Eurofound

European Foundation for the Improvement of Living and Working Conditions

The tripartite EU Agency providing knowledge to assist in the development of better social, employment and work-related policies

L’impatto della pandemia sulla vita ed il lavoro dei cittadini europei.

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Introduction- Eurofound

2021-2024: Research activities

Working conditions and sustainable work

Industrial relations and social dialogue

Employment and labour markets

Living conditions and quality of life

Anticipating and managing the impact of change

Promoting social cohesion and convergence

Long history of fielding surveys

The European Working Conditions Survey

The European Quality of Life Survey

The European Company Survey

European Working Conditions Survey

Since 1991

European Quality of Life Survey

Since 2003

European Company Survey

Since 2004

Documenting the impact of the crisis.

- *Living, Working and COVID19*
- The Eurofound large-scale online survey across the European Union and beyond.
- Cross-sectional and longitudinal survey.

It started like an experiment

- 24 March 2020
- April 9th 2020: launched in 22 languages across the EU and beyond.
- 6 waves has been fielded and more than 200,000 observations collected.
- Cross-sectional and longitudinal

Topics

- Mental Health
- WorkLife Balance
- Housing
- Public Service and support
- Trust
- Political Participation
- Material Living conditions
- Vaccine acceptance
- Telework
- Skillls
- Social Cohesion
- …

The COVID19 crisis: like a modern Kerberos

The COVID19 crisis, a three-headed hound

- The COVID19 pandemic started in March 2020 and quickly became a **health, economic and social crisis.**
- Like **a modern Kerberos**, the gigantic three-headed hound and guardian of Hades, these three faces of the crisis are affecting the various demographic groups in our societies very differently**.**
- Age-specific trends in **Coronavirus deaths** have been clear since the beginning of the pandemic.
- Conversely, **younger generations and women** are much more exposed than the older population to the wider consequences of **restrictive measures** implemented by governments to control the virus.

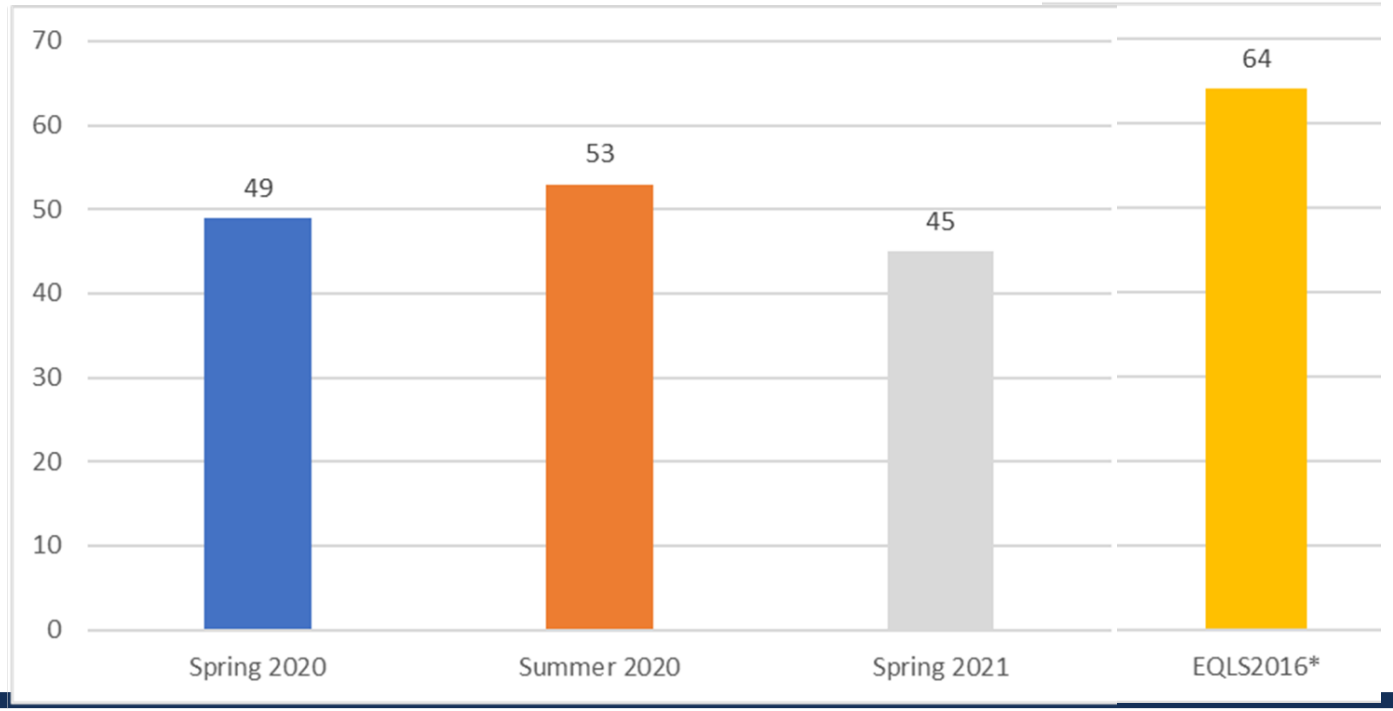
This talk

- Mental Health
- WorkLife Balance
- Vaccine hesitancy


Mental Health

The impact on Mental Wellbeing.

- There is increasing evidence for a surge in mental health problems, greater vulnerability and alarming implications for emotional and social functioning.
- WHO-5 mental well-being scale (0–100), based on the frequency of positive feelings over the previous two weeks

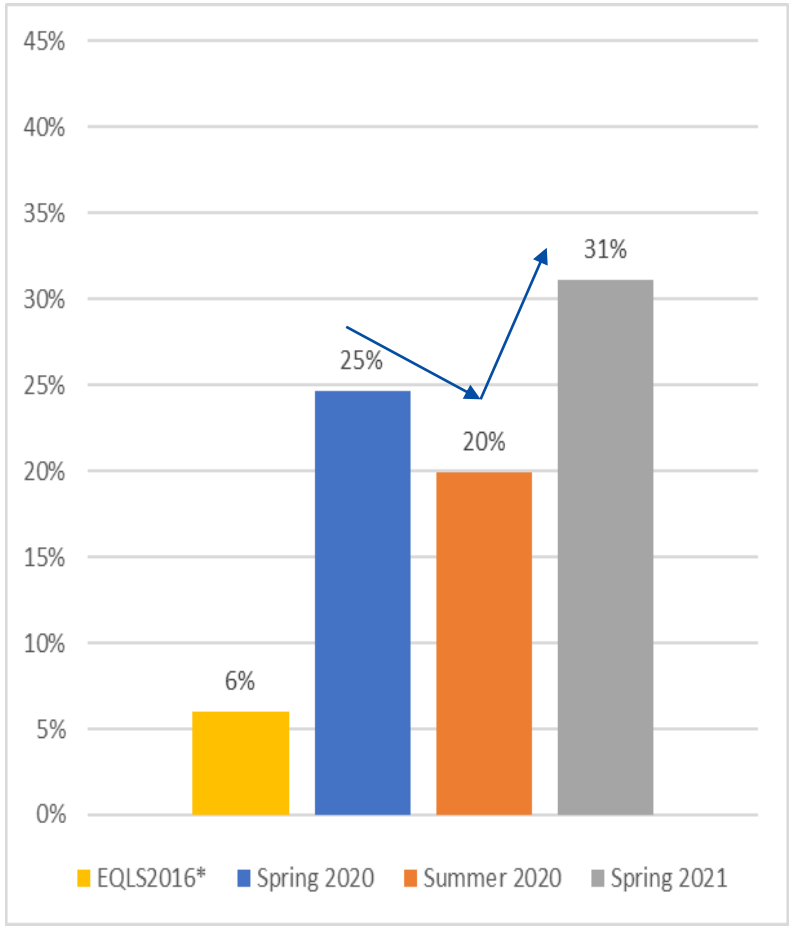


Source: Eurofound Living, Working and COVID19 survey

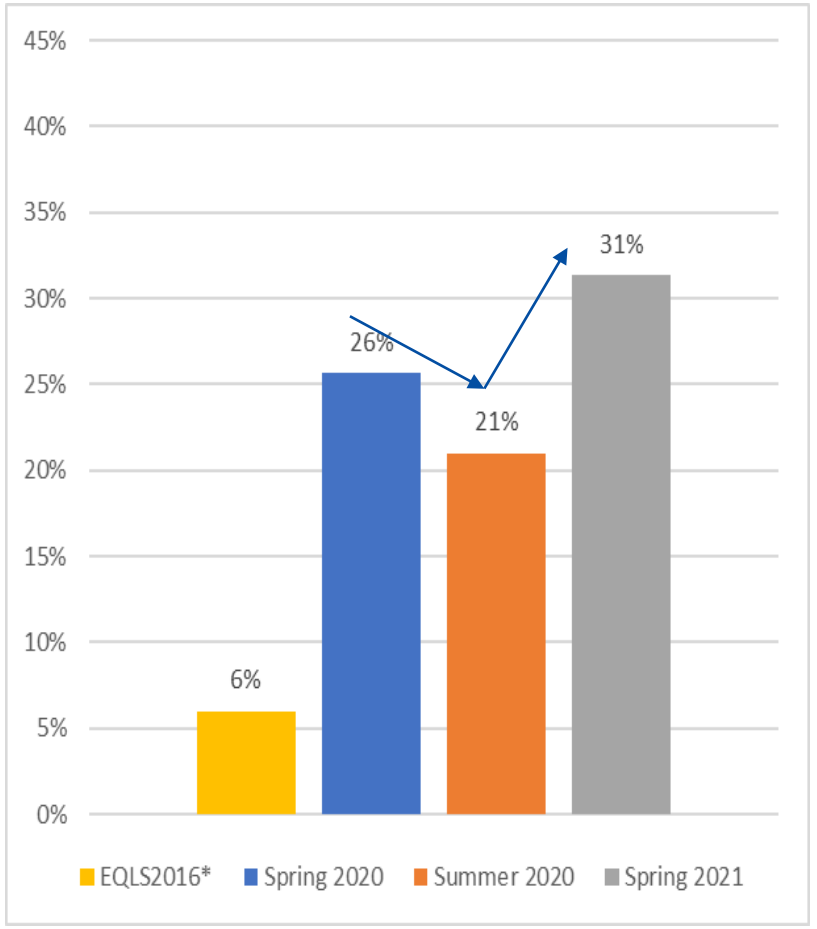
Eurofound

The impact on Mental Wellbeing.

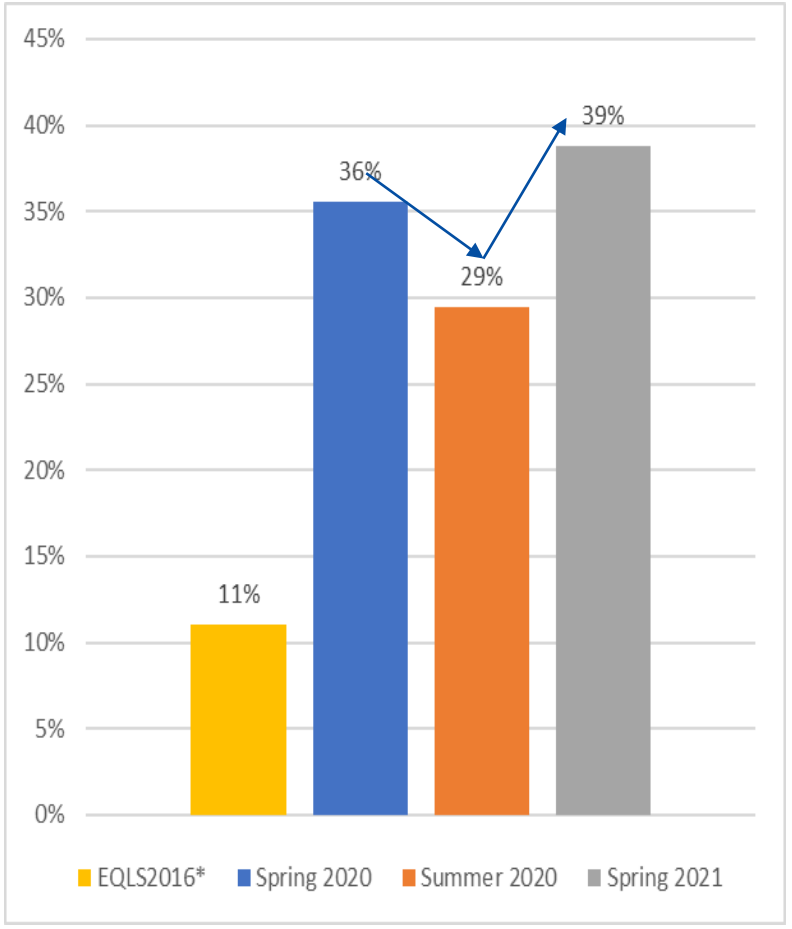
Feeling downhearted and depressed



Feeling lonely



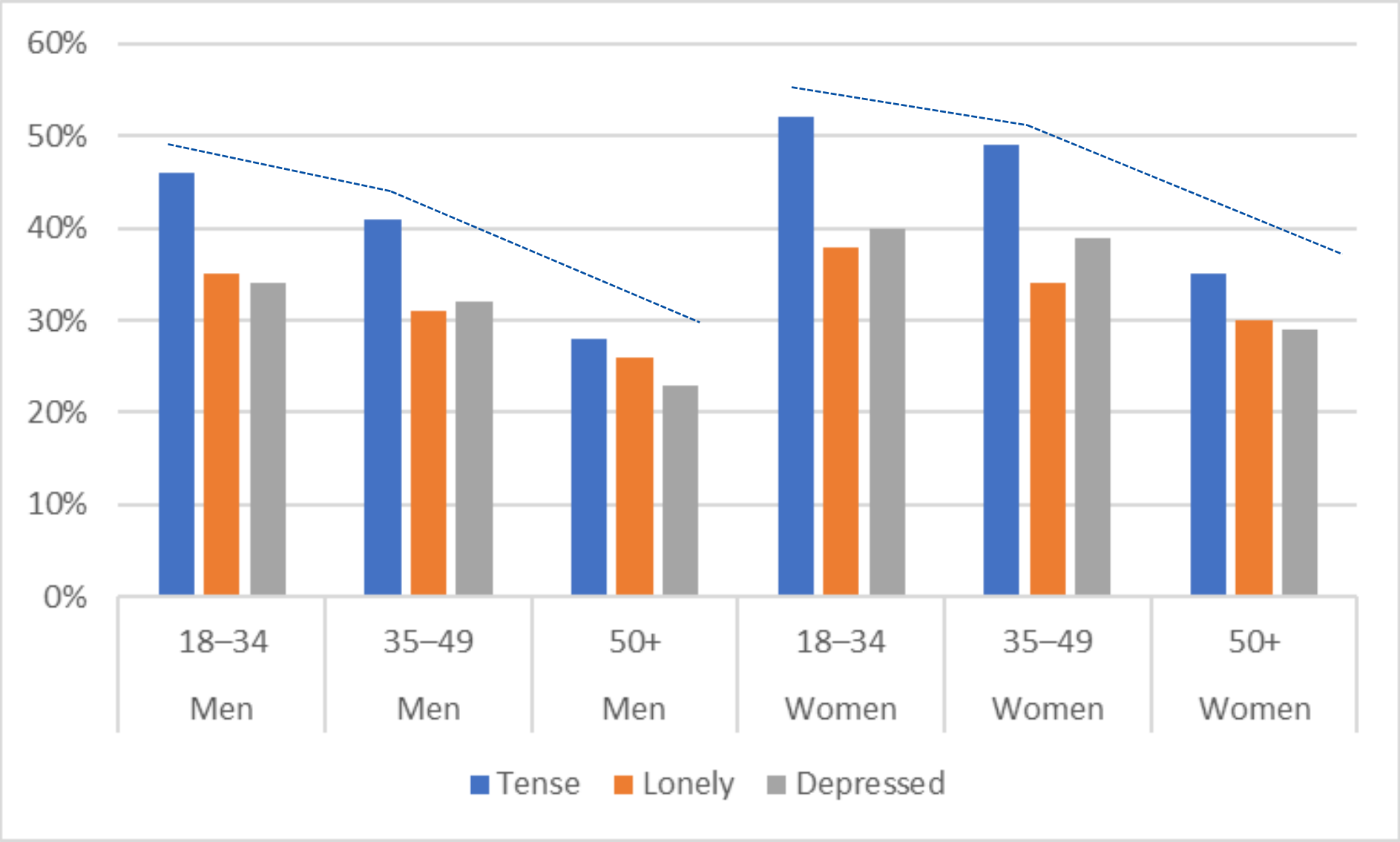
Feeling tense



Source: Eurofound Living, Working and COVID19 survey

Eurofound

Not everyone is affected the same way



Source: Eurofound Living, Working and COVID19 survey

- Pandemic-related distress stems from the **fear of the illness**, **economic hardship**, and **uncertainty** about the real impact of the crisis.
- It is also a result of **social isolation** and **tensions** (within families) in lockdown together as a **result of restrictions** (NPI) that most governments have deployed to contain the pandemic.
- **Had NPIs a role in worsening mental health?**

Data and Methods

- Dependent variable:
  WHO5 Mental Wellbeing Index
- Covariates:
  Usual **key individual** variables (age, gender, education, place of living...)
- Explanatory variables:
  13 NPIs, measured with Oxford COVID-19 Government Response Tracker (OxCGRT).
- Dataset:
  Eurofound Living, Working and COvid19, wave 1-3 longitudinal.

- The dataset is further complemented by numbers of daily COVID-19 cases and deaths at country level.
- Unemployment rate is included to control for the impact of macro-economic shock.

The model

NPI equal to 1 if the policy p was implemented in country c before the interview and 0 otherwise

X represent key individual characteristics

interactions. But we estimate separate models for each NPI to avoid too many regressors

Western-Europe represents a dummy-variable equal to 1 whether the individual lives in Western-Europe or otherwise.

WHO scores

$$MWB_{i,t} = \sum_{p=1}^{13} \beta^p \, NPI^p_{c,\,t-1} + \sum_{g=1}^{G} \lambda^g \, X_i^g + \sum_{g=1}^{G} \gamma^g \, NPI_{c,t-1} \, X^g + \delta \, NPI_{c,t-1} \, WesternEurope_c$$
$$+ \zeta \, COVID19 \, Deaths_{c,t-1} + \xi \, COVID19 \, Cases_{c,t-1} + \rho \, U_{c,m} + \alpha_c + \mu_w + \eta_i + \varepsilon_{i,t}$$

COVID-19 Deaths and COVID-19 Cases represent the smoothed averages for the seven days prior to the interview

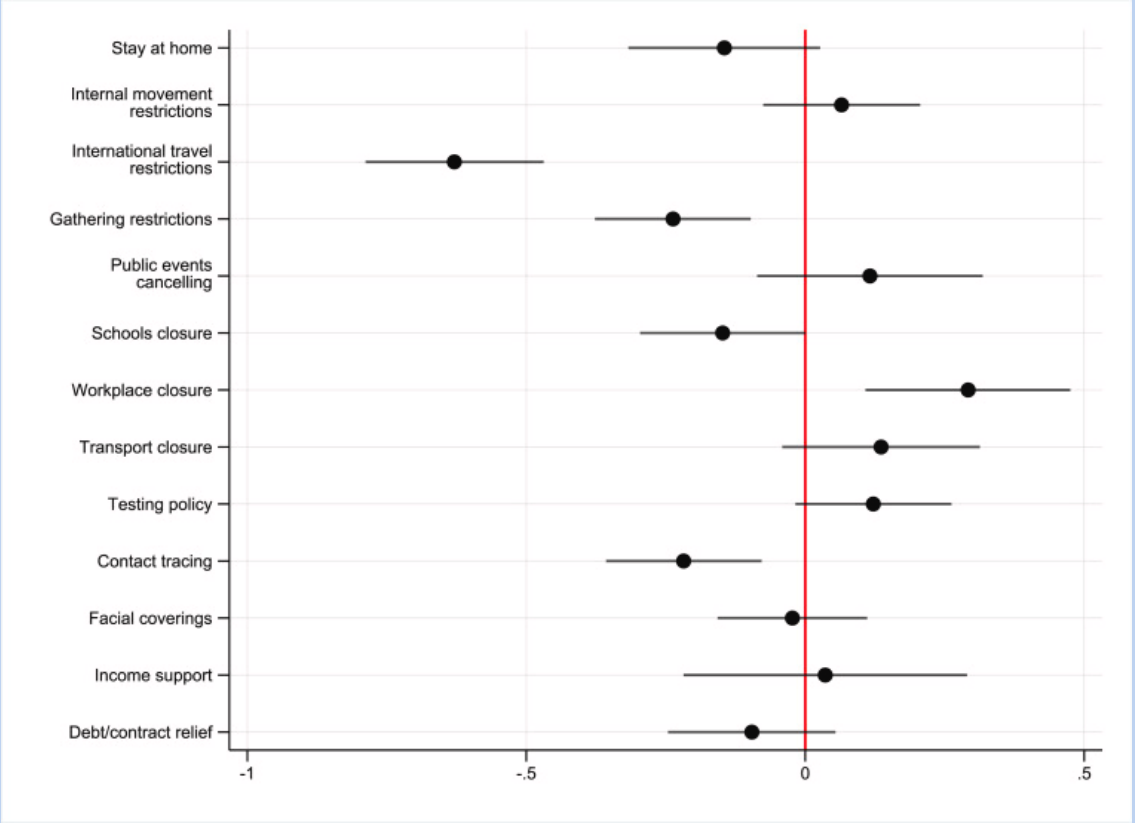
unemployment rate as macro-economic context

Country and waves fixed effects

Individual random effects

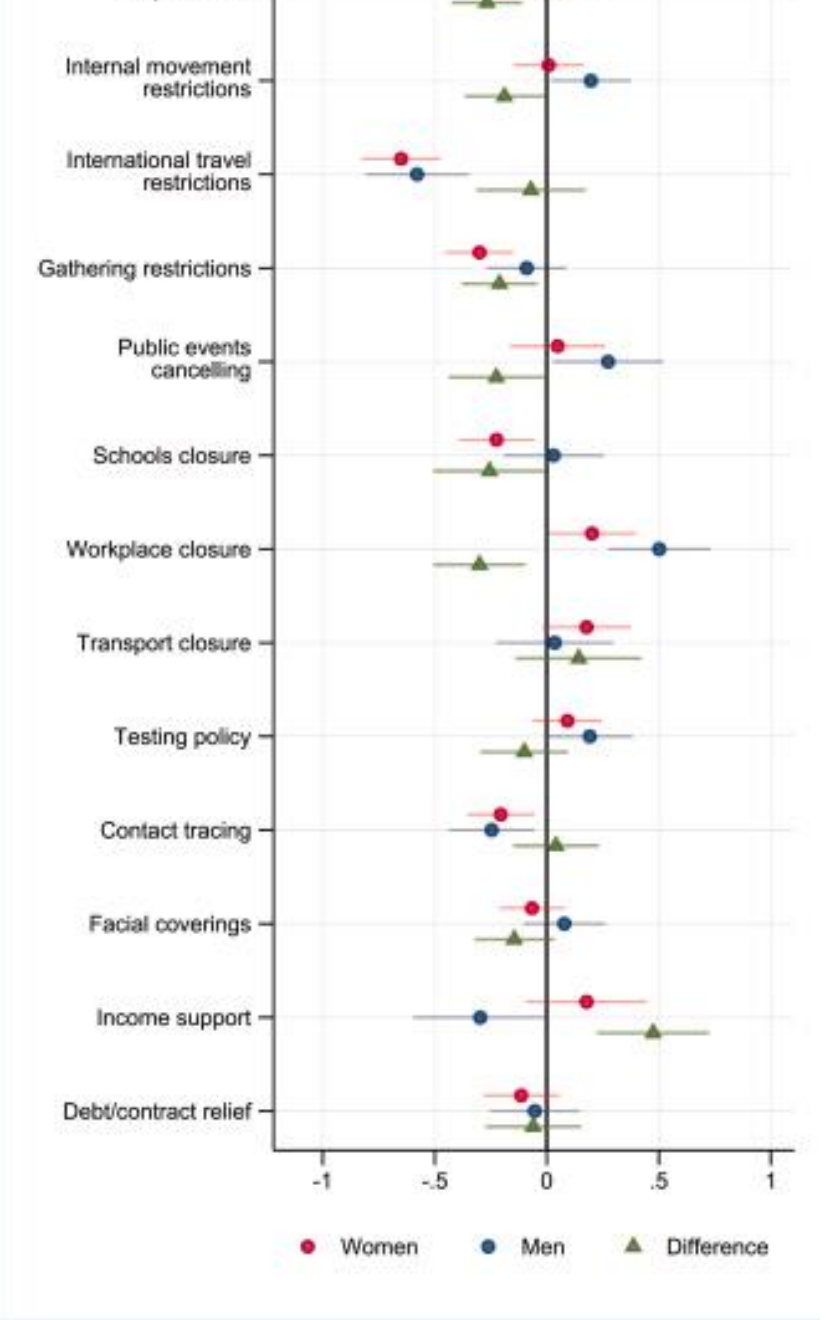
Results

- Average marginal effects and 95% CIs for the association between each NPI and MWB, estimated with mixed-effects OLS models on longitudinal data from the 28 European countries.
- Our evidence shows that the enactment of NPIs in terms of restriction on **international travel**, **restrictions on private gatherings**, and **contact tracing policies** were negatively associated with individuals' MWB



Results – gender differences

- Gender differences:
  - **stay-at-home requirements**, **restrictions on private gatherings**, and **school closures** were negatively associated with women's MWB
  - As for men, **restrictions on internal movement**, **cancellations of public events** were positively associated with their MWB
  - **Workplace closures** were positively related to both men and women's MWB.
  - for both women and men, **contact tracing policies** and **international travel restrictions** were negatively associated with their MWB



EMPLOYMENT

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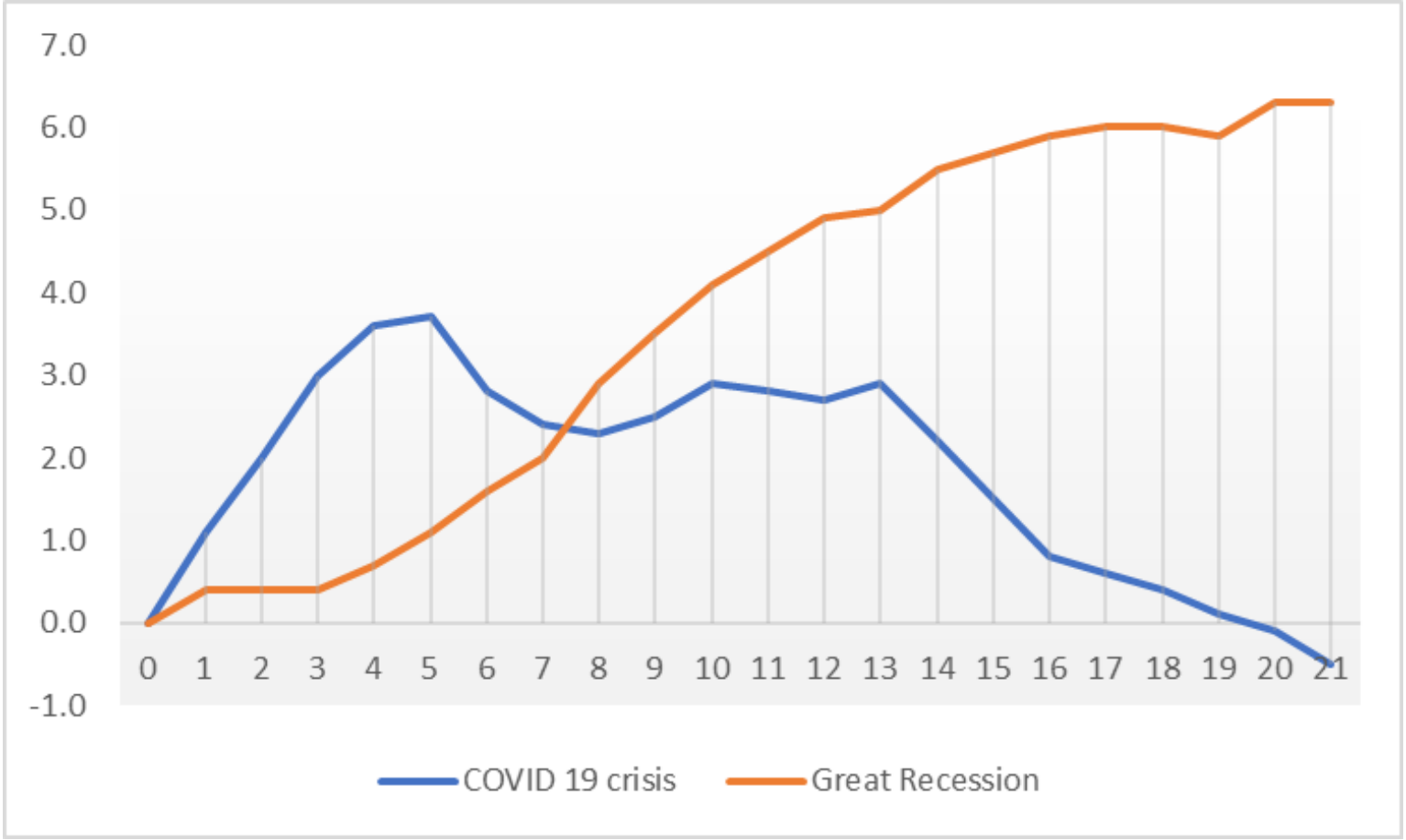
Unemployment, comparison with 2008

In 2008, the surge unemployment started mild and then grew regularly over the months before the crisis.

In 2020, unemployment surged dramatically but it was fully re-absorbed during 2021

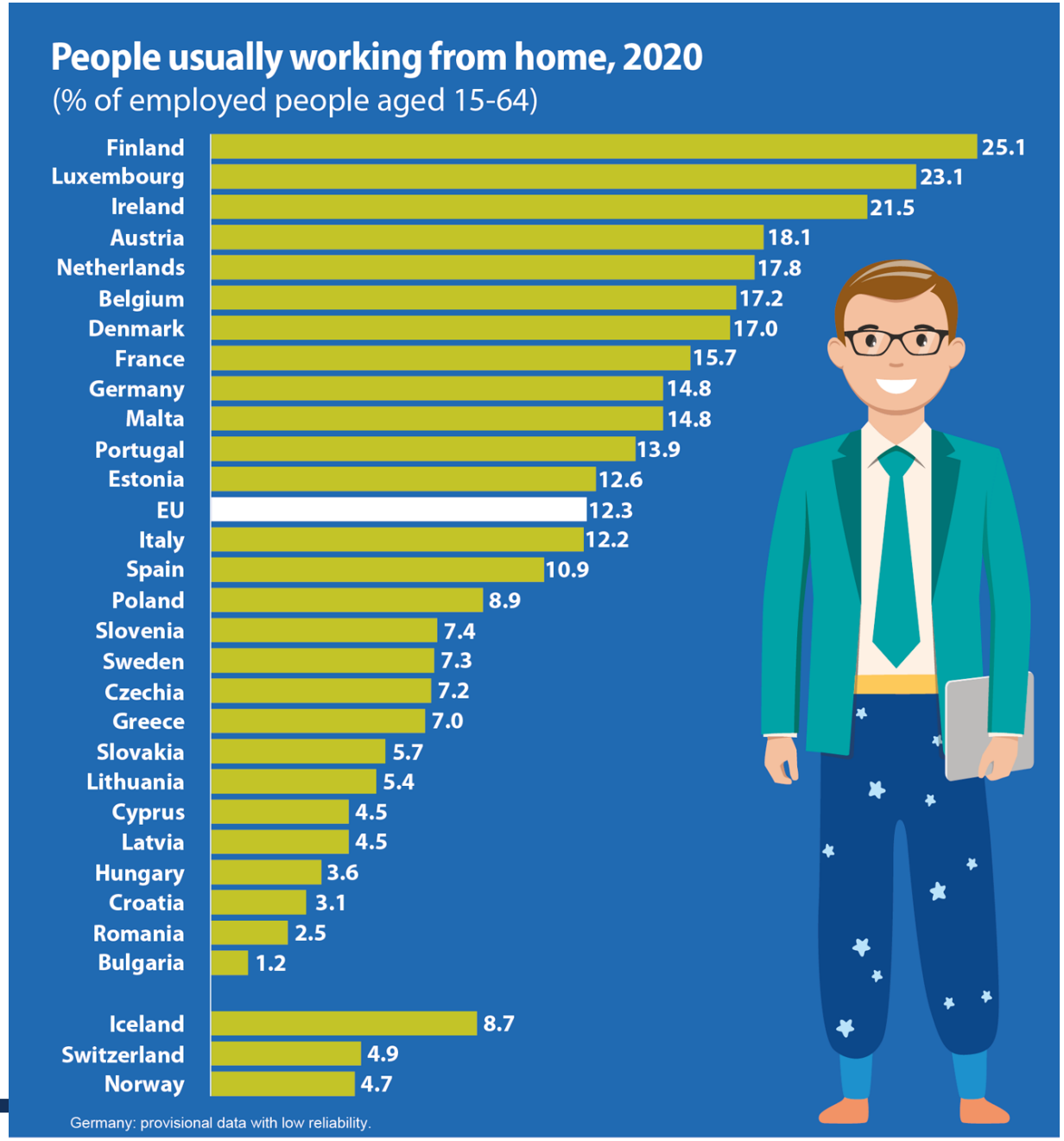


The surge of telework

The social distancing measures that were introduced as a response to the COVID-19 pandemic forced many people to work from home.

In 2020, 12.3% of employed people aged 15-64 in the EU usually worked from home, although this share had remained constant at around 5% over the past decade.

Compared with other age groups, younger people were less likely to work from home in 2020: only 6.3% of those aged 15-24 reported that they usually worked from home, compared with 13.0% of those aged between 25-49 and 12.4% of those aged 50-64.




WORK
LIFE

Work-life balance and NPIs

- The difference in mental health among men and women rings an alarm bell and open questions on how Europeans coped with life and work during the pandemic.
- Teleworking in a time of social distancing and lockdown might be burdensome for many working mothers as they juggle work, home-schooling and care, all in the same pocket of space and time.
- Concentration of activity in the home also meant that work and home life are in conflict and the work–life balance among European workers deteriorate.
- In particular, this seems more acute in times of closure of schools.

- **What was the impact of NPIs on work life balance?**

Aim of the EF-ECDC study

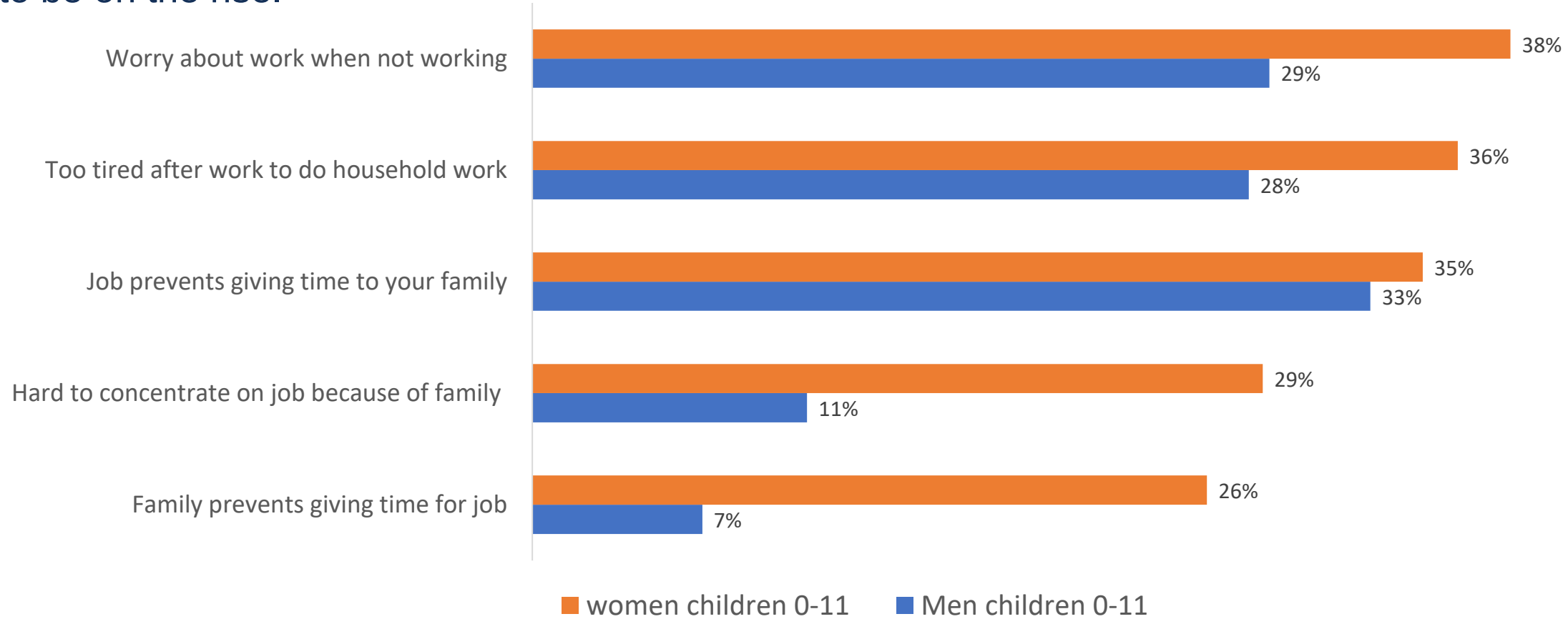
To join **Eurofound** and **ECDC** expertise in this field and to assess the **impact of different NPIs** in response to COVID-19 implemented **from January 2020 to May 2022** on the **work life balance** of the respondents of the Eurofound survey "Living, Working and COVID-19"

Measuring work-life balance

- The Living, Working and COVID19 survey adopt the work-life balance scale of the European Working Conditions Survey
- This scale has been introduced in Eurofound in the 90s.
- It is composed by 5 items:
  - 1. kept worrying about work when you were not working
  - 2. felt too tired after work to do some of the household jobs which need to be done
  - 3. found that your job prevented you from giving the time you wanted to your family
  - 4. found it difficult to concentrate on your job because of your family responsibilities
  - 5. found that your family responsibilities prevented you from giving the time you should to your job

Work-life balance of men and women with young children

Concentration of activity in the home also means that conflicts between work and home life are sure to be on the rise.



Source: Eurofound Living, Working and COVID19 – round 2

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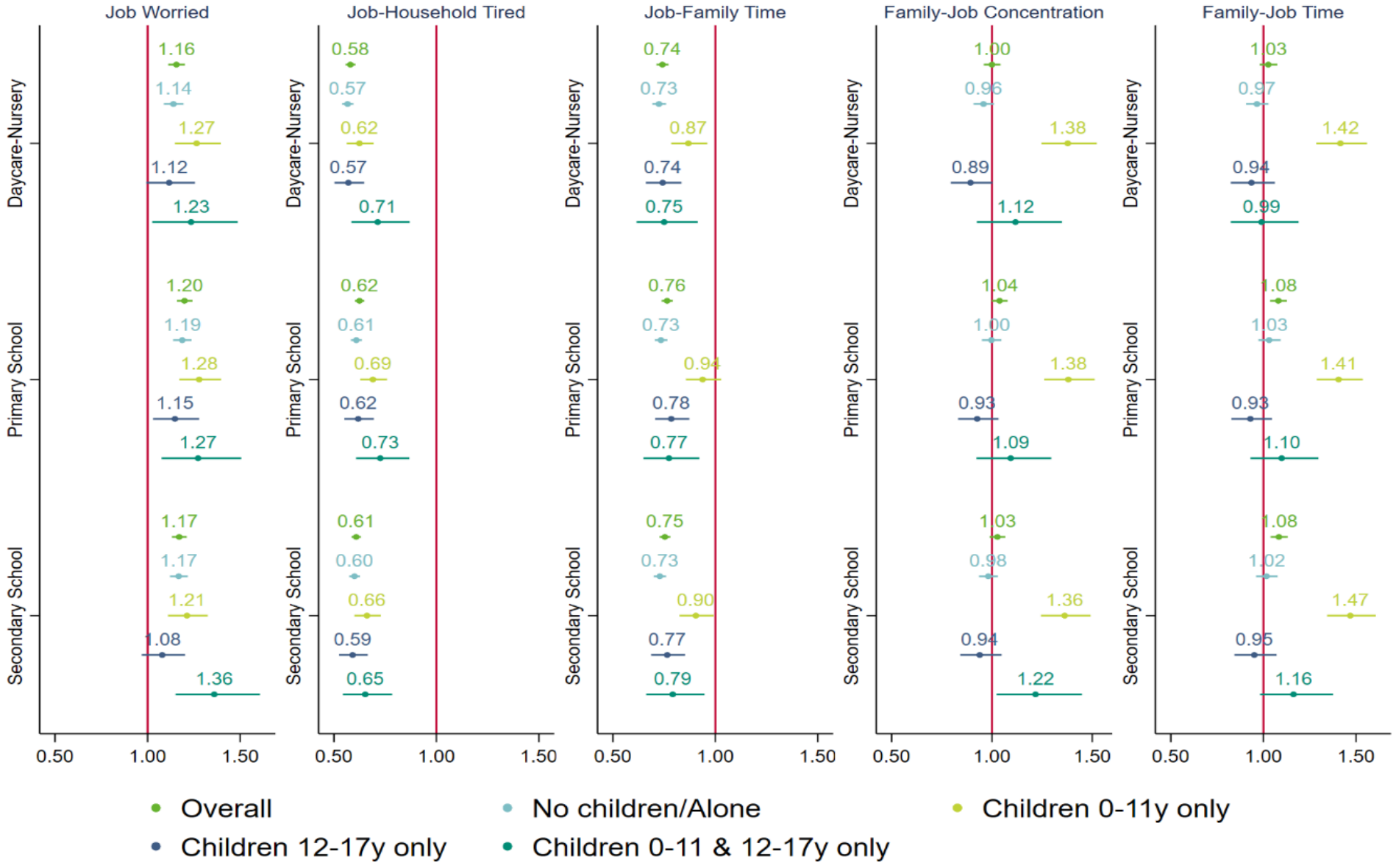
Methods: data on NPIs (ECDC)

- **Data on NPIs** were retrieved from the European Centre for Disease Prevention and Control (**ECDC**) and the European Commission's Joint Research Centre (**JRC**) Response Measures Database (ECDC-JRC RMD).
- **NPIs:**
  - organised in a **hierarchical structure** with a three-level system;
  - implemented from **1st Jan 2020 to 22nd June 2022;**
  - aiming at the **general community** (not specific target groups);
  - **mandatory and voluntary status;**
  - **full implementation** (partial implementation excluded).

Methods: design, participants and analyses

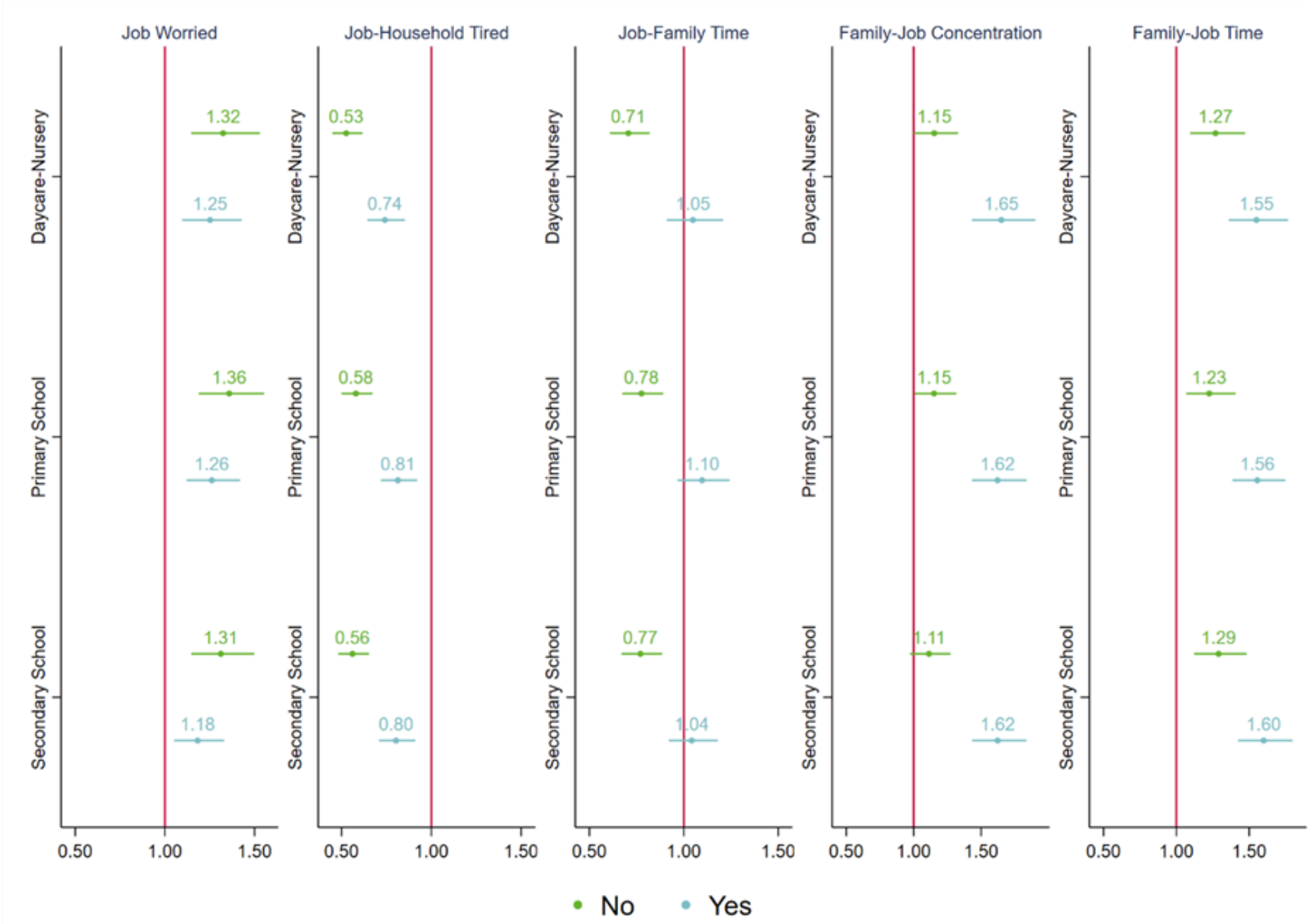
- **Design**: repeated cross-sectional study
- **Study participant**:
  - All EF survey respondents (in any survey round) stating to be workers
- **Statistical analyses**:
  - Descriptive analysis
  - Mixed logistic regression models fitted with random intercepts for participants ID variables and adjusting by individual-level covariates

Results


Job Worried
Job-Household Tired
Job-Family Time
Family-Job Concentration
Family-Job Time
Daycare-Nursery
Primary School
Secondary School
1.16
1.14
1.27
1.12
1.23
1.20
1.19
1.28
1.15
1.27
1.17
1.17
1.21
1.08
1.36
0.58
0.57
0.62
0.57
0.71
0.62
0.61
0.69
0.62
0.73
0.61
0.60
0.66
0.59
0.65
0.74
0.73
0.87
0.74
0.75
0.76
0.73
0.94
0.78
0.77
0.75
0.73
0.90
0.77
0.79
1.00
0.96
1.38
0.89
1.12
1.04
1.00
1.38
0.93
1.09
1.03
0.98
1.36
0.94
1.22
1.03
0.97
1.42
0.94
0.99
1.08
1.03
1.41
0.93
1.10
1.08
1.02
1.47
0.95
1.16
0.50
1.00
1.50
Overall
No children/Alone
Children 0-11y only
Children 12-17y only
Children 0-11 & 12-17y only

Results

- Role of telework and having young kids.



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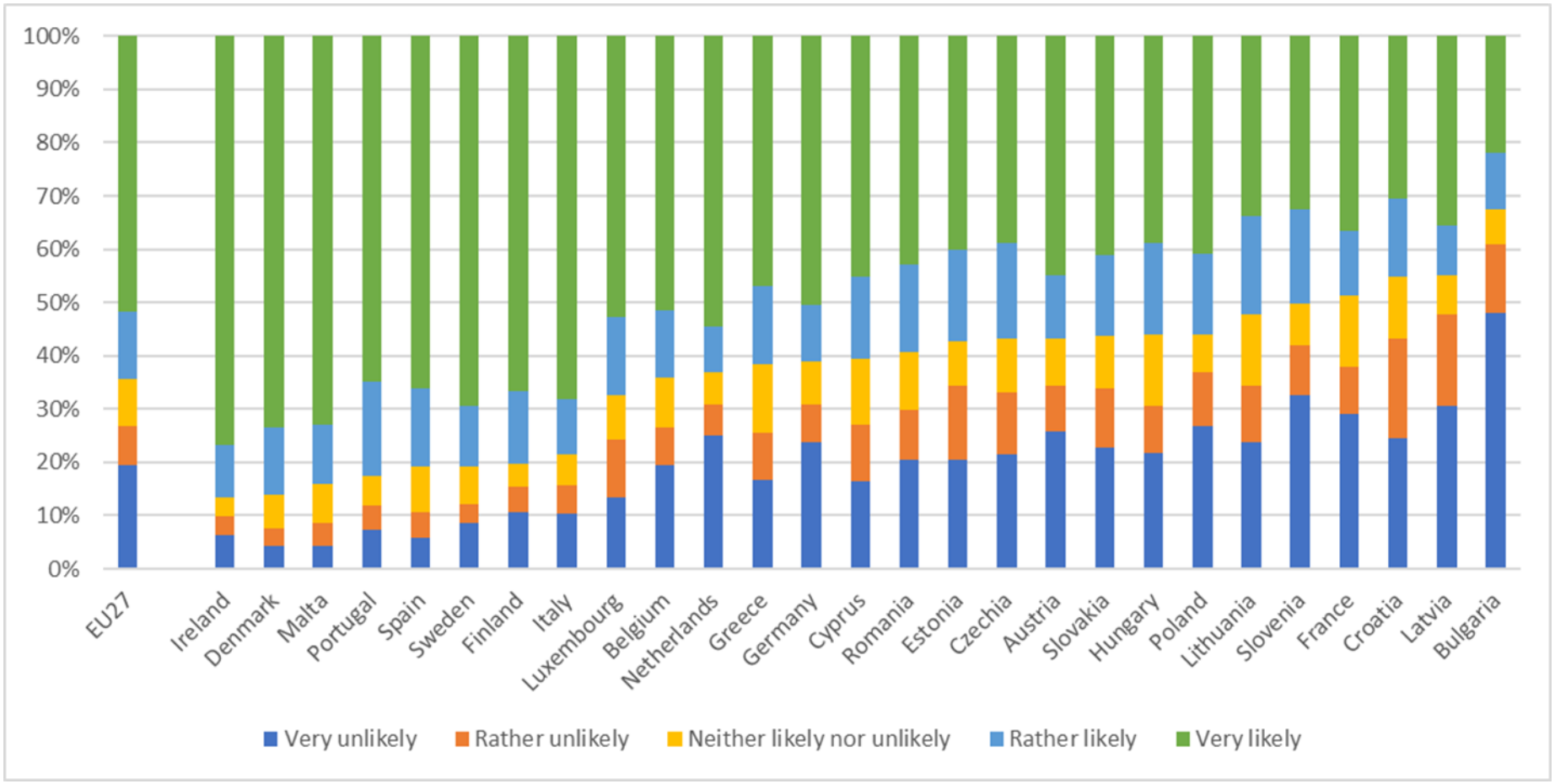
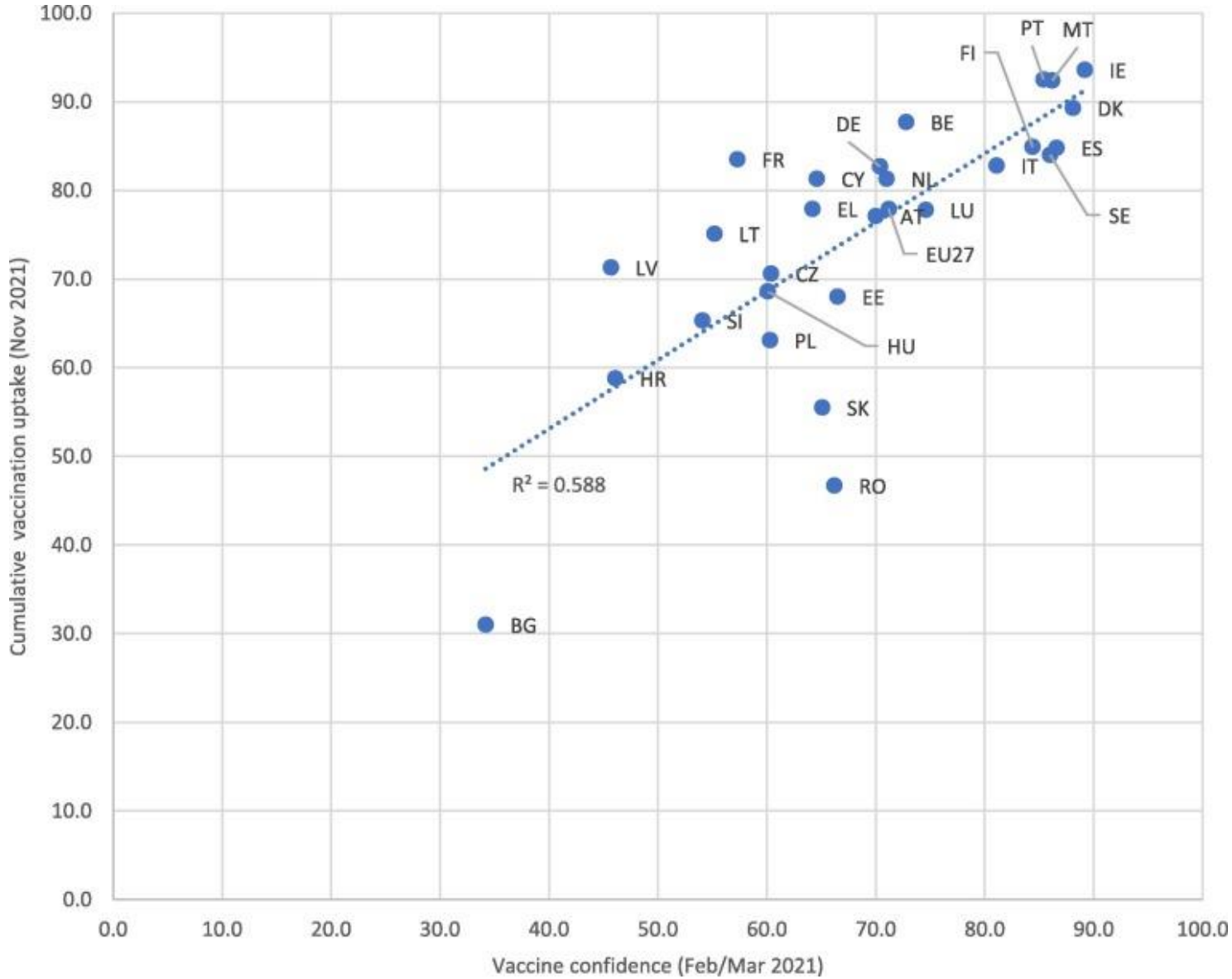
The issue of vaccine hesitancy

- A flexible tool like an e-survey allows to address timely questions as the vaccine hesitancy.
- It was open from March to April 2021
- What are the main drivers of intention to vaccination?
- Did the AstraZeneca suspension increased vaccine hesitancy in Europe?

Vaccine hesitancy in Europe

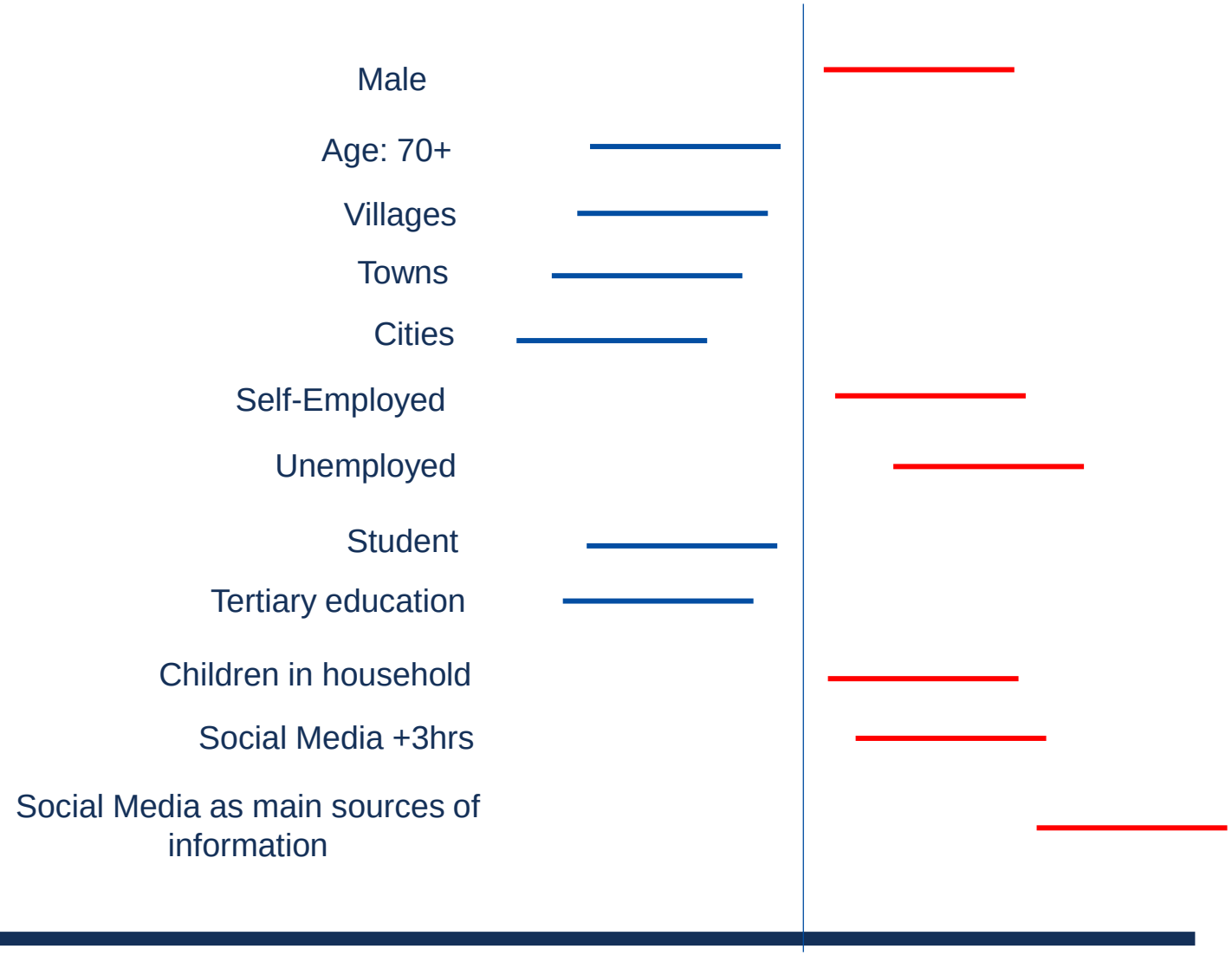



Cumulative vaccination uptake (Nov 2021)
Vaccine confidence (Feb/Mar 2021)
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
90.0
100.0
PT
MT
FI
IE
DK
DE
BE
ES
FR
IT
CY
NL
EL
AT
LU
SE
LT
EU27
LV
CZ
EE
SI
PL
HU
HR
SK
RO
BG
R² = 0.588

	(1)		(2)		(3)		(4)		(5)	
Female	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)
Male	0.02*	(0.01)	0.02*	(0.01)	0.02*	(0.01)	0.02*	(0.01)	0.01	(0.01)
18-29 years	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)
30-39 years	0.04	(0.03)	0.04	(0.03)	0.03	(0.03)	0.04	(0.03)	0.04	(0.03)
40-49 years	0.02	(0.03)	0.02	(0.03)	0.01	(0.03)	0.02	(0.03)	0.03	(0.03)
50-59 years	0.02	(0.03)	0.02	(0.03)	0.02	(0.03)	0.03	(0.03)	0.04	(0.03)
60-69 years	-0.02	(0.03)	-0.02	(0.03)	-0.02	(0.03)	-0.01	(0.03)	0.00	(0.03)
70+ years	-0.05*	(0.03)	-0.05	(0.03)	-0.05	(0.03)	-0.04	(0.03)	-0.02	(0.03)
The open countryside	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)
A village/small town	-0.06**	(0.02)	-0.06**	(0.02)	-0.06**	(0.02)	-0.06***	(0.02)	-0.06**	(0.02)
A medium to large town	-0.07***	(0.02)	-0.07***	(0.02)	-0.07***	(0.02)	-0.07***	(0.02)	-0.08***	(0.03)
A city or city suburb	-0.13***	(0.02)	-0.13***	(0.02)	-0.12***	(0.02)	-0.13***	(0.02)	-0.13***	(0.02)
Employed	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)
Self-employed	0.06**	(0.03)	0.06**	(0.03)	0.06**	(0.03)	0.06**	(0.03)	0.05**	(0.03)
Unemployed	0.10***	(0.03)	0.10***	(0.03)	0.09***	(0.03)	0.09***	(0.03)	0.08***	(0.03)
Ill/disabled	0.13***	(0.04)	0.13***	(0.05)	0.13***	(0.05)	0.12**	(0.05)	0.10*	(0.05)
Retired	0.03	(0.02)	0.03	(0.02)	0.02	(0.02)	0.02	(0.02)	0.01	(0.02)
Homemaker	0.04	(0.04)	0.04	(0.04)	0.03	(0.03)	0.02	(0.03)	0.01	(0.03)
Student	-0.10***	(0.02)	-0.10***	(0.02)	-0.10***	(0.02)	-0.10***	(0.02)	-0.11***	(0.02)
No spouse	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)
Lives with spouse	-0.03**	(0.01)	-0.03**	(0.01)	-0.03**	(0.01)	-0.03**	(0.01)	-0.03*	(0.01)
No children in household	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)
Children in household	0.03**	(0.02)	0.03*	(0.02)	0.03**	(0.02)	0.03**	(0.02)	0.03**	(0.02)
Primary education	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)
Secondary education	0.02	(0.03)	0.03	(0.03)	0.03	(0.03)	0.03	(0.03)	0.04	(0.03)
Tertiary education	-0.06**	(0.03)	-0.06**	(0.03)	-0.06*	(0.03)	-0.05*	(0.03)	-0.04	(0.03)
(Very) bad health			0.00	(.)	0.00	(.)	0.00	(.)	0.00	(.)
Fair health			-0.07**	(0.03)	-0.07**	(0.03)	-0.06**	(0.03)	-0.06**	(0.03)
Good health			-0.10***	(0.03)	-0.09***	(0.03)	-0.09***	(0.03)	-0.08***	(0.03)
Very good health			-0.05	(0.03)	-0.05	(0.03)	-0.05	(0.03)	-0.04	(0.03)
Chronic health problem / disability			-0.05***	(0.01)	-0.05***	(0.01)	-0.05***	(0.01)	-0.05***	(0.01)
Close person had Covid					-0.03**	(0.01)	-0.03**	(0.01)	-0.03**	(0.01)
Close person died of Covid					-0.04	(0.02)	-0.04*	(0.02)	-0.04*	(0.02)
Social media: Less than daily							0.00	(.)	0.00	(.)
Social media: Daily: under 3 hours							0.05***	(0.02)	0.04*	(0.02)
Social media: Daily: 3+ hours							0.10***	(0.02)	0.05**	(0.02)
Main news source: Traditional (press, radio, TV)									0.00	(.)
Main news source: Social media/blogs									0.20***	(0.02)
Country dummies	Yes		Yes		Yes		Yes		Yes	
Observations	29755		29755		29755		29755		29755	
Pseudo R^2	0.055		0.061		0.064		0.069		0.102	

`The effect of social media on vaccine hesitancy

- Vaccine hesitancy can hinder the successful roll-out of vaccines.
- all 27 EU Member States, carried out between February and March 2021 (n = 29,755).
- We study the determinants of vaccine hesitancy, focusing on the role of social media use.
- In multivariate regression models, we find statistically significant ($p < 0.05$) impacts on vaccine hesitancy of heavy use of social media and using social media as a main source of news.



Did the AstraZeneca suspension increased vaccine hesitancy in Europe?

- Yes, slightly.

	(1)	(2)	(3)	(4)
VARIABLES	vaccine hesitancy	vaccine hesitancy	vaccine hesitancy	vaccine hesitancy
Trend	0.004***	0.007***	0.008***	0.002***
	(0.004–0.005)	(0.006–0.007)	(0.007–0.008)	(0.002–0.003)
AstraZeneca controversy		-0.075***	0.413***	0.230***
		(-0.094–-0.055)	(0.330–0.496)	(0.157–0.302)
Trend*AstraZeneca controversy			-0.015***	-0.007***
			(-0.017–-0.012)	(-0.010–-0.005)
Age group (Ref:25–34)				
18–24	-0.064***	-0.061***	-0.052***	0.004
	(-0.090–-0.038)	(-0.087–-0.036)	(-0.077–-0.026)	(-0.019–0.027)
35–44	0.004	0.002	-0.000	-0.029***
	(-0.013–0.021)	(-0.014–0.019)	(-0.017–0.017)	(-0.044–-0.014)
45–54	0.011	0.009	0.005	-0.040***
	(-0.005–0.028)	(-0.008–0.025)	(-0.011–0.022)	(-0.054–-0.026)
>= 55	-0.035***	-0.039***	-0.043***	-0.077***
	(-0.049–-0.020)	(-0.053–-0.024)	(-0.058–-0.028)	(-0.090–-0.064)
Female	-0.022***	-0.022***	-0.019***	-0.010**
	(-0.031–-0.013)	(-0.031–-0.013)	(-0.028–-0.010)	(-0.018–-0.002)
Tertiary education	-0.104***	-0.103***	-0.102***	-0.055***
	(-0.114–-0.094)	(-0.113–-0.093)	(-0.112–-0.092)	(-0.063–-0.046)
Tested positive to COVID-19	0.033***	0.034***	0.036***	0.027***
	(0.016–0.051)	(0.017–0.051)	(0.019–0.053)	(0.012–0.043)
Death of acquaintance	-0.067***	-0.067***	-0.066***	-0.057***
	(-0.080–-0.053)	(-0.080–-0.053)	(-0.079–-0.053)	(-0.070–-0.045)
Trust in the government				-0.010***
				(-0.012–-0.008)
Trust in the EU				-0.020***
				(-0.022–-0.018)
Trust in the healthcare system				-0.017***
				(-0.019–-0.015)
Trust in pharmaceutical firms				-0.044***
				(-0.046–-0.042)
Constant	0.255***	0.236***	0.219***	0.742***
	(0.237–0.273)	(0.218–0.254)	(0.201–0.237)	(0.721–0.762)
Observations	35,390	35,390	35,390	35,390
R-squared	0.036	0.038	0.042	0.253

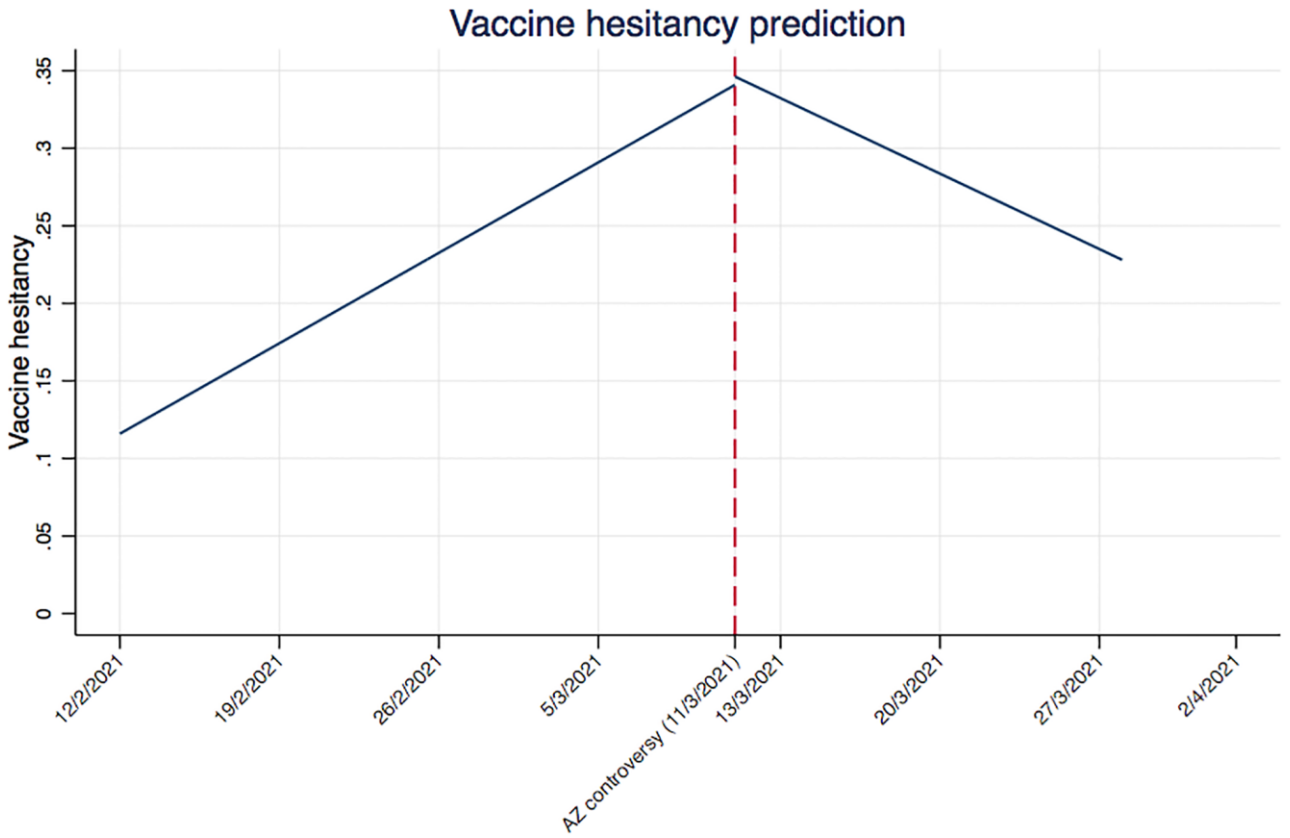
Notes: Estimation results from the Eq 1. Data come from the third wave of the Eurofound "Living, Working and COVID-19". The outcome variable represents a dummy variable equal to 1 if the individual is (rather) unlikely to get vaccinated if he or she was offered the vaccine against COVID-19 and 0 otherwise. Trend is a continuous variable equal to the day of interview. AZControversy is a dummy variable that takes value 1 since 11 March 2021 (date of the controversy), and 0 before. Robust standard errors are employed. 95% confidence intervals are presented in parentheses.

*** p<0.01,

** p<0.05,

* p<0.1.

https://doi.org/10.1371/journal.pone.0273555.t001



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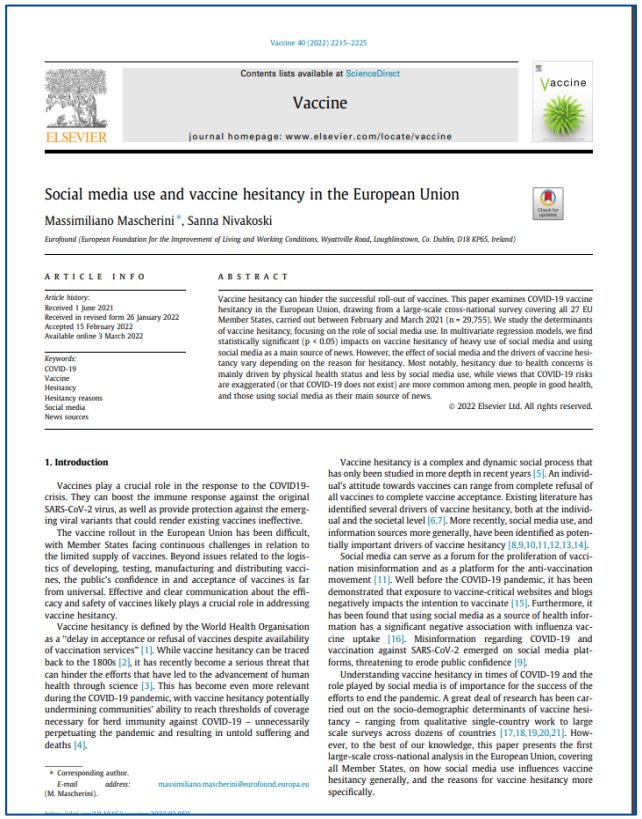

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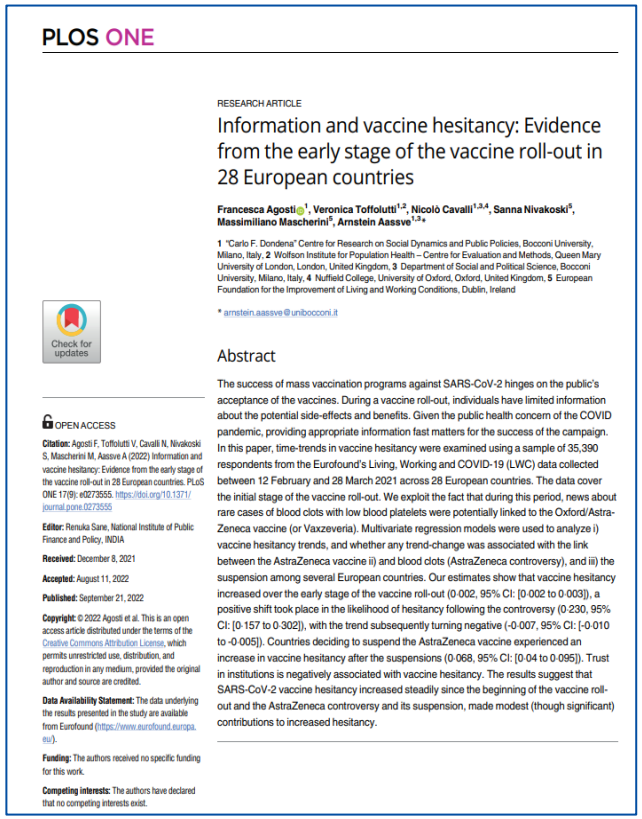

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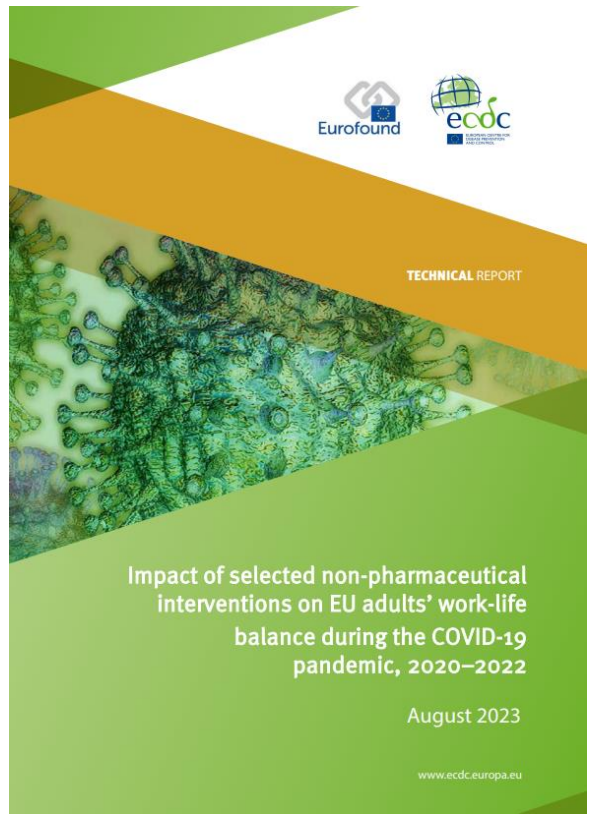

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Thank you for your attention

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