A longitudinal perspective on perceived vulnerability to disease during the COVID-19-pandemic in Belgium

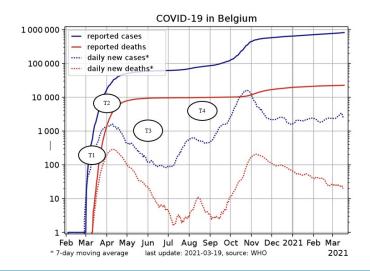
November 23, 2023

Presenter: Margaux Delporte

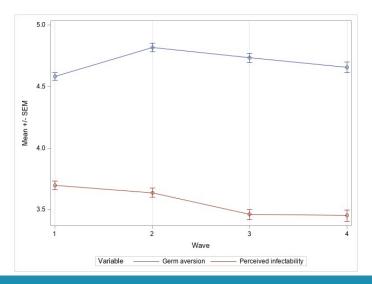
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1 Timing



1 Responses



1 Predictors

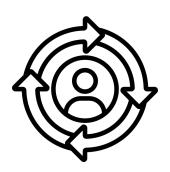
- Sociodemographic characteristics
- Media usage
- Economic situation
- ► The ability to work from home
- ► COVID-19 infection



2 Longitudinal data

$$Y_{1ij} = \mathbf{X}_{1ij}\boldsymbol{\beta}_1 + b_{10i} + b_{11i}t_{ij} + \epsilon_{1ij},$$

 $Y_{2ij} = \mathbf{X}_{2ij}\boldsymbol{\beta}_2 + b_{20i} + b_{21i}t_{ij} + \epsilon_{2ij}$



2 Time dependent covariates



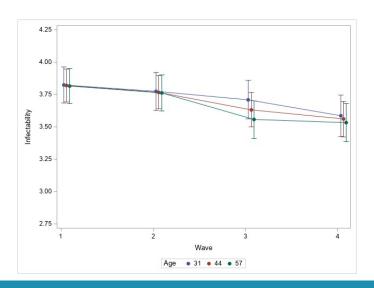
Highly correlated predictors

	Commercial/	Public/	Digital/
	tabloid	quality	face-to-face
Commercial tv	0.788	-0.054	0.076
Commercial radio	0.607	-0.159	0.229
Popular newspapers	0.563	0.338	-0.159
Socials commercial/popular	0.673	0.198	0.301
Public television	0.143	0.697	-0.066
Public radio	-0.073	0.639	0.187
Quality newspapers	-0.060	0.628	0.056
Socials public/quality	0.189	0.553	0.311
Face to face contacts	-0.023	0.019	0.802
Internet	0.199	0.267	0.479
Social media	0.220	0.090	0.765

3 Results Perceived Infectability

	F-value	p-value	β
Wave	0.63	.594	=
Gender: Male	14.53	<.001	-3.81
Disability	6.21	.013	2.49
Living environment	13.31	<.001	-
Grandparents alive	4.00	.046	-2.00
Age	1.12	.290	-0.12
COVID-19 at T1	30.51	<.001	5.53
Better economic situation	35.78	<.001	-5.98
Wave×Living Environment	3.04	<.001	_
$Wave { imes Age}$	3.66	.012	-

3 Perceived infectability



3 Results Germ aversion

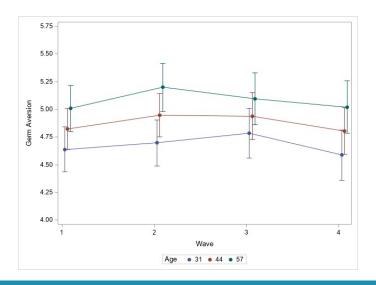
	F-value	p-value	β
Wave	2.11	.097	-
Gender: Male	42.76	<.001	-5.90
Student	0.15	.704	-0.25
Disability	6.98	.008	2.64
Living environment	1.36	.238	-
No Grandparents alive	4.901	0.03	2.21
Age	27.27	<.001	4.59
No children	4.73	.030	2.17
COVID-19 at T1	4.96	.026	2.23
Working from home	0.06	.944	-
Economic situation	21.67	<.001	-4.66
Media usage	4.84	<.001	-

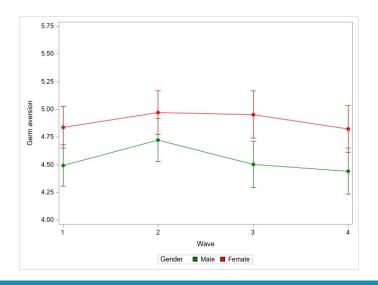
3 Media profiles and Germ aversion

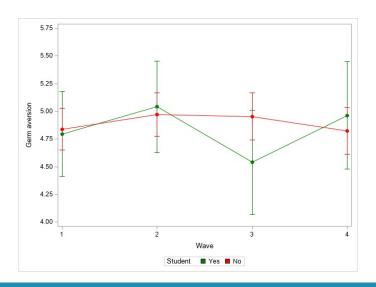
Quality	Popular	Digital/F2F	Estimate	SE	P-value
Low	Low	High	-0.469	0.105	<.001
Low	Low	Low	-0.423	0.109	<.001
High	Low	High	-0.293	0.104	0.005
High	Low	Low	-0.255	0.102	0.013
Low	High	Low	-0.143	0.104	0.169
High	High	Low	-0.117	0.107	0.272
High	High	High	-0.069	0.105	0.510
Low	High	High	0		

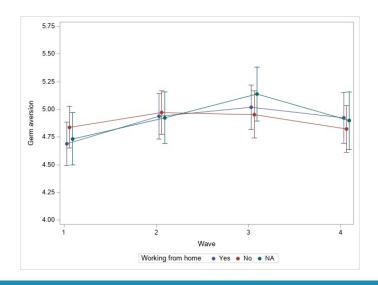
3 Results Germ aversion

	F-value	<i>p</i> -value
Wave×Gender	3.91	0.009
$Wave{ imes}Student$	3.32	0.020
Wave×Living Environment	5.38	<.001
$Wave{ imes}Age$	3.32	0.019
Wave×Working from home	3.45	0.002









Concluding remarks

- Limitations include the non-representativeness of the sample in terms of age and gender
- Insights on how individual characteristics may influence the evolution of fears of infection during a pandemic, and how targeted campaigns and information can help reduce these fears

3 More information

Delporte, M., De Coninck, D., d'Haenens, L., Luyts, M., Verbeke, G. Molenberghs, G., & Matthijs, K. (2023). A longitudinal perspective on perceived vulnerability to diseaseduring the COVID-19-pandemic in Belgium. *Health Promotion International*, **38**(2), 1-10.

