2.98)	-9.132856 2.588426	3.99* (1.97)	.1249747 7.862711	2.69 (2.26)	-1.753029 7.131197
Age	-.06 (.08)	-.216641 .0945313	.29** (.10)	.0908801 .4965525	.14 (.09)	-.0277699 .3084364	.14 (.09)	-.0400491 .3139794
Education	.17 (1.55)	-2.870296 3.212314	4.05* (2.03)	.0584411 8.048415	1.83 (1.44)	-.9867677 4.654249	-.26 (1.44)	-3.077543 2.561486
Constant	11.25 (9.12)	-6.683225 29.18983	-2.95 (11.42)	-25.3942 19.50099	-5.72 (8.91)	-23.22542 11.78279	17.46 <sup>†</sup> (1.44)	-3.062332 37.9813

Note: Cells contain unstandardized regression coefficients, standard errors in parentheses, and confidence intervals

<sup>†</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$