TRAIN THE TRAINERS ON VACCINE CONFIDENCE AND COMMUNICATION

BACKGROUND DOCUMENT

TABLE OF CONTENT

GENERAL INFORMATION

Earlier research has confirmed that healthcare providers are the most trusted source of information about vaccines for the general public (Special Eurobarometer; Wellcome Global Monitor). Therefore, healthcare providers play a major role in supporting vaccination campaigns and reaching a good vaccination coverage. However, research performed under the umbrella of the EU Joint Action on Vaccination has stressed that many healthcare providers do not feel confident to answer questions about vaccines and/or lack specific knowledge about vaccines.

The vast majority of healthcare providers indicates that they are willing to follow extra courses on vaccinology and would benefit from extra support (like FAQ modules, trustworthy websites, support from the government etc.). To meet the needs of healthcare providers, WP5 of the IMMUNION project focusses on providing vaccinology training in different formats.

In WP5, we have developed a **Train the Trainers Workshop** to improve vaccine confidence focussing on knowledge and communication about vaccines. Moreover we also organise(d) special **vaccinology sessions** during international events, organised by the coalition members, with the purpose of advocacy for vaccinology in healthcare providers that are not necessarily administering vaccines or confronted with vaccination/vaccine hesitancy issues on a daily basis. During these sessions, special attention is given to tailoring the session to the needs of the audience by an extended Q&A module.

The Train the Trainers workshop will serve as the basis for 3 more tailored **country sessions** in Greece, Latvia and Romania.

To be able to provide this training, we have put together an **all-in curriculum** (ML5.1), in a cross-project effort (incl. the EU Joint Action on Vaccination). The curriculum contains all information about vaccines that (future) healthcare providers need in terms of knowledge, practical skills and communication. This curriculum was used to **tailor** the general/country sessions and the special vaccinology sessions at international events to the needs of the targeted healthcare providers.

OBJECTIVE

The objective of the Train the Trainer session is to support trainers of healthcare providers and health students by offering training on vaccine confidence and communication. The training is designed to provide knowledge and tools to trainers, who can then carry this content forward in their trainings of healthcare providers and/or healthcare students, which will result in better knowledge and confidence of (future) healthcare providers to communicate about vaccines and to deal with questions about vaccination.

TARGET AUDIENCE

Trainers that are involved in teaching (future) healthcare providers:

- Teachers who are currently training any type of (future) healthcare provider that is or will be involved in the vaccination process (nurses, midwives, pharmacists, GPs, pediatricians…)
- On the topic of vaccines/vaccination
- From all EU member states

PRACTICAL INFORMATION

Language: English

Timing: 21/06/2022, 13-16h CEST

Format: online meeting

Registration is free of charge, but required.

For more information: contact us at vaxcom@uantwerpen.be

PROGRAM

Chairs : Sara Valckx & Aurélie De Waele

Introduction (10min)
Alison Maassen
EuroHealthNet

Role of the HCP in the vaccination process and the importance of communication (20min)
Brett Craig
WHO Euro

Vaccine hesitancy in Europe (20min)
Greet Hendrickx
University of Antwerp

How to improve health literacy (20min)
Pierre Van Damme & ECDC & WHO

Communication about vaccines (75min)

- How to communicate about vaccines (45min)
- Communication exercises (30min)

Philipp Schmid
University of Erfurt, JITSUVAX

Tips and tricks for teaching (20min)
Max Willie
EPSA training coordinator

Q&A (15min)

Closing

REGISTRATION

Following information was retrieved during the registration:

Register online via this link, or fill out the form below and send back to vaxcom@uantwerpen.be.

1. Email: ……
   ……
2. Surname (official as printed on passport/ID): ……
   ……
3. First name: ……
   ……
4. Country: ……
   ……
5. Affiliation: ……
   ……
   ……
   ……
6. Function: ……
   ……
   ……
7. Type of training you are involved in:

   ☐ Trainer of health students

   ☐ Trainer of in-service healthcare providers – nurse

   ☐ Trainer of in-service healthcare providers – dentist

   ☐ Trainer of in-service healthcare providers – medical doctor

   ☐ Trainer of in-service healthcare providers – pharmacist

   ☐ Trainer of in-service healthcare providers – other

Please note that the meeting will be recorded and shared on the IMMUNION website.

PRE- AND POST-TRAINING SURVEYS

In order to evaluate the Train the Trainers session, pre- and post-training surveys were sent to the participants (see below). These surveys can be adapted for tailored trainings of healthcare providers.

PRE-TRAINING SURVEY

You have registered for the IMMUNION Train-The-Trainers workshop on the 21st of June 2022 (13-16h CEST). We would like to ask you to fill out the questions in this survey before the start of the training. This will allow us to tailor the training to your expectations. Filling out the survey will take less than a minute of your time. Thank you in advance and happy to meet you during the training.

How did you learn about the Train-the-Trainers workshop?

Do you have any prior experience in training healthcare providers or health students? If yes, please specify.

Do you feel confident to train healthcare providers on the topic of vaccine communication? Y/N/sometimes

On a scale from 0-100%, how confident do you feel?

Does your current knowledge about vaccination originate from your standard education, or from extra courses/workshops/experience that you attended after your standard education?

- *Standard education*
- *Extra course or workshop*
- *Experience*
- *Other / None of the above*

What are your expectations regarding the Train-the-Trainers workshop?

Thank you for taking the time to answer the questions.

Please note that we will send you another short survey after the workshop. We would very much appreciate if you could fill out the Train-the-Trainers post-workshop survey as well, as it will enable us to evaluate the training.

Please note that a recording of the training will be available after the workshop on the website of the Coalition for Vaccination - IMMUNION (coalitionforvaccination.com).

We are happy to meet you during the workshop!

POST-TRAINING SURVEY

You recently joined us for the IMMUNION Train-the-Trainers workshop (21/06/2022). We hope you enjoyed the training and we would be very grateful if you could fill out the following questions to evaluate the workshop. Filling out the survey will take less than 1 minute of your time.

On a scale from 1-10, how would you evaluate the following items with regard to the Train-the-Trainers workshop? (10 = best score)

- *Content of the workshop*
- *Timing of the workshop (13-16h)*
- *Duration of the workshop (3h)*

After following the Train-the-Trainers workshop, do you feel MORE confident to train healthcare providers on the topic of vaccine communication? Y/N/no answer

On a scale from 0-100%, how confident do you feel?

Was there anything missing in this training to fully meet your expectations?

Thank you for joining us during the Train-the-Trainers workshop and for filling out both the pre- and post-workshop survey.

The recording of the workshop will be available soon at the Coalition for Vaccination website: IMMUNION (coalitionforvaccination.com).

SPEAKERS AND RECOURCES

Hand-outs of the presentations are provided at the end of this document. The presentations and recordings of the Train the Trainer session are available on the website of the Coalition for Vaccination.

INTRODUCTION

Speaker: Alison Maassen (EuroHealthNet)

SPEAKER'S INFORMATION

Alison Maassen is Project Coordinator of the IMMUNION project (2021-2023).

RESOURCES

- IMMUNION (coalitionforvaccination.com)
- Vaccine communication toolbox | IMMUNION (coalitionforvaccination.com)
- Strengthening Education And Knowledge On Immunization (SEKI) - Home
- Council Recommendation of 7 December 2018 on strengthened cooperation against vaccine-preventable diseases (europa.eu)

ROLE OF THE HCP IN THE VACCINATIOAND THE IMPORTANCE OF COMMUNICATION

Speaker: Brett Craig (WHO Euro)

SPEAKER'S INFORMATION

Brett Craig is a technical officer in the Vaccine-Preventable Diseases and Immunization Programme in the WHO Regional Office for Europe, specifically working on vaccine acceptance and demand. He has been primarily coordinating in-country support on COVID-19 vaccine acceptance and demand activities for the Region. Brett has a background in social science research, social and behaviour change and communication and has experience with gathering insights and designing interventions, including trainings, in the areas of new vaccine introduction and provider-patient communication in primary healthcare settings.

RESOURCES

- Communicating with health workers about COVID-19 vaccination (who.int)
- Communicating with patients about COVID-19 vaccination (who.int)

VACCINE HESITANCY IN EUROPE

Speaker: Greet Hendrickx (University of Antwerp)

SPEAKER'S INFORMATION

Greet Hendrickx (Ir, MSc) has worked as a senior project coordinator at the University of Antwerp within the Centre for the Evaluation of Vaccination (VAXINFECTIO) since 2007. She is involved in several international projects on vaccine hesitancy, training and communication, such as the EU Joint Action on Vaccination, ECDC projects, IMMUNION and the Vaccine Confidence Project. She furthermore supports all activities of the Viral Hepatitis Prevention board (www.vhpb.org).

RESOURCES

- Strategic Advisory Group of Experts on Immunization (who.int)
- Ten threats to global health in 2019 (who.int)
- Vaccine confidence project: The Vaccine Confidence Project
  - State of Vaccine Confidence in the EU and the UK (2020)
  - The State of Vaccine Confidence in the EU: 2018
- Larson HJ, Clarke RM, Jarrett C, Eckersberger E, Levine Z, Schulz WS, Paterson P. Measuring trust in vaccination: A systematic review. Human vaccines & immunotherapeutics. 2018 Jul 3;14(7):1599-609.
- Sallam M. COVID-19 Vaccine Hesitancy Worldwide: A Concise Systematic Review of Vaccine Acceptance Rates. Vaccines (Basel). 2021 Feb 16;9(2):160
- MacDonald NE; SAGE Working Group on Vaccine Hesitancy. Vaccine hesitancy: Definition, scope and determinants. Vaccine. 2015 Aug 14;33(34):4161-4

HOW TO IMPROVE HEALTH LITERACY

Speaker: Pierre Van Damme (incl. materials from ECDC & WHO Euro)

SPEAKER'S INFORMATION

Prof. Dr. Pierre Van Damme is vice-dean and a full professor at the Faculty of Medicine and Health Sciences at the University of Antwerp. He is the director of the Centre for the Evaluation of Vaccination (CEV), and former chair of the Vaccine & Infectious Disease Institute (VAXINFECTIO) at the University of Antwerp. VAXINFECTIO is a consortium of four research groups within the university and is recognized as a 'Centre of Excellence' that functions as a WHO Collaborating Centre for the WHO European Region. The CEV is also the European Hub of the Vaccine Confidence Project. Besides clinical studies, Pierre's research interests focus on vaccine confidence and education. In that regard, Pierre is involved in many national and international vaccine educational assignments for health students and in-service healthcare providers and also in multiple international research projects on vaccine confidence and communication. A few examples are the yearly Valentine Symposium, the annual Summer School on Vaccinology, lectures for specific target audiences, being guest professor in several courses on vaccination across Europe and the Vaccine Confidence Project. He authored more than 400 peer reviewed publications.

RESOURCES

- EU Joint Action on Vaccination : https://eu-jav.com/
- EU Joint Action on Vaccination leaflet : EODY_EU-JAV-Leaflet-2022.pdf
- Eurobarometer 488 – Europeans' attitudes towards vaccination (2019)
- Eurobarometer 494 – Attitudes on vaccination against COVID-19 (2021)
- Eurobarometer 505 - Europeans' attitudes towards vaccination (2022)
- EU JAV - Curriculum | Centre for Evaluation of Vaccination | University of Antwerp (uantwerpen.be)
- ECDC Virtual Academy
- European Center for Disease Prevention and Control (John Kinsman – expert social and behaviour change):
    1. https://www.ecdc.europa.eu/en/publications-data/lets-talk-about-protection-enhancing-childhood-vaccination-uptake
    2. Let's talk about hesitancy. Enhancing confidence in vaccination and uptake. A practical guide for public health programme managers and communicators (europa.eu)
    3. https://www.ecdc.europa.eu/en/publications-data/vaccine-hesitancy-among-healthcare-workers-and-their-patients-europe
    4. https://vaccination-info.eu/en/about-us
    5. Questions and answers on COVID-19: Vaccines (europa.eu)
- WHO Regional Office for Europe (Brett Craig – Technical officer vaccine preventable diseases and immunization program WHO Euro): COVID-19 vaccines and vaccination explained (covid19infovaccines.com)
- Dubé E, Laberge C, Guay M, Bramadat P, Roy R, Bettinger J. Vaccine hesitancy: an overview. Hum Vaccin Immunother. 2013 Aug;9(8):1763-73. doi: 10.4161/hv.24657
- Summerschool on vaccinology

COMMUNICATION ABOUT VACCINES

Speaker: Philipp Schmid (University of Erfurt, JITSUVAX)

SPEAKER'S INFORMATION

Dr. Philipp Schmid is psychologist and postdoctoral researcher working for the Horizon2020 project "Jitsuvax" at the University of Erfurt, Germany. He studies the psychology of science denialism and health misinformation and aims to support people's informed decision making in health, for example, in vaccination decision making. He applies a persuasion psychology perspective to understand the impact of misinformation in health communication and to develop and evaluate promising interventions. He is the first author of the WHO guidance document on "How to respond to vocal vaccine deniers in public" and a co-author of the Debunking Handbook 2020 and the Covid-19 Vaccine Communication Handbook. Updates of his work can be followed at Twitter: @PhilippMSchmid

RESOURCES

- WHO Guidance Document on How to respond to vocal vaccine deniers: Vocal-vaccine-deniers-guidance-document.pdf (who.int)
- Debunking Handbook: Debunking Handbook 2020 | Center For Climate Change Communication
- COVID 19 Vaccine Communication Handbook: The COVID-19 Vaccine Communication Handbook - HackMD
- Key scientific publication - The psychological drivers of misinformation belief and its resistance to correction: The psychological drivers of misinformation belief and its resistance to correction | Nature Reviews Psychology
- Key scientific publication - Effective strategies for rebutting science denialism in public discussions: Effective strategies for rebutting science denialism in public discussions | Nature Human Behaviour

TIPS AND TRICKS FOR TEACHING

Speaker: Max Willie (EPSA training coordinator)

SPEAKER'S INFORMATION

Max Willie Georgi is a Pharmacist from Berlin Germany. He studied pharmacy in Jena from 2014 to 2019 and during his studies he became active in the national and international pharmacy students associations BPhD and EPSA. In 2018 he graduated from a Training New Trainers Event and has been active as a Soft Skill Trainer mostly for pharmaceutical and medical students in Europe. In 2021 he was training professionals as part of the CTIS Master Trainers Programme of EMA. He is currently working for the German Start Up Blue Health Group.

RESOURCES

- Home - EPSA (epsa-online.org)

Q&A

At the end of the session, time was foreseen for questions and answers. All speakers participated in the expert panel.

PRESENTATIONS AND RECORDINGS

All materials are available on the website of the Coalition for Vaccination: Education and Reports | IMMUNION (coalitionforvaccination.com).

A hand-out of the presentations is provided below.

IMMUNION

COALITION FOR VACCINATION
by European Healthcare Professionals

IMMUNION project:
Improving **IMM**unisation cooperation in the European **UNION**

April 2021-March 2023

This project is co-funded by the European Union's Health Programme 2014-2020.

PROJECT OVERVIEW

IMMUNION ("Improving IMMunisation cooperation in the European UNION")

Overall objective: to support EU efforts to improve vaccine uptake by strengthening joint efforts amongst Coalition for Vaccination member associations and other stakeholders in order to deliver better vaccine education to health professionals and better information to the general public.

Specific objectives:

1. Dissemination of resources
2. Strengthening Coalition for Vaccination
3. Increasing training opportunities
4. Enhancing collaboration with media
5. Improving overall equity in vaccination

Coalition for Vaccination

The **Coalition for Vaccination** brings together European associations of healthcare professionals and relevant student associations in the field. It was convened by the European Commission in 2019 based on the 2018 Council recommendation on strengthened cooperation against vaccine-preventable diseases.

https://coalitionforvaccination.com/

Partners

Other Health student and providers association:

CED EAP EAHP AEMH CEOM FEMS EJD EMSA EMA ENSA EPSA
ER-WP ESNO UEMO EDSA (and associated organisation)

OUR ACTIVITIES

TIMELINE: HALFWAY THROUGH!

WEBSITE AND SOCIAL MEDIA

DISSEMINATION OF INFORMATION

SEKI Platform integration

Ask An Expert

Vaccine Communication Toolkit

Vaccine Training Barometer

Need for Vaccine Training in HCP

Preliminary results (Dec 2020)

Second Round Flanders

Input of 820 HCP

Ph 22% - MD 16% - N44% - Oth 16%

- 31.3% feels confident to answer questions about vaccines
- 11.1% gained sufficient knowledge through their standard education
- 94.8% is willing to follow extra courses
- 52.1% got questions in the last 3 months that they could not answer

First round Spain

Input of 295 HCP

Ph 23% - MD 16% - N 9% - Midw 52%

- 21.7% feels confident to answer questions about vaccines
- 52.5% gained sufficient knowledge through their standard education
- 91.5% is willing to follow extra courses
- 36.9% got questions in the last 3 months that they could not answer

Training of Trainers

General Training of Trainers

Providing the backbone for strong communication about vaccination

Greek National ToT

Latvian National ToT

Romanian National ToT

Summary of general session, with in-depth application of the theory and communication tools tailored to national context

Sessions recorded and made available online for other trainers, students and healthcare professionals to access (and to inspire future national sessions across Europe).

Vaccine Communication Sessions at International Events

- **Objective**: Advocacy for vaccinology via in-service healthcare providers, with a focus on knowledge and communication.

- **3 sessions**
  - CPME: 25/03/2022 at the CPME Annual Meetings (Brussels, Belgium)
  - CED: 28/06/2022 (online, standalone event)
  - EPSA: 04/11/2022 at the EPSA Autumn Assembly (Athens, Greece)

- **Target audience**: In-service or future healthcare providers that may have an interest in vaccination (any aspect thereof), and who would like to improve their communication skills and confidence in communicating about vaccines (all vaccines, not limited to COVID-19 vaccines).

TODAY’S PROGRAMME

PROGRAM

Chairs : Sara Valckx & Aurélie De Waele

13:00 - 13:10 Introduction
Alison Maassen
EuroHealthNet

13:10 - 13:30 Role of the HCP in the vaccination process and the importance of communication
Brett Craig
WHO Euro

13:30 - 13:50 Vaccine hesitancy in Europe
Pierre Van Damme & Greet Hendrickx
University of Antwerp

13:50 - 14:10 How to improve health literacy
University of Antwerp & ECDC & WHO

PROGRAM

14:25 - 15:40 **Communication about vaccines** (75min)

- How to communicate about vaccines (45min)
  Topics: inoculation to prevent misinformation, rebuttal and debunking to debunk misinformation, motivational interviewing as a technique to respond in patient-doctor interaction
- Communication exercices (30min)
  e.g. discussion, cases, role-playing

Philipp Schmid
University of Erfurt, JITSUVAX

15:40 - 16:00 **Tips and tricks for teaching** (20min)
Max Willie
EPSA training coordinator

16:00 - 16:15 **Q&A** (15min)

Closing

THANK YOU

ENJOY THE WORKSHOP!

COALITION FOR VACCINATION
by European Healthcare Professionals

IMMUNION

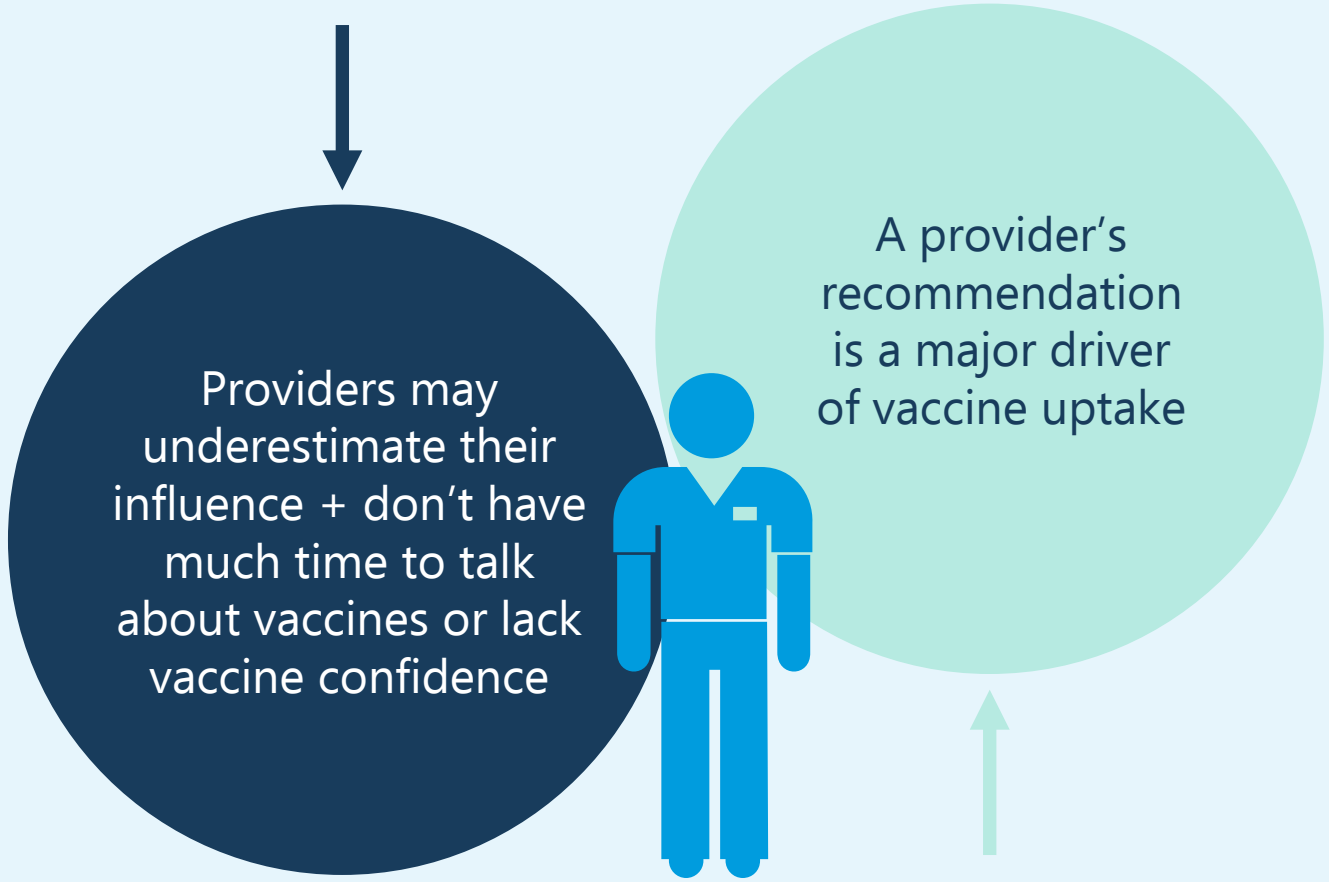
This project is co-funded by the European Union's Health Programme 2014-2020

Role of healthcare providers in the vaccination process

World Health Organization
REGIONAL OFFICE FOR Europe

How do healthcare providers impact vaccine confidence?

- **Most trusted advisors and influencers** of vaccination decisions.
- A provider's strong recommendation is a strong facilitator of vaccination uptake.
- A provider's relationship with individuals supports them in their decision to vaccinate.
- Individuals require consistent and accurate information about vaccine safety and benefits from all their healthcare providers, conveyed in a respectful and positive manner.

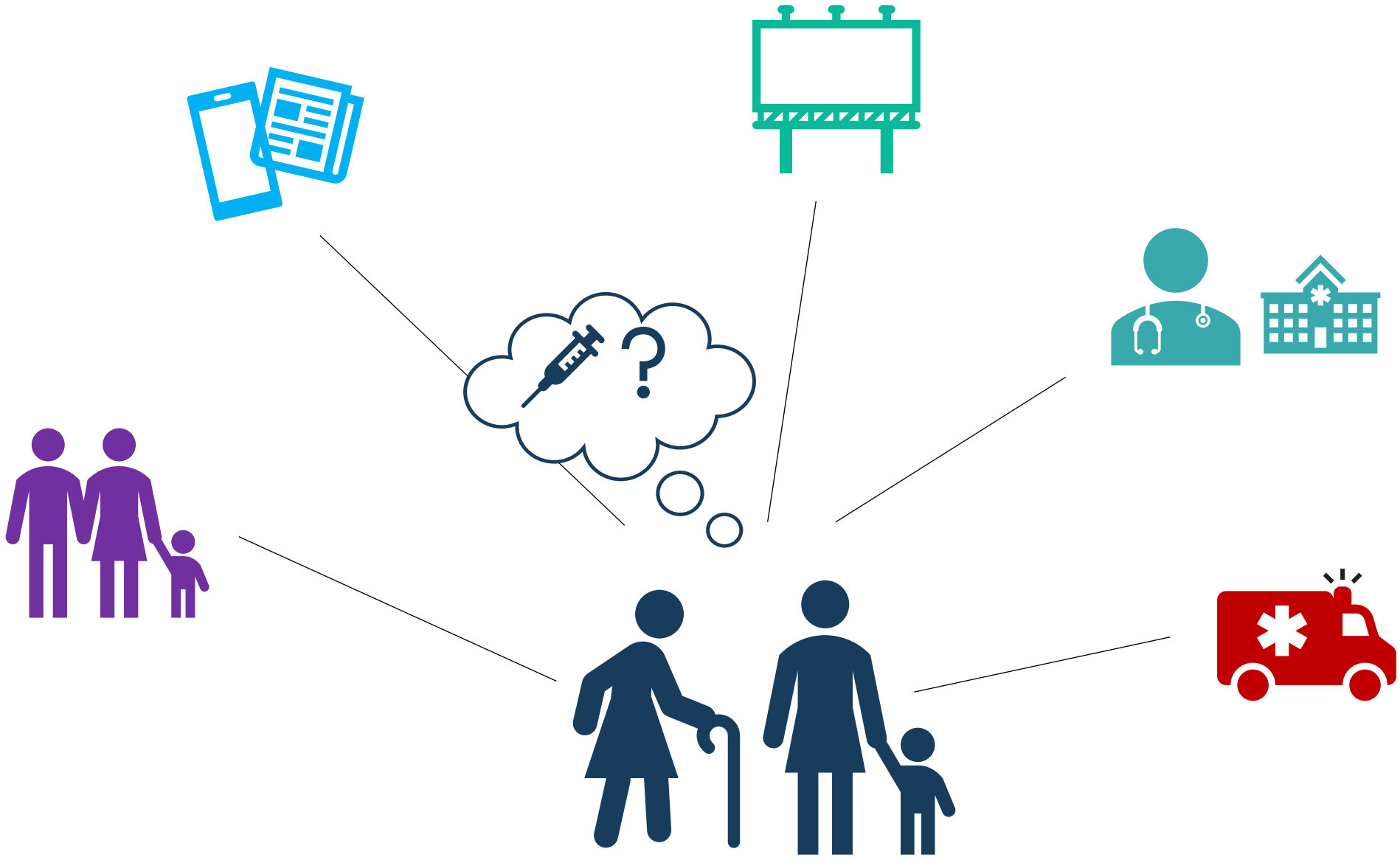


Dubé, E., et al. 2013. Vaccine Hesitancy, An Overview.

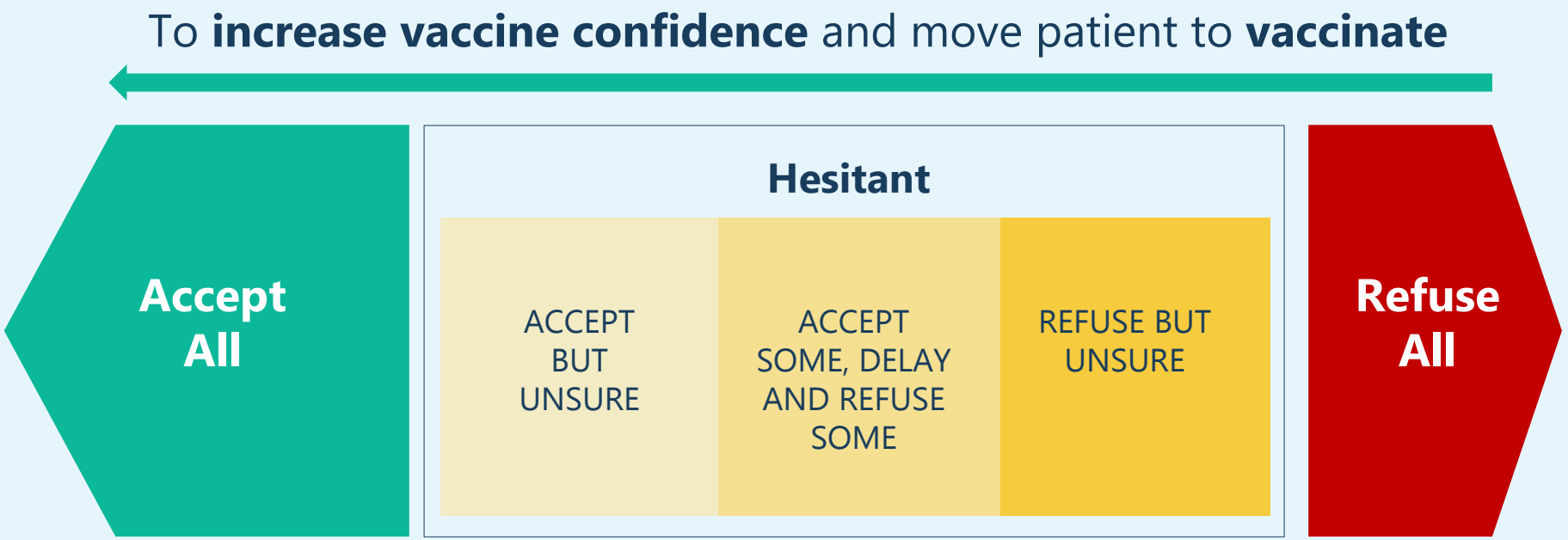
Trust in healthcare providers and COVID-19 vaccination

- Results of behavioural insights survey across the European Region show that **trust in healthcare provider increases intention to vaccinate and likeliness to have been vaccinated**.
- Results of rapid qualitative insights research across the region show also show that people want to hear information about vaccines from healthcare providers because **they want tailored recommendations to their specific health condition as an individual**.
- Consequently, lower levels of trust in healthcare providers is a driver of low vaccination intention and of being unvaccinated.

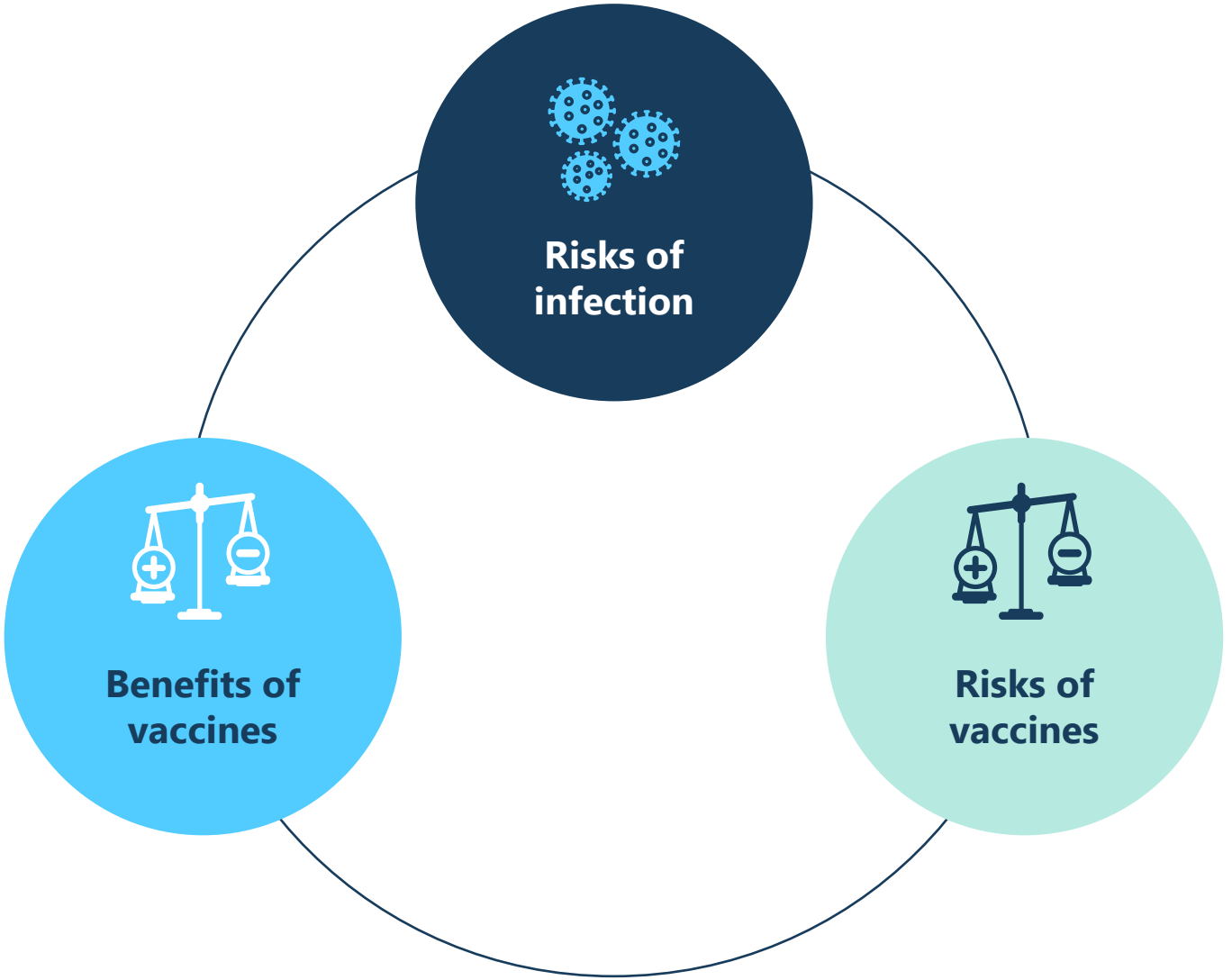
Dubé, E., et al. 2013. Vaccine Hesitancy, An Overview.



The conversation objective



Present the risks & benefits



The role of HWs in communicating risks and benefits

It is essential that the individual:

- understands the risks associated with contracting vaccine-preventable diseases;
- understands the benefits and risks associated with vaccines;
- knows where to find accurate, trustworthy and clear information about these.

The general rule:

- If people **perceive** high levels of **risk of disease,** they will be *more likely to vaccinate;*

- If people **perceive** high levels of **risk of vaccination,** they will become *less likely to vaccinate.*

The HWs' role:

- Help caregivers make an informed decision

WHO. 2017. Vaccination and trust; Lewandowsky, S., et al. 2021. The COVID-19 Vaccine Communication Handbook

Principles of communicating risks and benefits

World Health Organization
REGIONAL OFFICE FOR Europe

Communicate current knowledge

- Consider what your patient already knows.
- Use varied information formats tailored to educational levels and languages.
- Provide guidance on how to assess website reliability and provide a list of reliable ones.

Your professional opinion matters

- Your strong recommendation to get vaccinated has been shown to increase uptake.
- Use statements such as, "I believe this vaccine will protect your daughter".
- Remember: A trusted Health Worker is proven to be essential in the decision-making process.

Respect differences of opinion about vaccination

- Some parents will express reluctance or refusal to accept the vaccine for their child.
- Ask permission to explore underlying reasons without being judgmental.

Represent risks and benefits of vaccines fairly and openly

Contrast known versus theoretical risks of the vaccine with known risks associated with HPV.

Adopt a patient-centred approach

- Effective decision-making is best done in a partnership between the health worker, parent and adolescent.
- Individuals have input into the decision to vaccinate and retain responsibility for the health of their children.

Present clear, concise evidence-based messages

- Encourage questions, address misinformation, and provide credible and appropriate resources, for those who want more information.
- Respond to specific concerns avoiding lengthy discussions.
- Reaffirm your conviction that the vaccine is important to protect against cancers and other diseases caused by HPV.

Adapted from the Public Health Agency of Canada. 2008. Immunization competencies for health professionals

Vaccine Confidence in Europe.

Prof dr Pierre Van Damme & Greet Hendrickx,

Centre for the Evaluation of Vaccination, University of Antwerp

Content

- **Vaccine hesitancy (definition)**
- **Vaccine hesitancy**
  - Global
  - Europe
  - Impact of COVID
  - Volatility of vaccine confidence
  - Impact of misinformation
- **Encourage vaccine uptake**
  - Role HCP
  - Information – Courses

Definition Vaccine hesitancy

- The SAGE Working Group on Vaccine Hesitancy concluded **that** ***hesitancy refers to delay in acceptance or refusal of vaccination despite availability of vaccination services.*** *Vaccine hesitancy is complex and context specific, varying across time, place and vaccines. It is influenced by factors such as complacency, convenience and confidence.*

Vaccine 33 (2015) 4161–4164

Contents lists available at ScienceDirect

Vaccine

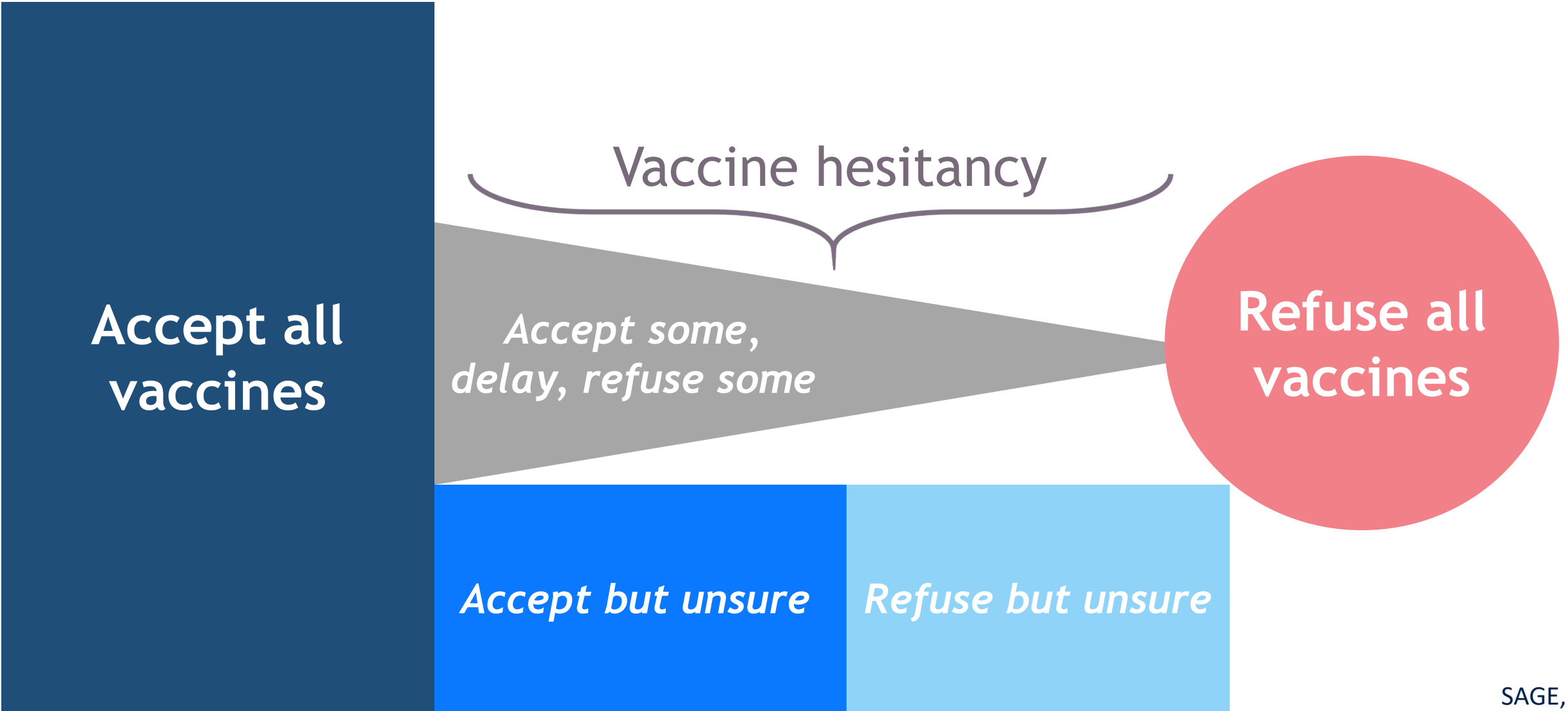
journal homepage: www.elsevier.com/locate/vaccine

Vaccine hesitancy: Definition, scope and determinants

Noni E. MacDonald*,[1], the SAGE Working Group on Vaccine Hesitancy[1]

Department of Paediatrics, Dalhousie University, Canadian Centre for Vaccinology, IWK Health Centre, Halifax, Canada

The vaccine hesitancy continuum



SAGE, 2014

Determinants of vaccine hesitancy (WHO SAGE, 2014)

Vaccine & vaccination specific issues

- Scientific risk/benefit
- Vaccination schedule
- Mode administration or delivery
- Introduction new vaccine
- Vaccine supply
- Healthcare professionals
- Costs
- Tailoring vaccines

Individual & social group influences

- Perceived risk/benefit
- Social norm, individual need
- Beliefs, attitudes and motivations about health
- Knowledge, awareness
- Trust in health system or provider
- Experience with past vaccination

Contextual influences

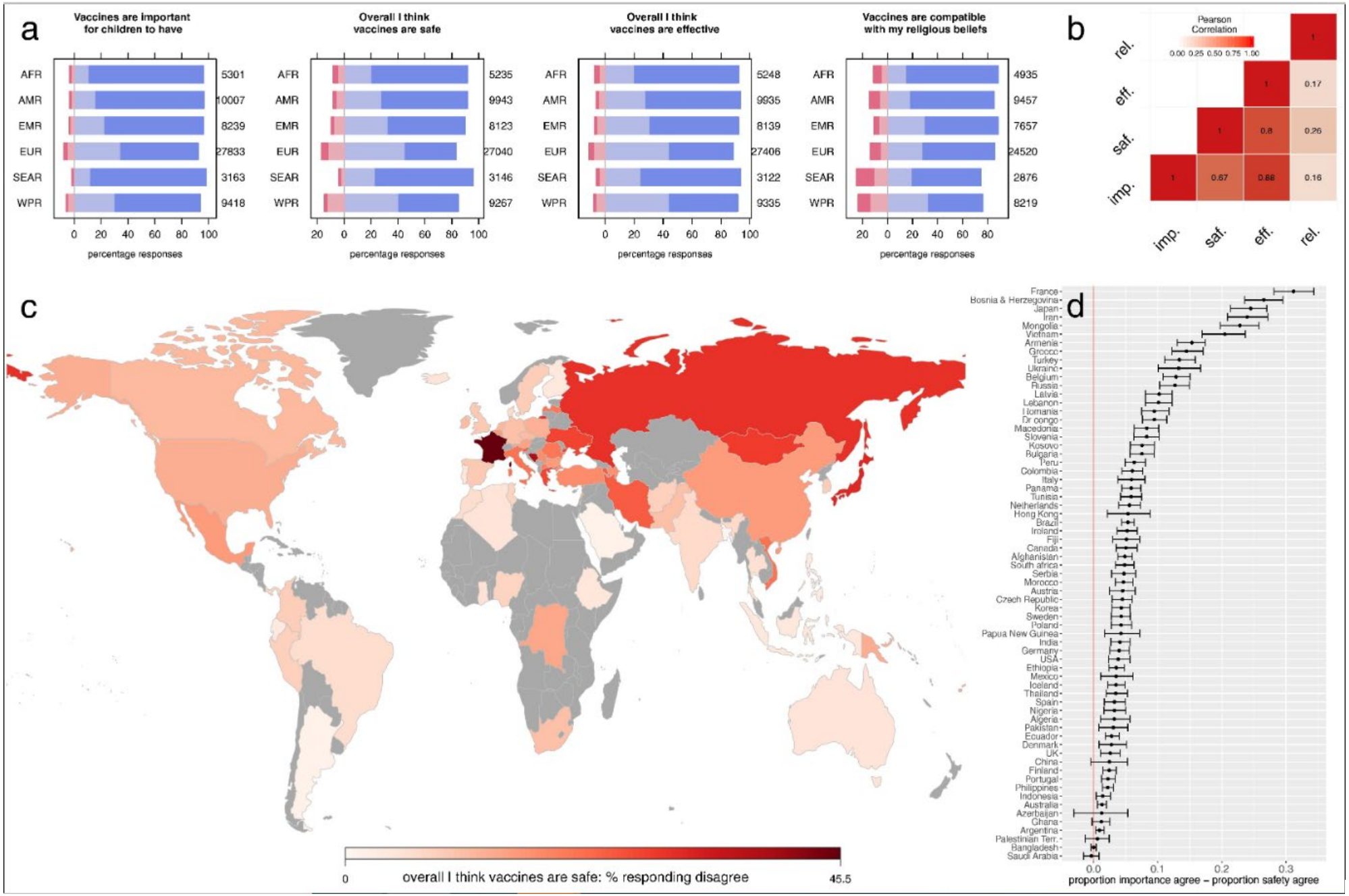
- Influential individuals or leaders
- Politics, policies (mandates)
- Religion, culture
- Socio-economics
- Communication and media
- Pharmaceutical industry
- Historical influences
- Geographic barriers

History
Vaccine hesitancy is not new

Is not a European issue but a Global

University of Antwerp

2016



University of Antwerp

Heidi J. Larson et al: The state of vaccine confidence 2016: Global Insights Through a 67 country survey

VACCINE CONFIDENCE PROJECT™

2018

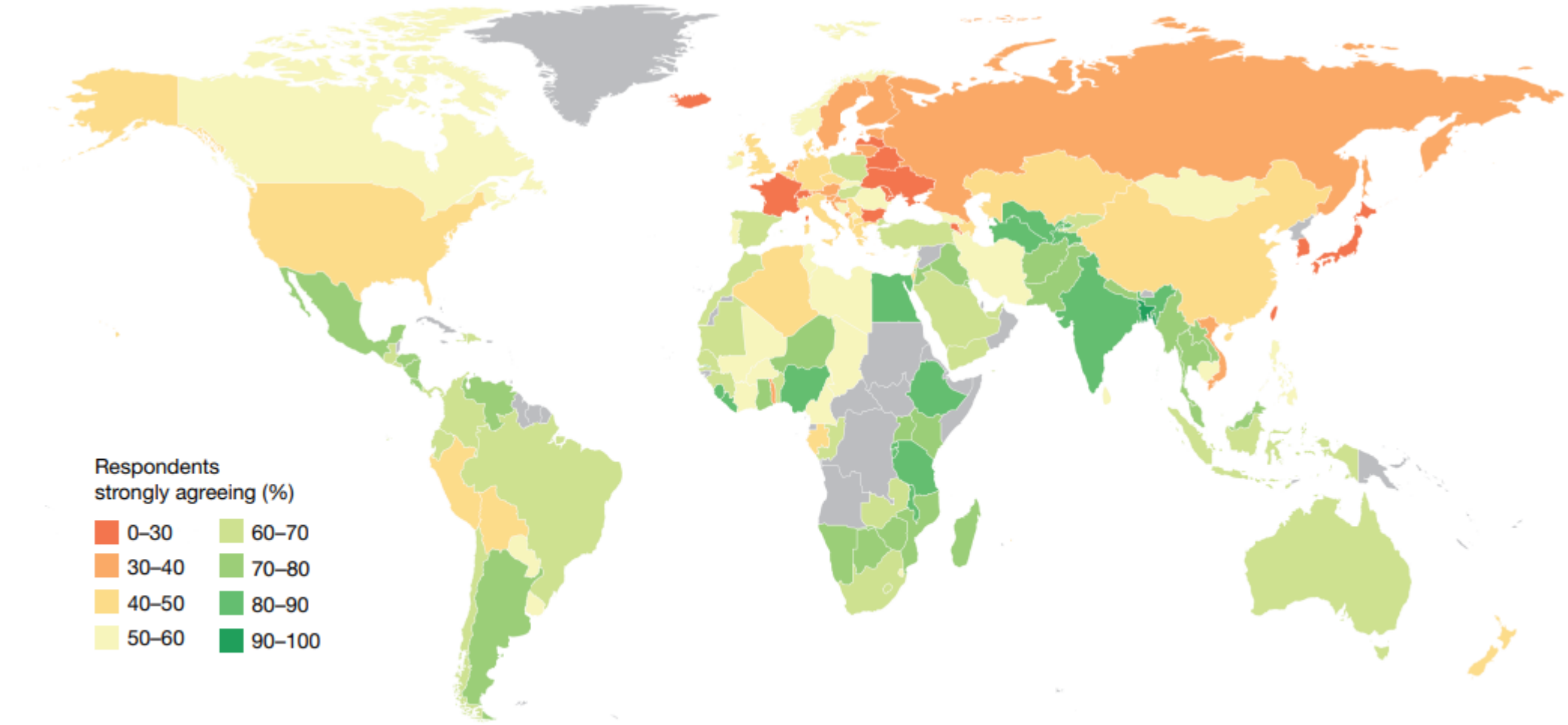
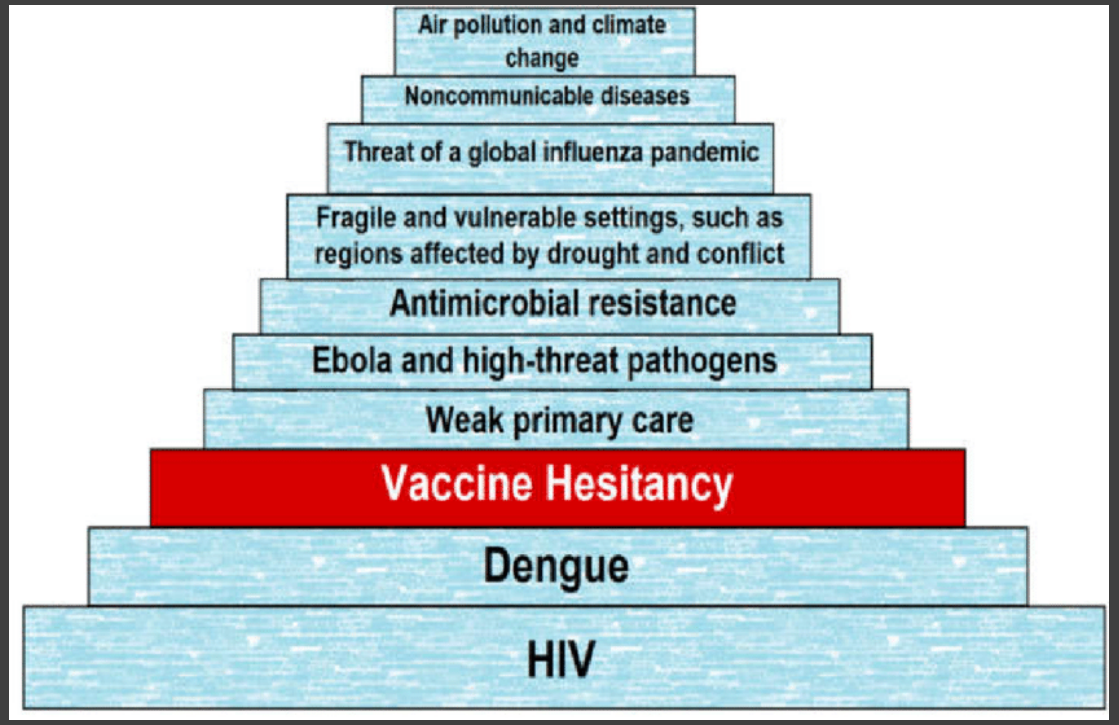


Fig. 2 | Global confidence in vaccine safety in 2018. Levels of confidence in vaccine safety varied considerably across countries and regions, with several countries showing very low levels of confidence. The colour chart at the bottom shows increasing levels of confidence. Note that the question asked in the survey was 'Do you agree with the following statement: vaccines are safe?'. Source: ref. [99]. Map credit: Alexandre De Figueiredo, The Vaccine Confidence Project.

World Health Organization

Vaccine Hesitancy 1 of Top10 Global Health threats



Vaccine confidence is not only about vaccines

Journal of Public Health | pp. 1–11 | doi:10.1093/pubmed/fdab122

Correlates of COVID-19 vaccine hesitancy in Austria: trust and the government

Eva Schernhammer[1,2,3], Jakob Weitzer[1], Manfred D. Laubichler[2,4,5], Brenda M. Birmann[3], Martin Bertau[6], Lukas Zenk[7], Guido Caniglia[8], Carlo C. Jäger[9], Gerald Steiner[2,6]

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[4]School of Complex Adaptive Systems, Arizona State University, Tempe, AZ 85287, USA
[5]Santa Fe Institute, Santa Fe, NM 87501, USA
[6]Institute for Technical Chemistry, TU Bergakademie Freiberg, 09599 Freiberg, Germany
[7]Department for Knowledge and Communication Management, Danube University Krems, 3500 Krems and der Donau, Austria
[8]Konrado Lorenz Institute for Evolution and Cognition Research, 3400 Klosterneuburg, Austria
[9]Global Climate Forum, 10178 Berlin, Germany
Address correspondence to Gerald Steiner, E-mail: gerald.steiner@donau-uni.ac.at

ABSTRACT

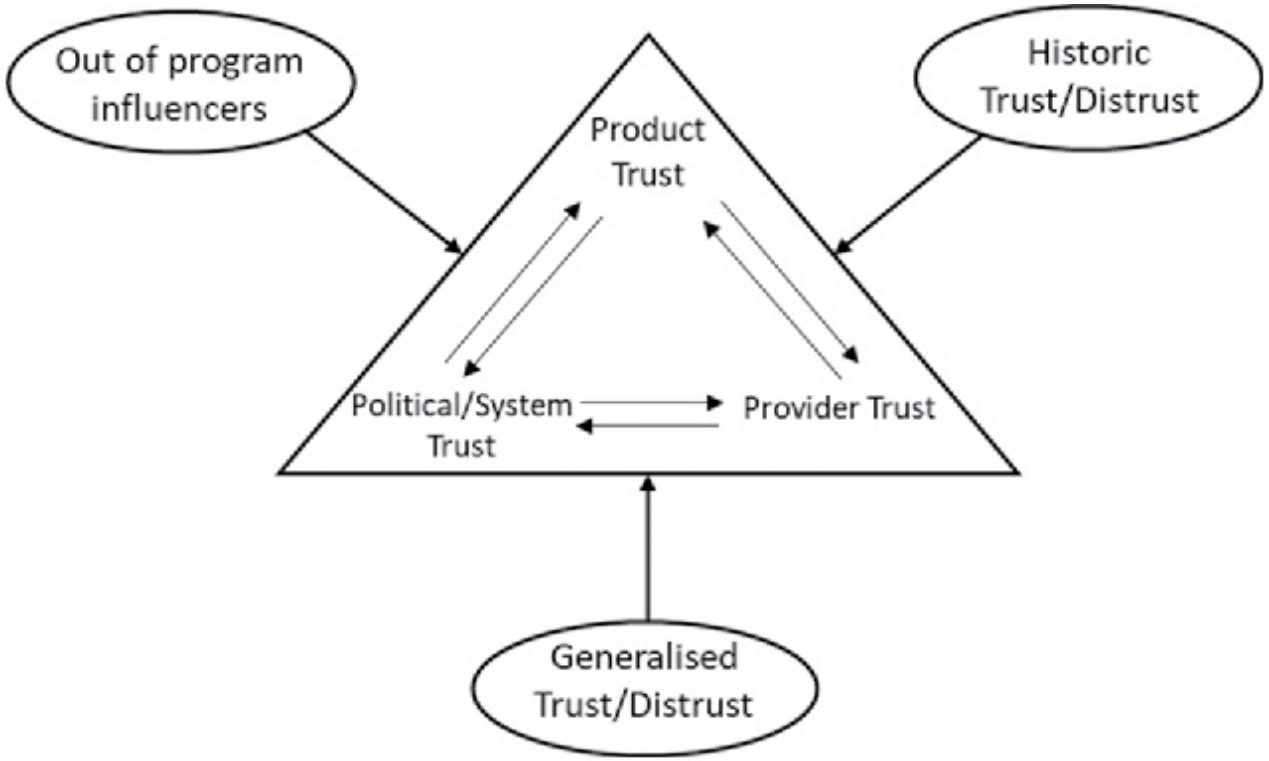
Background With the coronavirus disease 2019 (COVID-19) pandemic surging and new mutations evolving, trust in vaccines is essential.

Methods We explored correlates of vaccine hesitancy, considering political believes and psychosocial concepts, conducting a non-probability quota-sampled online survey with 1007 Austrians.

Results We identified several important correlates of vaccine hesitancy, ranging from demographics to complex factors such as voting behavior or trust in the government. Among those with hesitancy towards a COVID-19 vaccine, having voted for opposition parties (opp) or not voted (novote) were (95% Confidence Intervall (CI)opp, 1.44–2.95) to 2.25-times (95%CI_{novote}, 1.53–3.30) that of having voted for governing parties. Only 46.2% trusted the Austrian government to provide safe vaccines, and 80.7% requested independent scientific evaluations regarding vaccine safety to increase willingness to vaccine.

Conclusions Contrary to expected, psychosocial dimensions were only weakly correlated with vaccine hesitancy. However, the strong

Strong correlation between distrust in the vaccine and distrust in the authorities



Larson HJ, Clarke RM, Jarrett C, Eckersberger E, Levine Z, Schulz WS, Paterson P. Measuring trust in vaccination: A systematic review. Human vaccines & immunotherapeutics. 2018 Jul 3;14(7):1599-609.

The influence of populism

Comparing confidence in vaccination with votes for populist parties

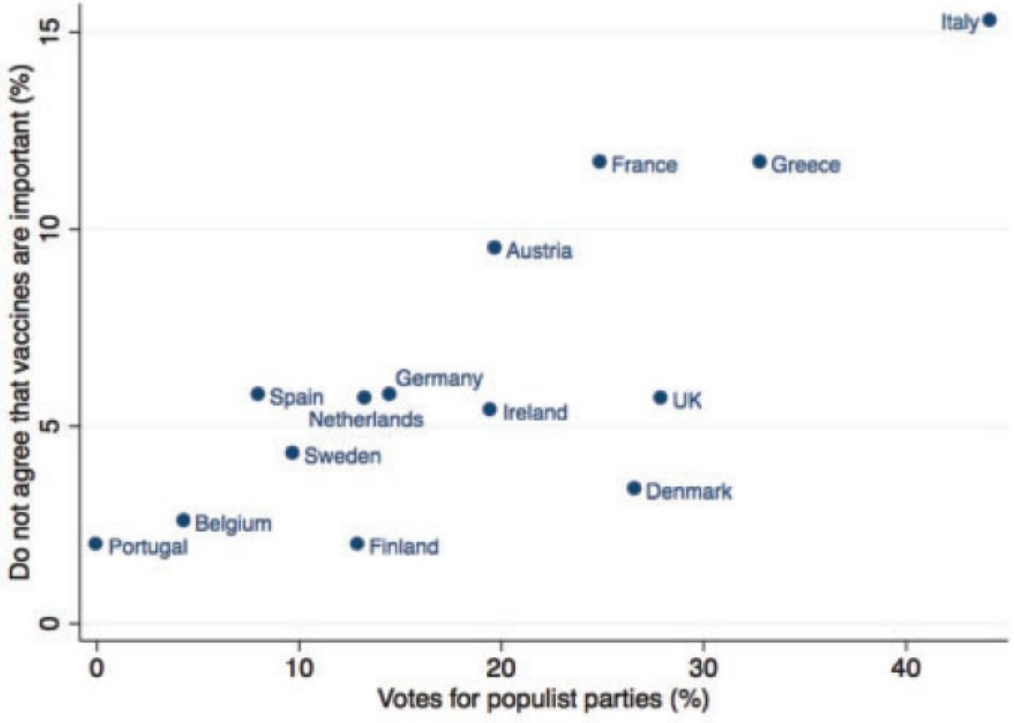
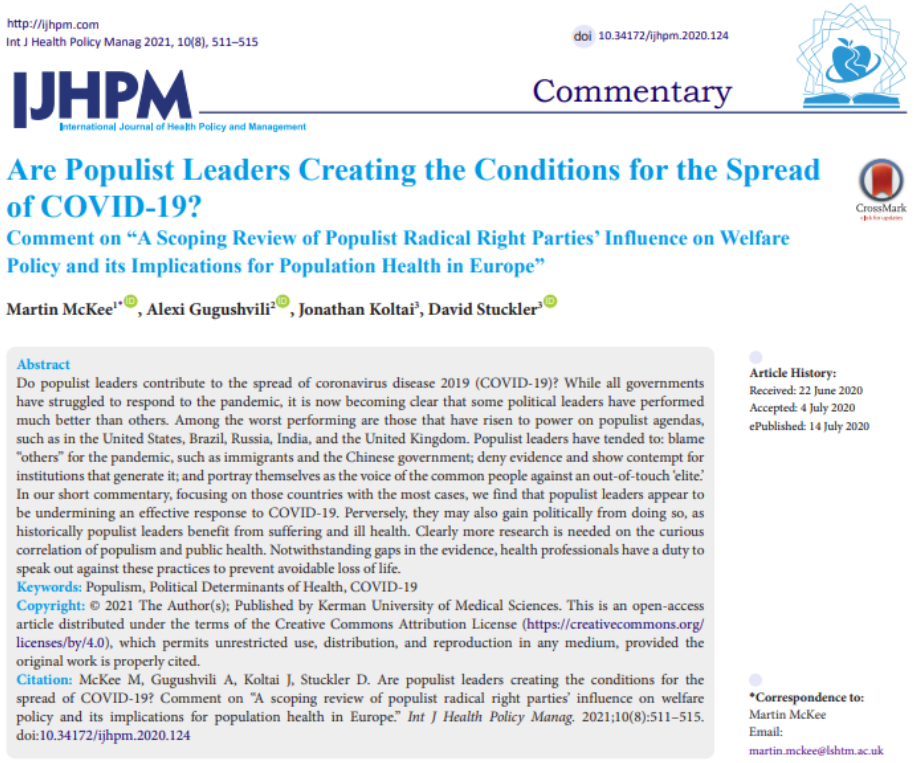


Figure 1 Populist votes and perceived vaccine importance. *Source:* European Parliament and Vaccine Confidence Project. *Notes:* *R*=0.7923, *P*=0.0007

Kennedy J, Populist politics and vaccine hesitancy in Western Europe: an analysis of national-level data, European Journal of Public Health, Volume 29, Issue 3, June 2019, Pages 512–516

What about COVID?

Four common mechanisms used by populist leaders in handling the Covid-19 pandemic: **blaming outsiders and victims**, **contempt for institutions**, **denialism** and **suspicion of elites**



http://ijhpm.com
Int J Health Policy Manag 2021, 10(8), 511–515

doi 10.34172/ijhpm.2020.124

IJHPM International Journal of Health Policy and Management

Commentary

Are Populist Leaders Creating the Conditions for the Spread of COVID-19?

Comment on "A Scoping Review of Populist Radical Right Parties' Influence on Welfare Policy and its Implications for Population Health in Europe"

Martin McKee[1*], Alexi Gugushvili[2], Jonathan Koltai[3], David Stuckler[3]

Abstract
Do populist leaders contribute to the spread of coronavirus disease 2019 (COVID-19)? While all governments have struggled to respond to the pandemic, it is now becoming clear that some political leaders have performed much better than others. Among the worst performing are those that have risen to power on populist agendas, such as in the United States, Brazil, Russia, India, and the United Kingdom. Populist leaders have tended to: blame "others" for the pandemic, such as immigrants and the Chinese government; deny evidence and show contempt for institutions that generate it; and portray themselves as the voice of the common people against an out-of-touch 'elite.' In our short commentary, focusing on those countries with the most cases, we find that populist leaders appear to be undermining an effective response to COVID-19. Perversely, they may also gain politically from doing so, as historically populist leaders benefit from suffering and ill health. Clearly more research is needed on the curious correlation of populism and public health. Notwithstanding gaps in the evidence, health professionals have a duty to speak out against these practices to prevent avoidable loss of life.

Keywords: Populism, Political Determinants of Health, COVID-19

Citation: McKee M, Gugushvili A, Koltai J, Stuckler D. Are populist leaders creating the conditions for the spread of COVID-19? Comment on "A scoping review of populist radical right parties' influence on welfare policy and its implications for population health in Europe." *Int J Health Policy Manag.* 2021;10(8):511–515. doi:10.34172/ijhpm.2020.124

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McKee, A. et al. Are populist leaders creating the conditions for the spread of Covid 19?; Comment on "A scoping review of populist radical right parties' influence on welfare policy and its implications for population health in Europe" Int J Health Policy Manage (2020)

Vaccine Confidence Europe

Europe: one of the region with the lowest confidence in vaccine safety in the world

Overall results

Overall vaccine confidence is positive, though responses differ between countries

European region

Lowest confidence in the safety of vaccines in the world 7/10 countries in the world with lowest confidence levels in Europe, including France, Italy, Greece and Slovenia

Education

Education increases confidence in vaccine importance and effectiveness but not safety

France

Country with the lowest level of confidence in the safety of vaccines

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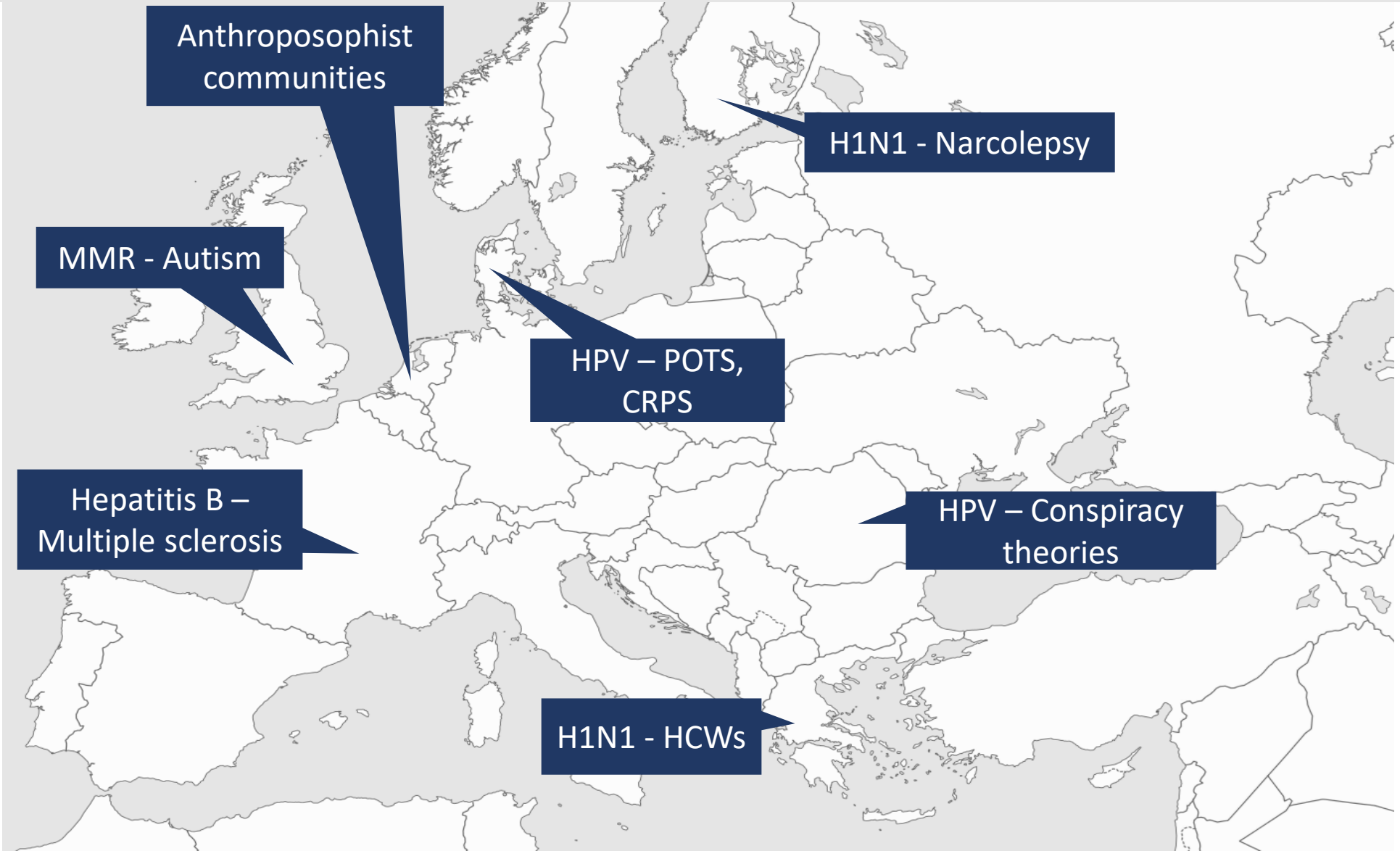
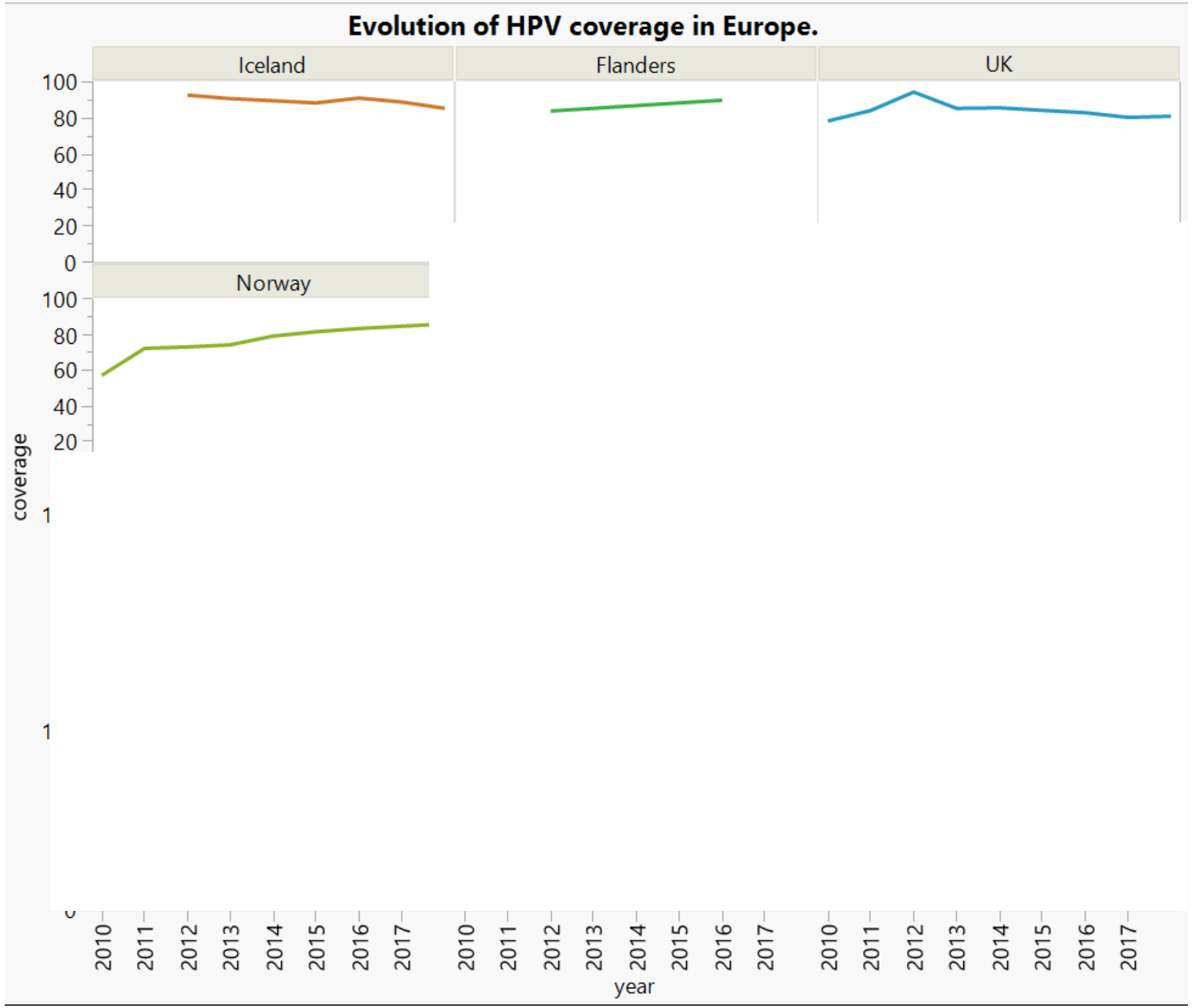
Larson HJ, et al The state of vaccine confidence 2016: global insights through a 67-country survey. EBioMedicine. 2016 Oct 1;12:295-301.

Concerns vary by vaccine, time, context, and country - even within Europe



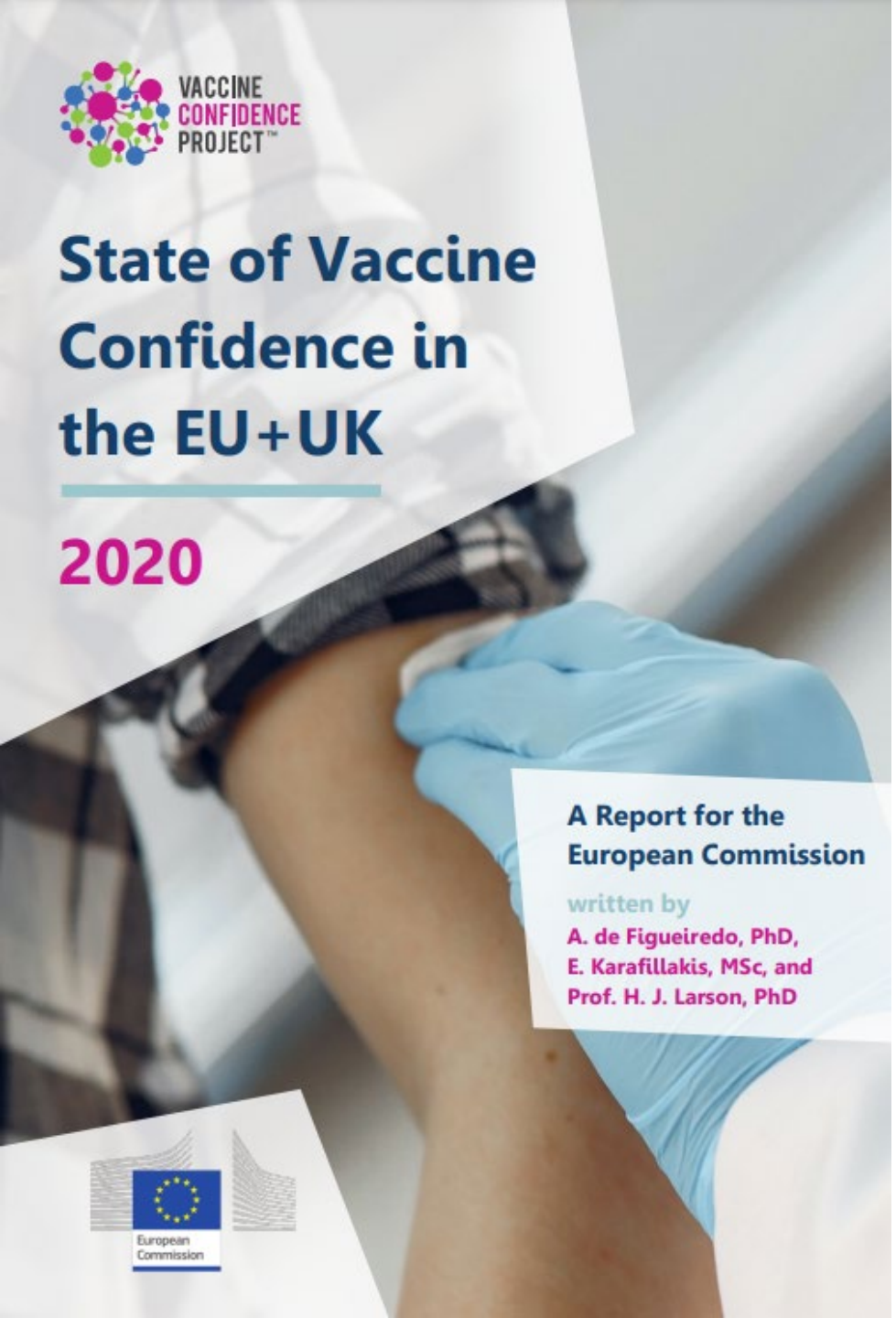
Influence on vaccine coverage HPV example



Coverage based on HPVc F : HPV vaccination program coverage - last dose - females

Only countries were HPVc F coverage data was reported are shown.

Data sources: http://www.who.int/immunization/monitoring_surveillance/data/HPV_estimates.xls accessed 10/2021; Data Flanders based on “Vaccinatiegraad in Vlaanderen 2016” Only data for 2012 and 2016 shown.



EU-wide public confidence in vaccines

- A **large majority** of the EU+UK public believe that vaccines are important, safe, effective, and that the MMR (measles, mumps, rubella), seasonal influenza (flu), and HPV (human papillomavirus) vaccines are important and safe
- Confidence in the safety and importance of vaccines generally, and in the MMR and seasonal influenza vaccine specifically, have **increased since 2018 across the EU+UK** (HPV confidence in 2018 was not measured in 2018 and no assessment in changes in HPV confidence could therefore be made)
- There are substantial **improvements** in perceptions of the importance and safety of the seasonal **influenza vaccine**

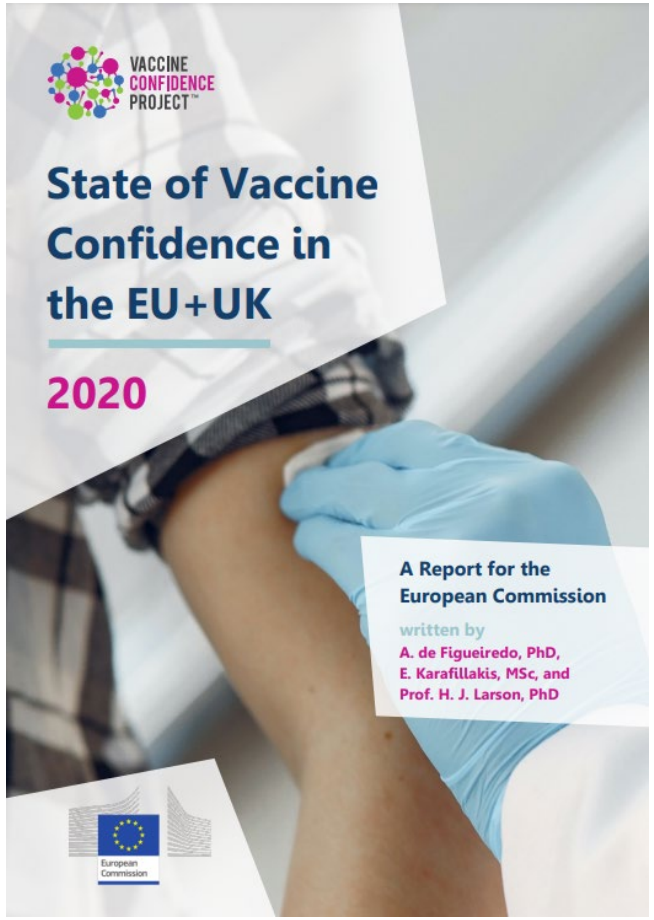
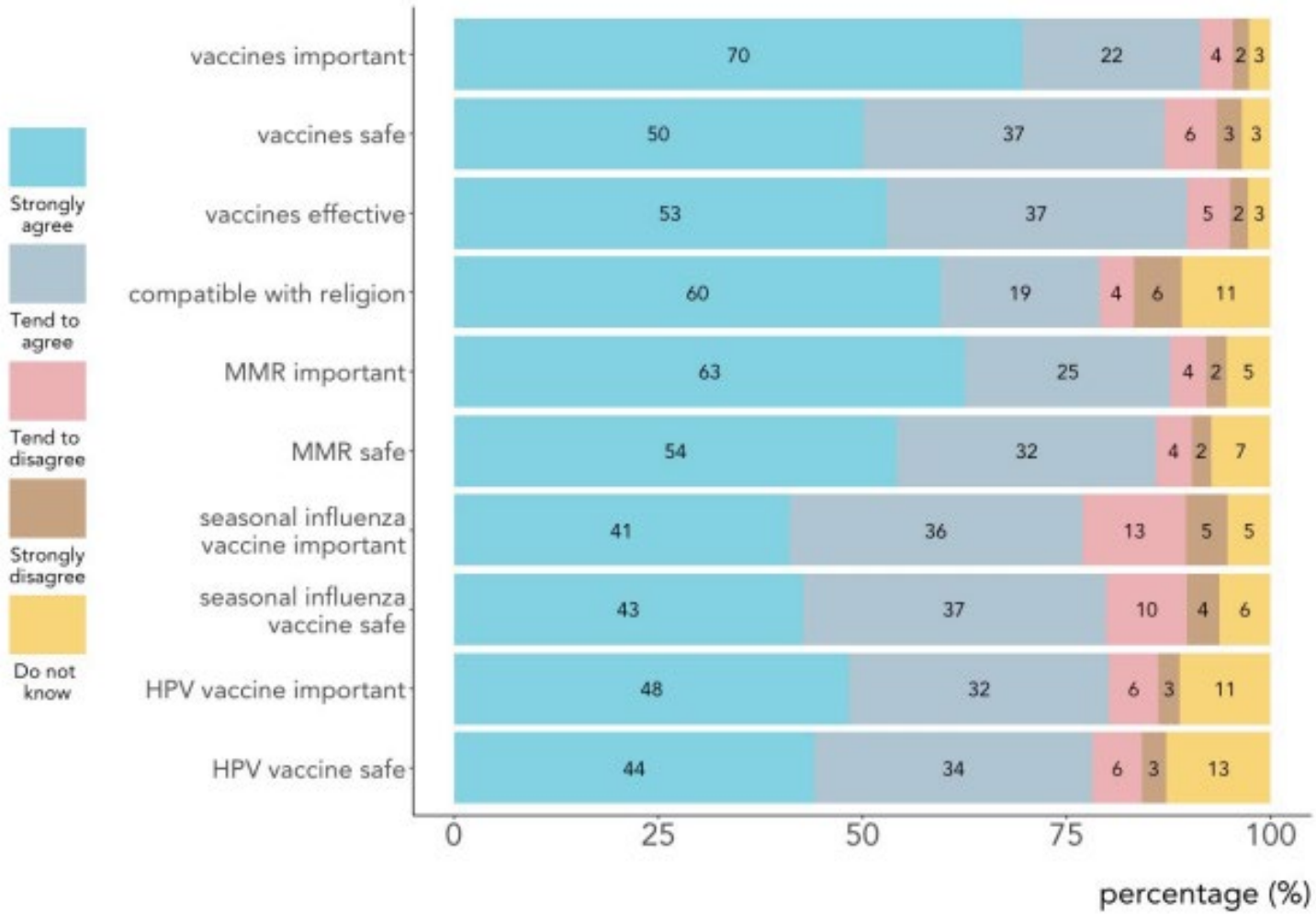


Figure 2.1 Overall public vaccine confidence across the EU+UK in 2020



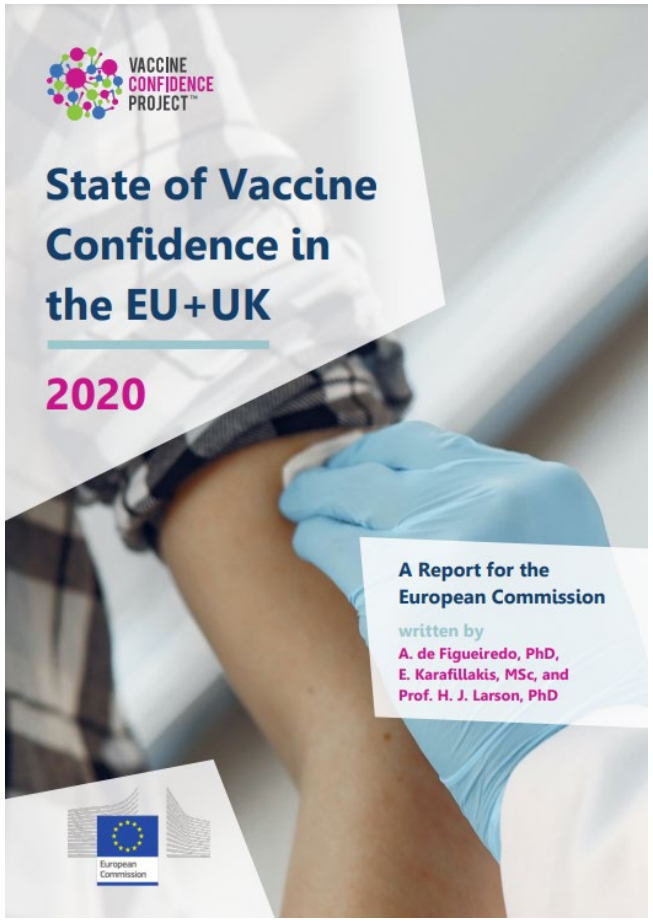
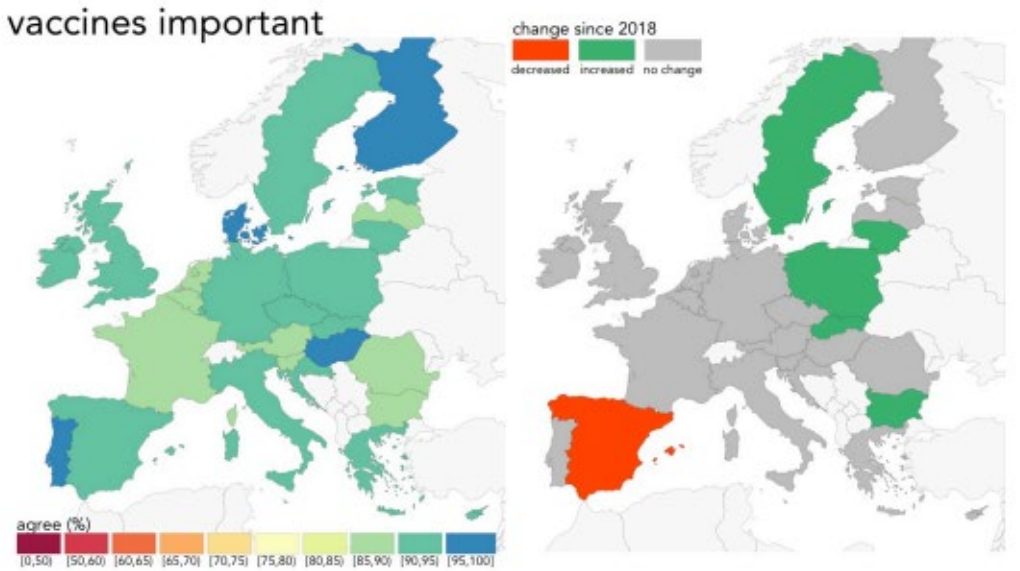
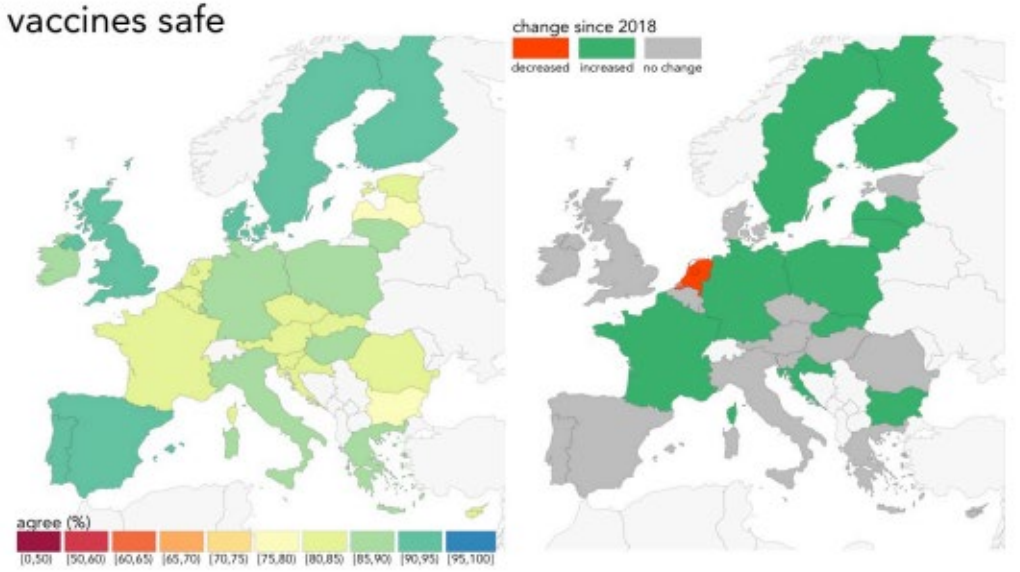


Figure 2.5
Country-level public vaccine confidence in the importance and safety of vaccines in 2020 and change since 2018



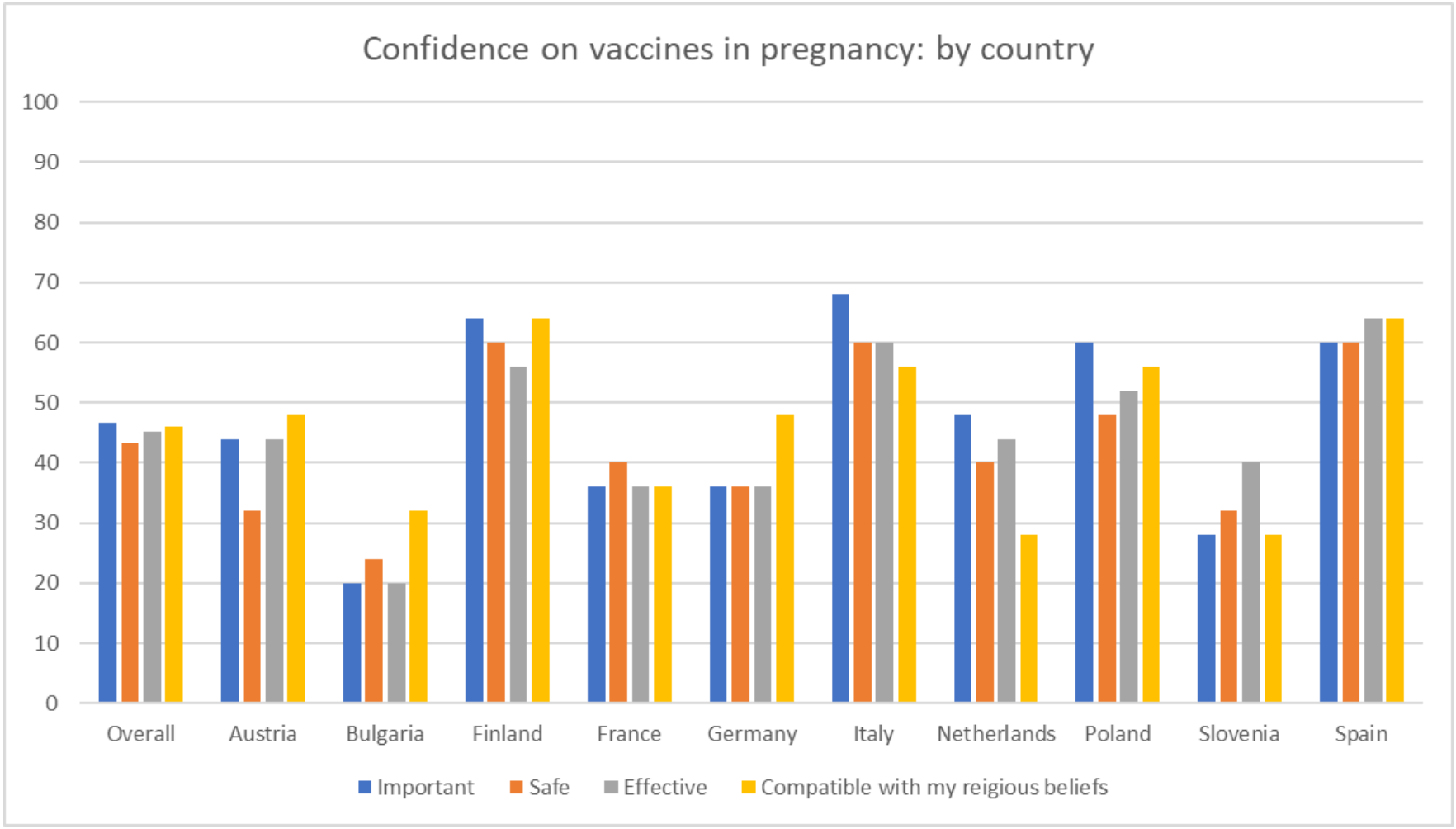


Differences in vaccine confidence by demographics

- Across the EU/UK, **males are found to be more likely than females** to have high confidence in vaccination in 11 countries Austria, Croatia, Czechia, Estonia, France, Greece, Italy, Lithuania, Luxembourg, Romania, and Slovakia.
- Over **65s have higher confidence than younger** groups, with Latvia the only exception
- In 12 countries, individuals with a **university education are more likely to have high vaccine confidence than** those with secondary education. Primary education is associated with lower vaccine confidence in four countries: Finland, Poland, Romania, and the UK
- **Individuals with children** are found to have higher confidence than those without children in Ireland and Slovenia, while those without children are found to have higher confidence in Denmark, Romania, and Sweden
- Differences among **migrant populations** vary by country and type of communities: in some countries, in Sweden for example, Somali communities were found to have lower confidence in vaccination than the general population. In Germany, vaccine uptake is for COVID-19 is lower in migrant communities, yet studies showed conflicting findings regarding their willingness to get vaccinated compared to the general population

European Commission. State of Vaccine Confidence in the EU + UK, 2020

Result of Vaccine confidence in pregnant women



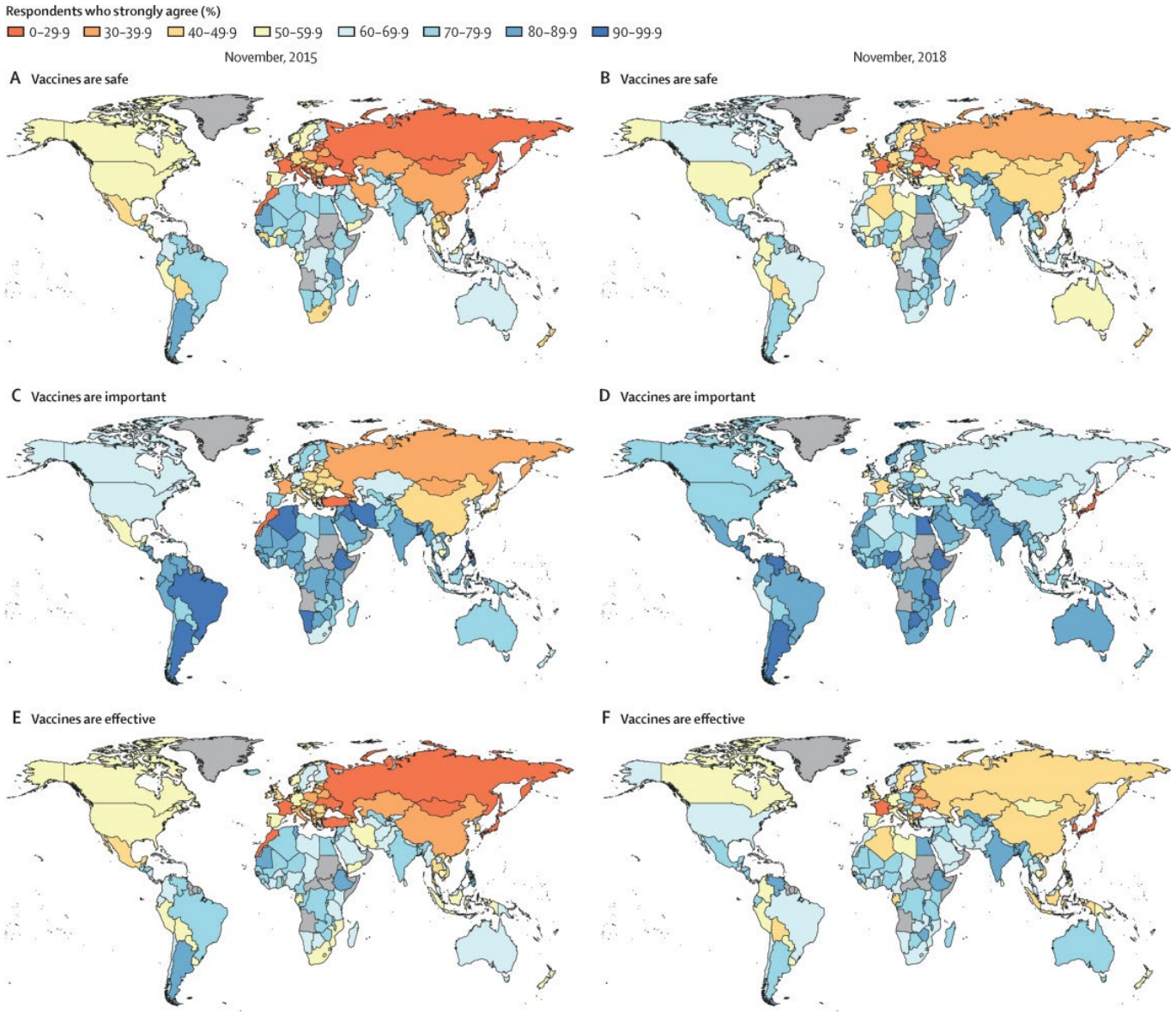
Maertens Kirsten, Larissa - Vaccine Confidence Fund – April 2022 – Not published yet

Volatility of vaccine confidence

The State of Vaccine Confidence in the EU: 2018

Global trend 2015 -2018

- **Global trends in perceptions towards the safety of vaccines in November, 2015, and November, 2018**
- Figure shows model-based estimates of the percentage of respondents strongly agreeing that vaccines are safe (panels A, B), important for children to have (panels C, D), and effective (panels E, F) in November, 2015, and November, 2018. No data were available for countries in grey



de Figueiredo A, et al. Mapping global trends in vaccine confidence and investigating barriers to vaccine uptake: a large-scale retrospective temporal modelling study. Lancet. 2020 Sep 26;396(10255):898-908

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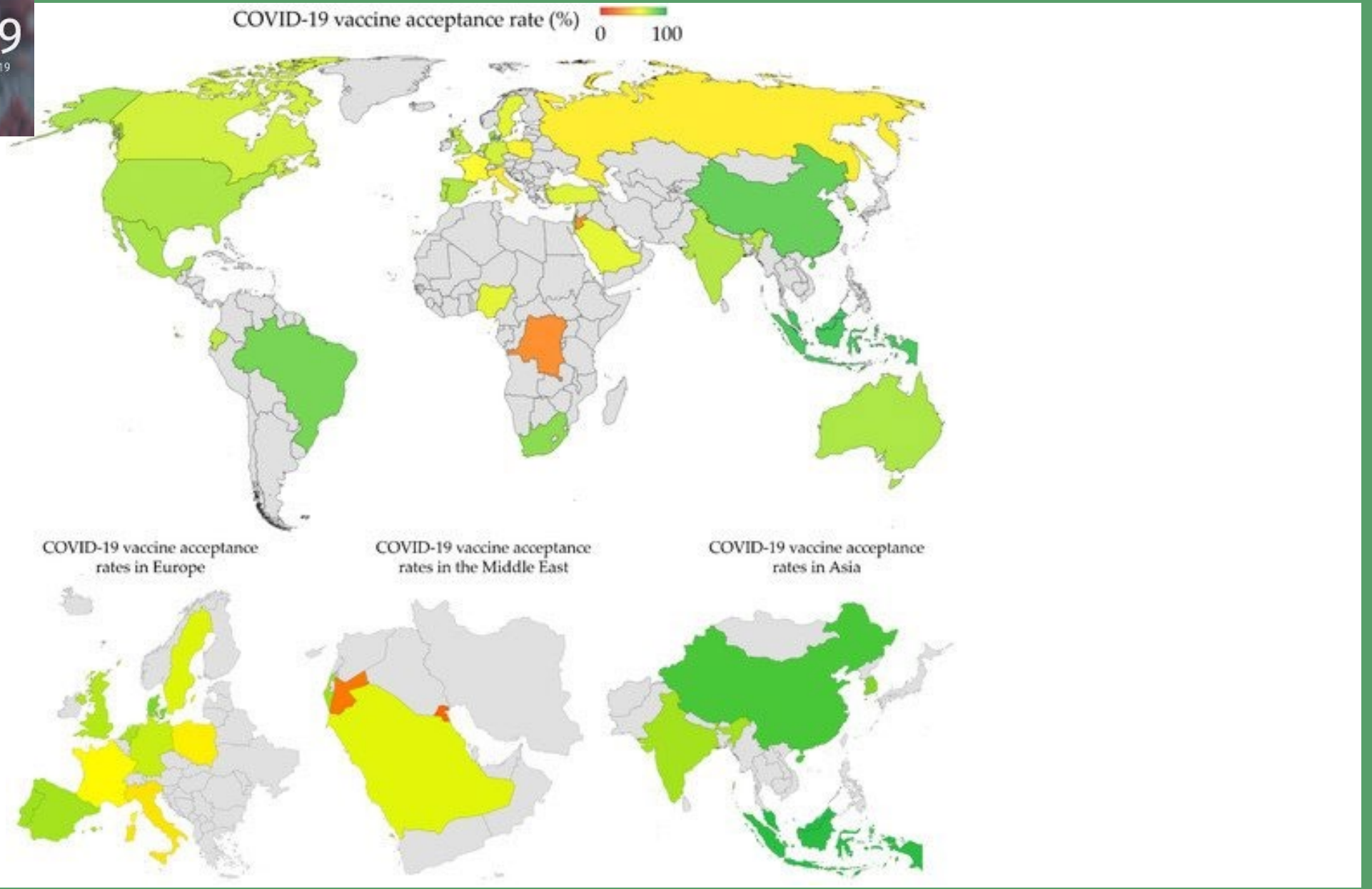
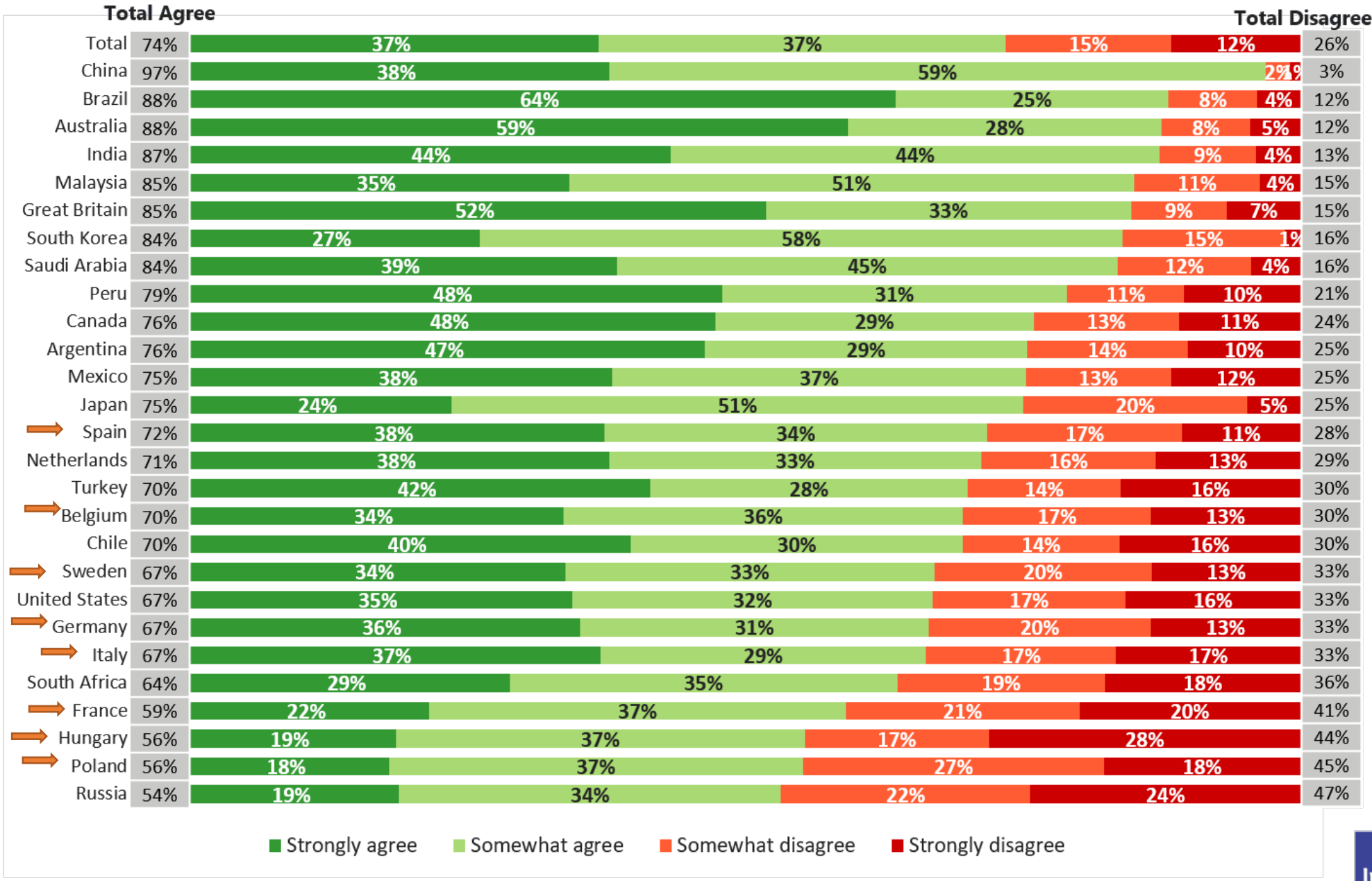


Malik Sallam Vaccines 2021 COVID-19 Vaccine Hesitancy Worldwide: A Concise Systematic Review of Vaccine Acceptance Rates

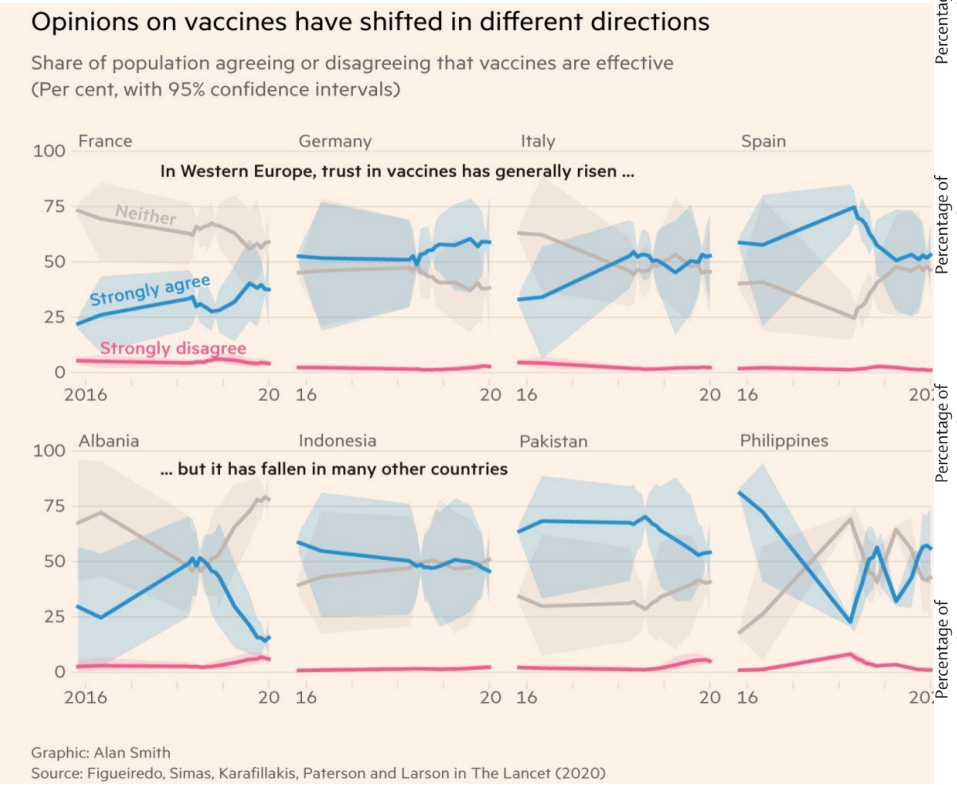
IF A VACCINE FOR COVID-19 WERE AVAILABLE, I WOULD GET IT

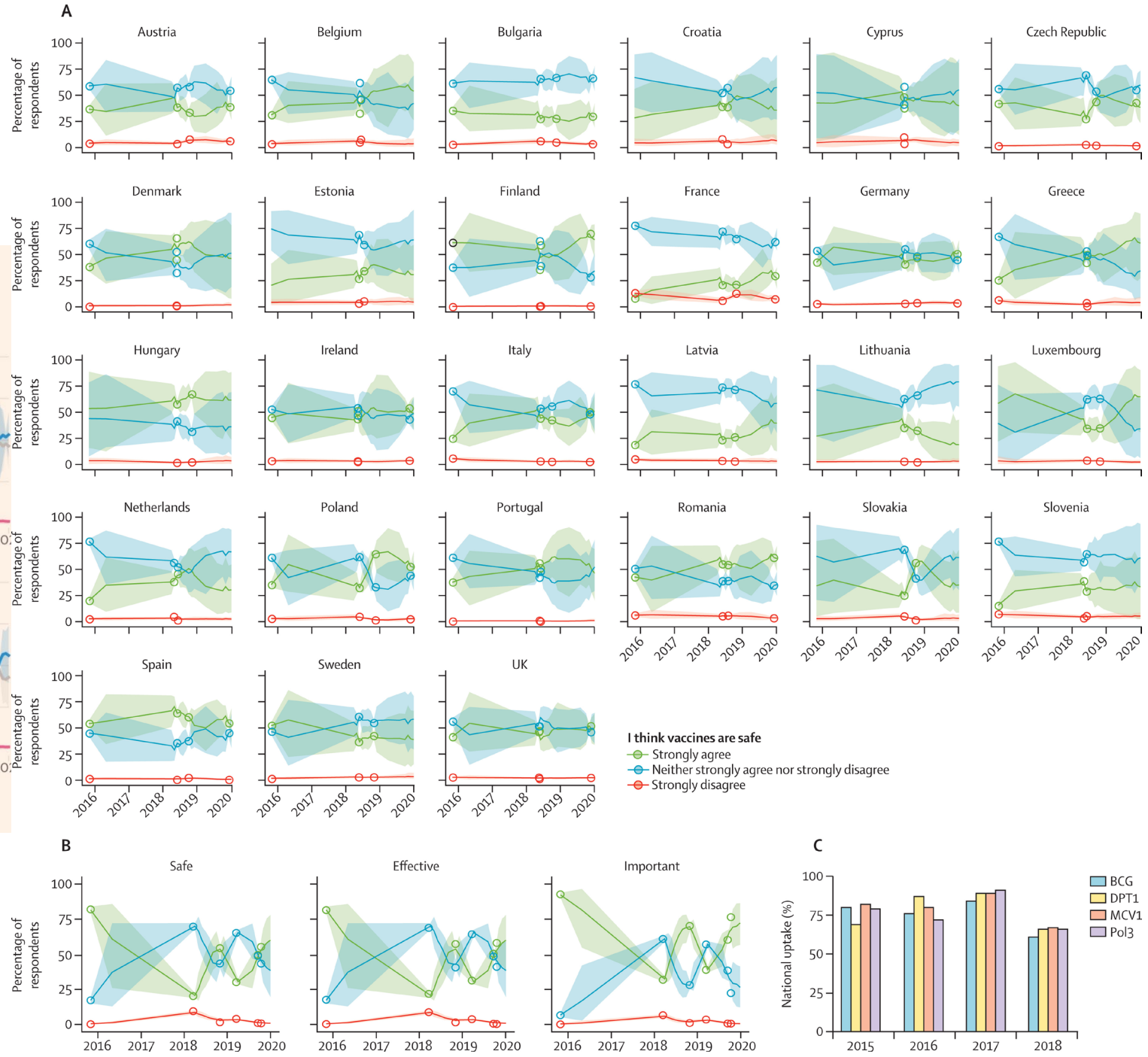


Base: 19,519 online adults aged 16-74 across 27 countries
Source: Ipsos Global Advisor

Sept 2020

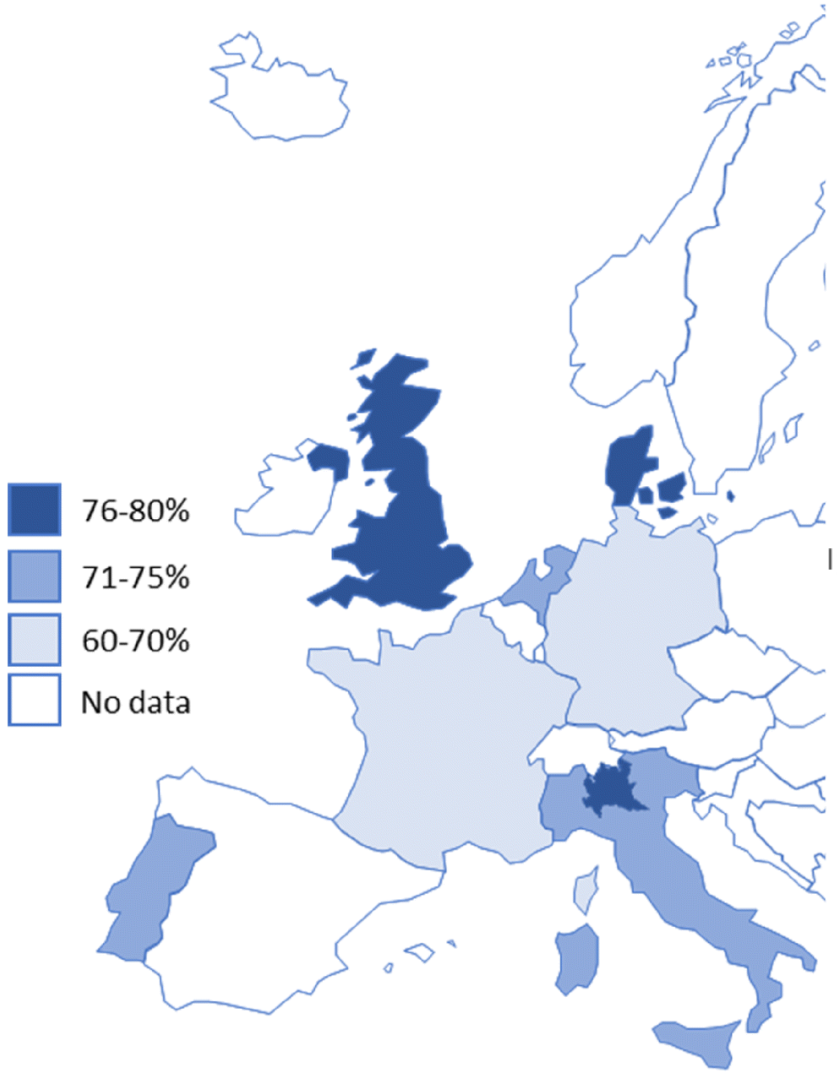
Vaccine confidence changes over time

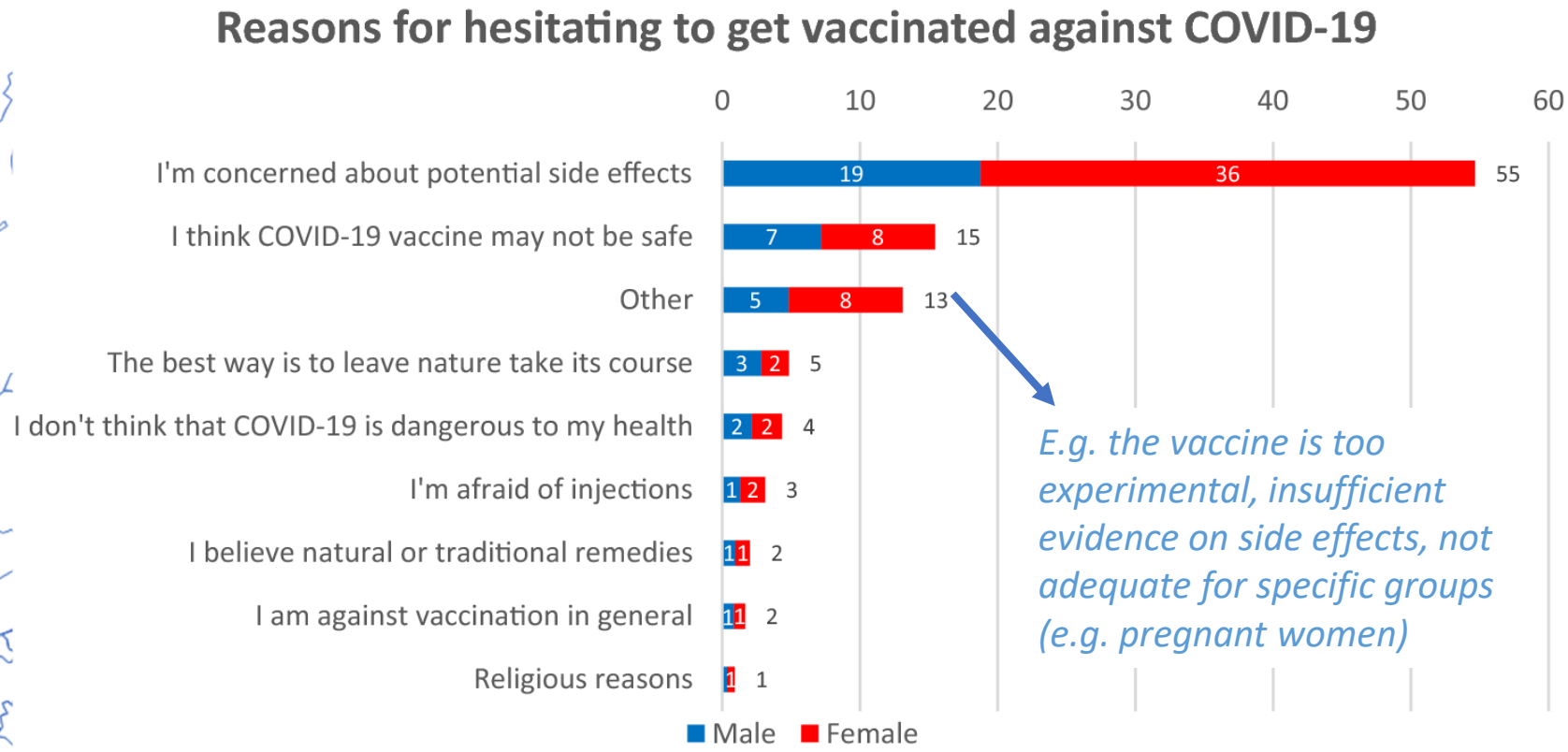




de Figueiredo, Alexandre, et al. "Mapping global trends in vaccine confidence and investigating barriers to vaccine uptake: a large-scale retrospective temporal modelling study." The Lancet (2020).

Willingness to receive a COVID-19 vaccine in Europe





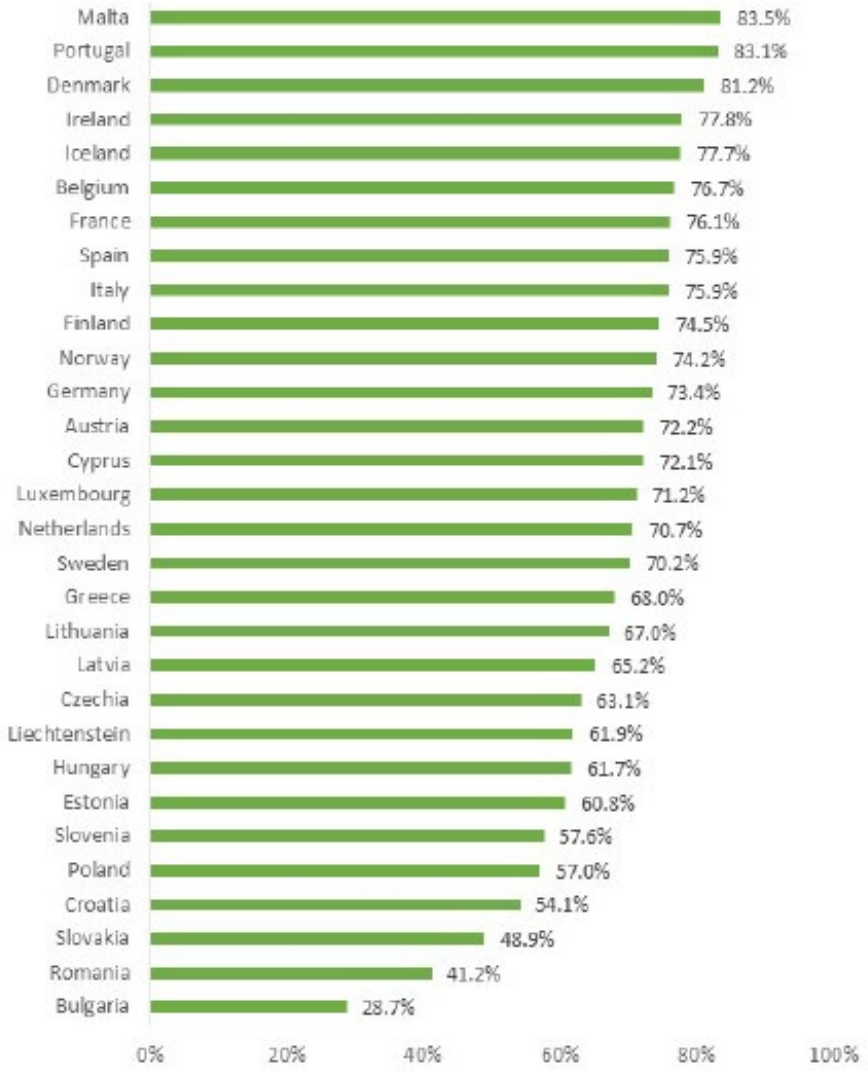
E.g. the vaccine is too experimental, insufficient evidence on side effects, not adequate for specific groups (e.g. pregnant women)

Neumann-Böhme, S., Varghese, N.E., Sabat, I. et al. Once we have it, will we use it? A European survey on willingness to be vaccinated against COVID-19. Eur J Health Econ 21, 977–982 (2020). https://doi.org/10.1007/s10198-020-01208-6

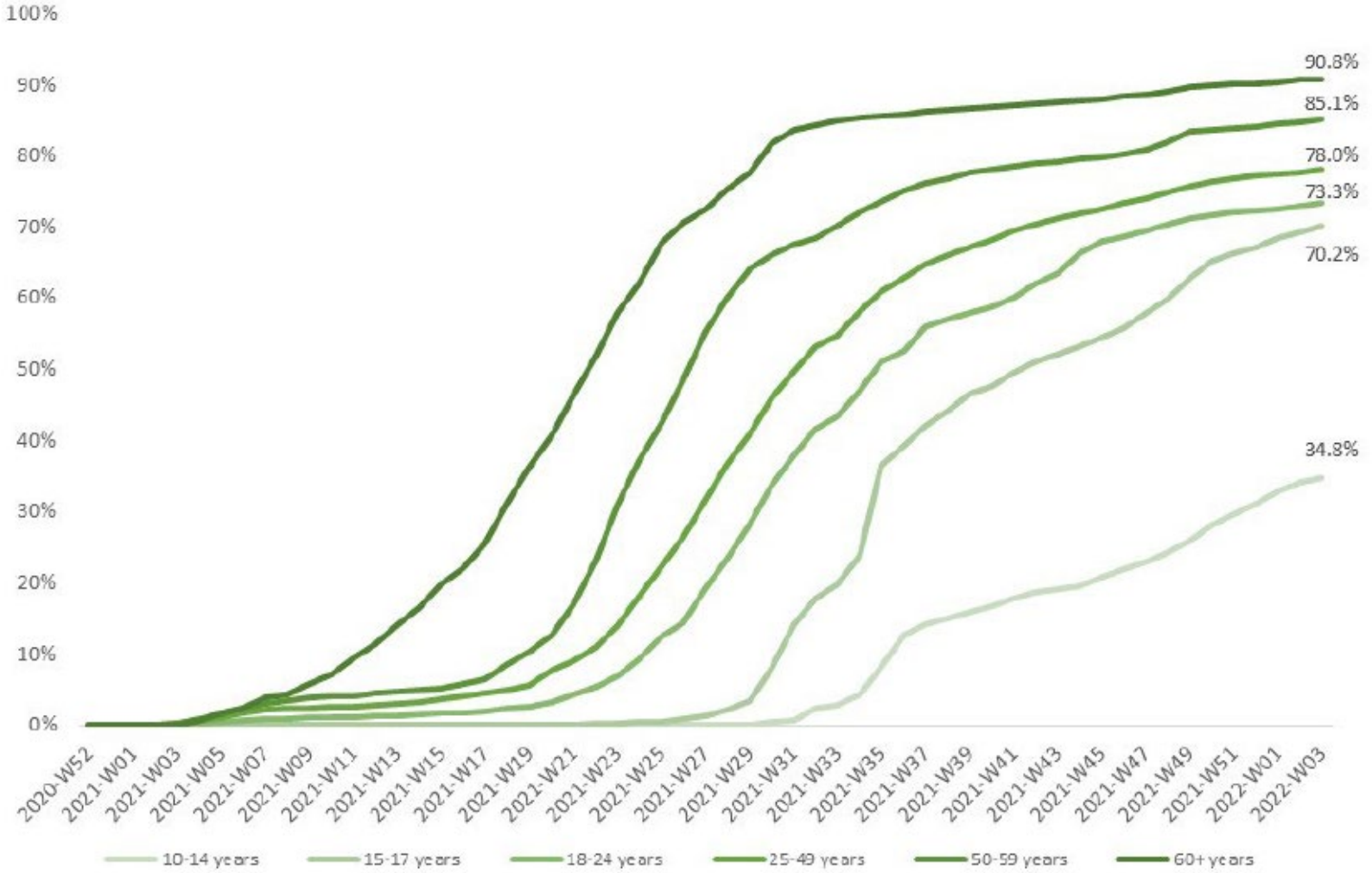
THE VACCINE CONFIDENCE PROJECT

COVID-19 vaccine uptake in Europe (2022)

Uptake of COVID-19 vaccination (primary course), week 3, 2022



Uptake of COVID-19 vaccination (primary course) by age group in EU/EEA countries, week 3, 2022



ECDC. Overview of the implementation of COVID-19 vaccination strategies and deployment plans in the EU/EEA. 31 January 2022. Stockholm: ECDC; 2021.

Impact of misinformation/social media

Example impact of rumours

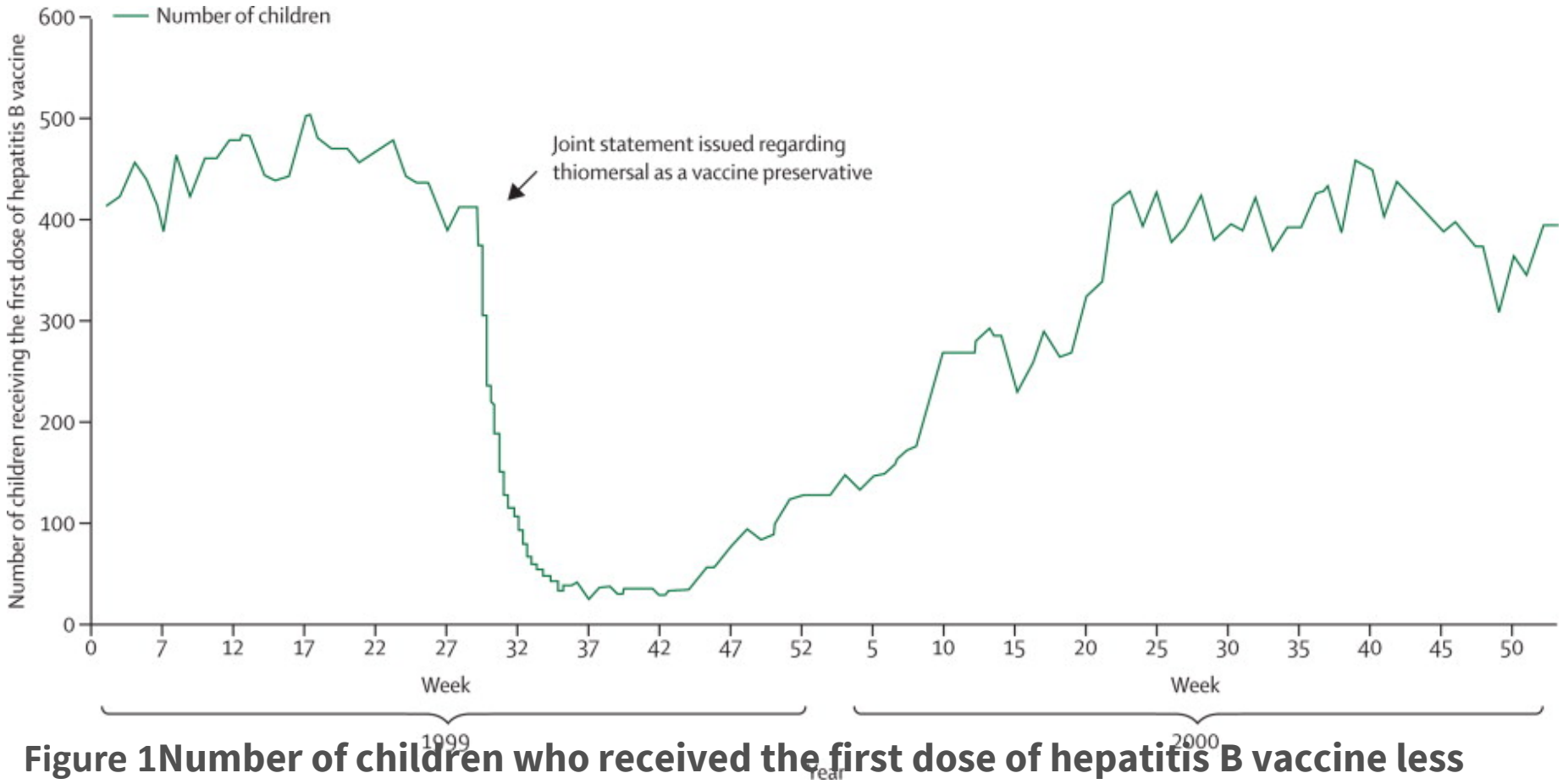


Figure 1Number of children who received the first dose of hepatitis B vaccine less than 5 days after birth (USA, 1999–2000)
Data from the US Centres of Disease Control and Prevention's morbidity and mortality weekly report.

Heidi J. Larson et al: Addressing vaccine confidence gap, June 2021 Lancet

Influence of Social media on vaccine confidence

- The internet, social media—which allows **interactive exchange between many users**—and mobile phone networks have shifted the **methods and speed** of communication substantially, allowing information about vaccines and immunisation to be gathered, analysed, and used—especially through blogs—very differently compared with even a decade ago.
- The **amount** of information available has **increased greatly**, including scientifically valid data and evidence-based recommendations alongside **poor quality data**, **personal opinions**, and misinformation.

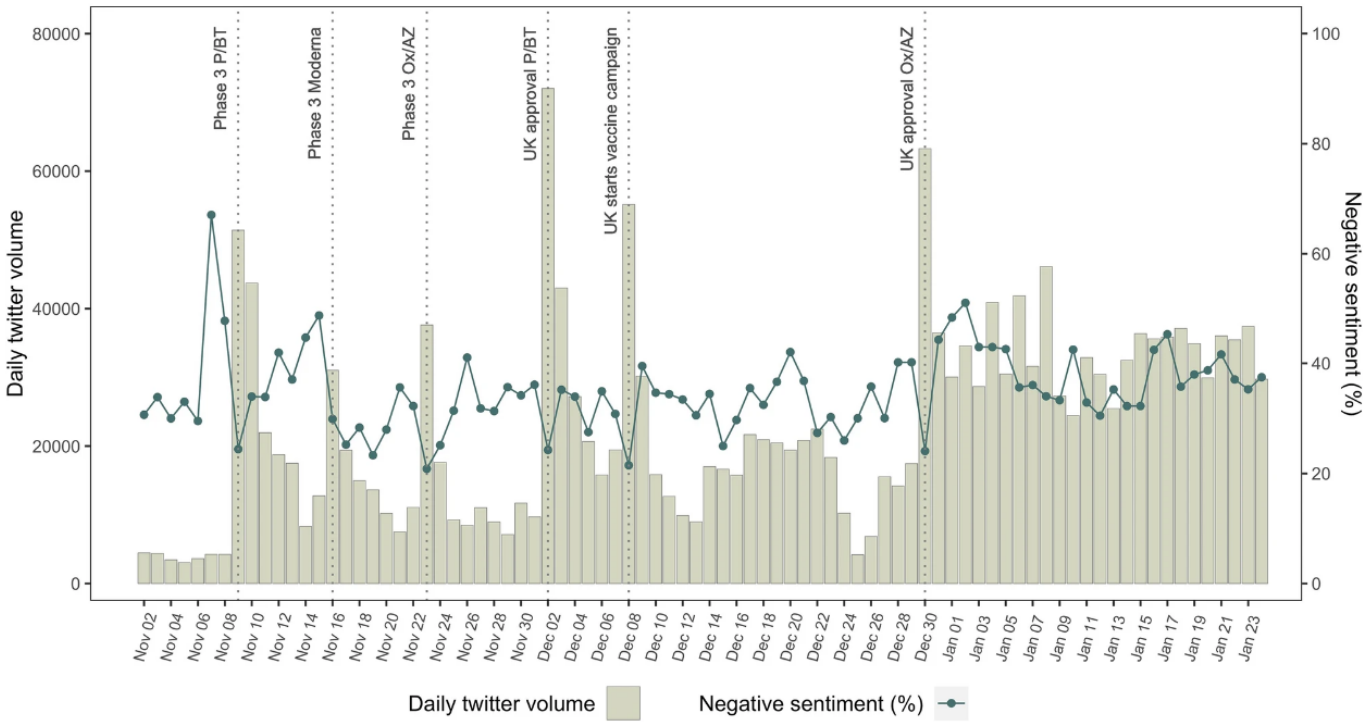
Heidi J. Larson et al: Addressing vaccine confidence gap, June 2021 Lancet

Twitter 2020

April 2020, Twitter reported seeing a COVID-19-related tweet every 45 milliseconds (Pertwee E, Simas C, Larson HJ. An epidemic of uncertainty: rumors, conspiracy theories and vaccine hesitancy. Nat Med. 2022)

Figure 1

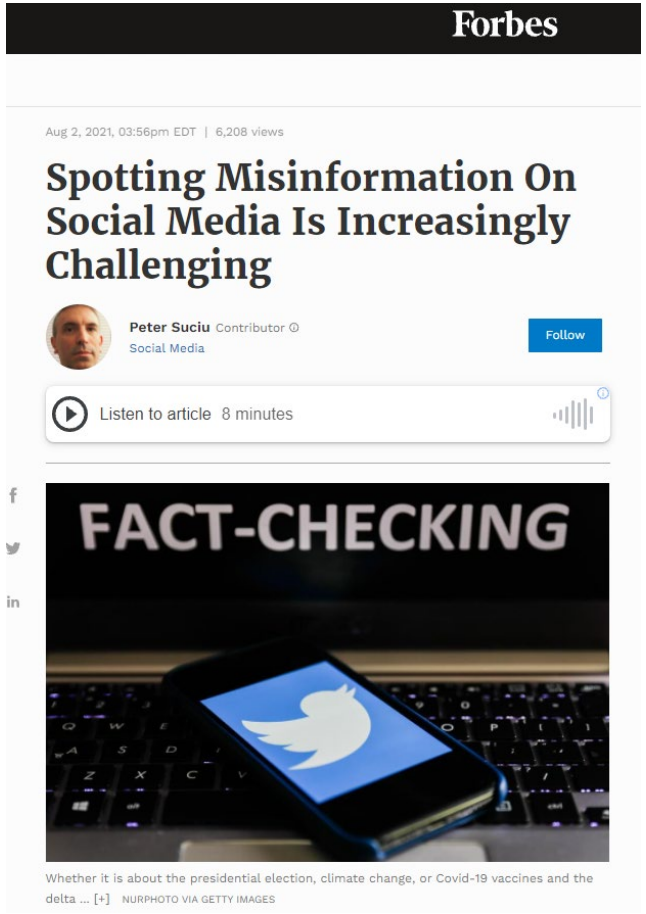
From: Harnessing Twitter data to survey public attention and attitudes towards COVID-19 vaccines in the UK



Social media attention to Covid-19 vaccine in UK from November 2020 to January 2021.

Misinformation and COVID-19 vaccination in Europe: towards polarisation?

Fear of new technologies



The spread of misinformation

The influence of 'expert figures'

Concerns about the speed of vaccine development

How to encourage vaccine uptake

In conclusion…

- Vaccine hesitancy which occurs globally is not a new phenomenon
- Europe is the region with the lowest confidence.
- Vaccine confidence is very volatile only one event can have big impact – catalyst by Social media
- **Thus**
  - **Monitoring is needed**
  - **Concerted efforts are needed to encourage vaccine**
  - **HCP can play an important role**

University of Antwerp

What can be the role of the HCP

Vaccine Confidence in Europe.

Prof dr Pierre Van Damme & Greet Hendrickx,

Centre for the Evaluation of Vaccination, University of Antwerp

Content

- **Vaccine hesitancy (definition)**
- **Vaccine hesitancy**
  - Global
  - Europe
  - Impact of COVID
  - Volatility of vaccine confidence
  - Impact of misinformation
- **Encourage vaccine uptake**
  - Role HCP
  - Information – Courses

What can be the role of the HCP

Determinants of vaccine hesitancy (WHO SAGE, 2014)

Vaccine & vaccination specific issues

- Scientific risk/benefit
- Vaccination schedule
- Mode administration or delivery
- Introduction new vaccine
- Vaccine supply
- Healthcare professionals
- Costs
- Tailoring vaccines

Individual & social group influences

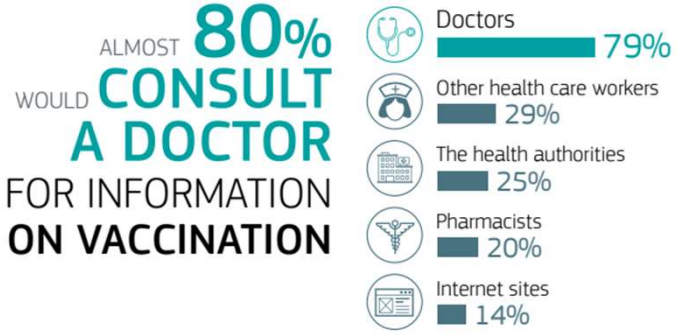
- Perceived risk/benefit
- Social norm, individual need
- Beliefs, attitudes and motivations about health
- Knowledge, awareness
- Trust in health system or provider
- Experience with past vaccination

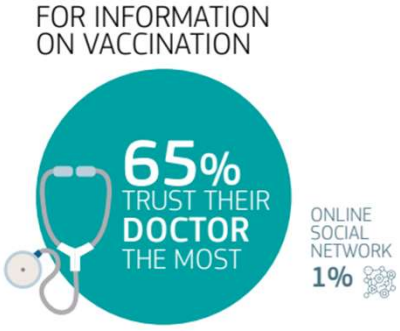
Contextual influences

- Influential individuals or leaders
- Politics, policies (mandates)
- Religion, culture
- Socio-economics
- Communication and media
- Pharmaceutical industry
- Historical influences
- Geographic barriers

The role of HCP

- **on vaccination attitudes and behaviours before pandemic**





Source: European barometer 488 (2019)– European's attitudes towards vaccination

Reason for having accepted your last vaccine

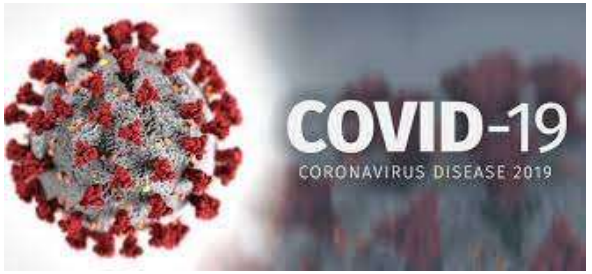
QC5 Thinking about the last vaccination you had, did you have it for any of the following reasons? (MULTIPLE ANSWERS POSSIBLE) **(%)**

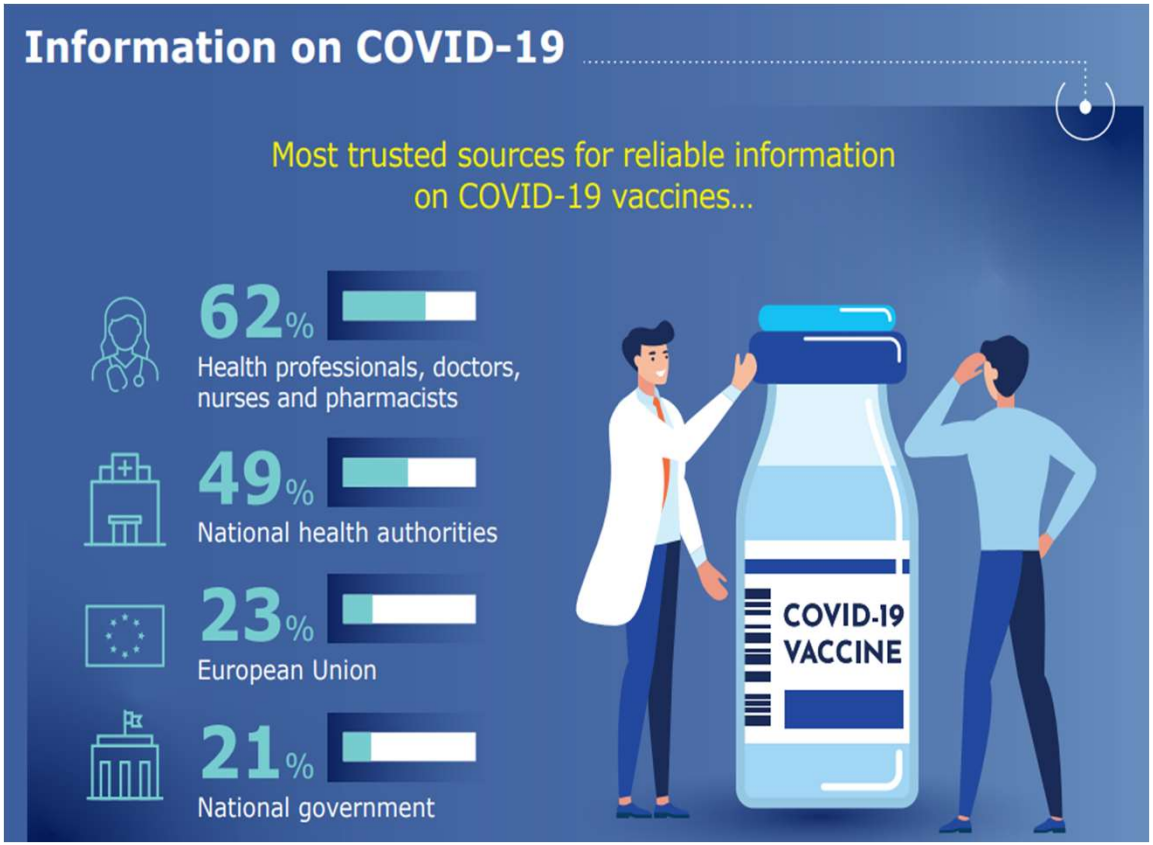
	It was recommended by the health authorities	It was mandatory under (NATIONALITY) law	You needed it to travel abroad	It was recommended by your general practitioner, a doctor, or a paediatrician	It was recommended by your family and friends	Other (SPONTANEOUS)	None (SPONTANEOUS)	Don't Know
EU28	24	13	17	63	9	4	2	0
BE	22	13	22	68	7	4	1	-
BG	9	37	7	65	10	0	1	2
CZ	12	23	14	64	12	4	2	-
DK	40	9	36	48	13	7	-	0
DE	10	7	17	79	11	4	4	0
EE	26	6	11	40	21	20	6	1
IE	34	5	19	63	12	1	0	0
EL	22	8	6	86	13	8	1	-
ES	24	9	7	71	7	4	1	-
FR	32	22	14	56	6	5	2	0
HR	34	24	4	66	16	1	2	-
IT	25	21	18	61	14	0	1	-
CY	18	13	5	59	7	9	3	-
LV	18	23	6	56	12	13	2	1
LT	17	11	10	58	21	11	4	-
LU	24	18	28	65	8	4	1	-
HU	10	15	8	78	8	3	1	-
MT	47	11	9	54	8	3	0	7
NL	41	4	37	47	5	1	1	-
AT	29	6	24	63	14	6	2	-
PL	22	24	8	53	12	3	3	-
PT	17	40	4	58	4	2	0	0
RM	27	15	5	70	21	4	1	-
SI	28	19	6	53	17	11	2	-
SK	10	28	8	78	9	2	0	-
FI	50	10	29	25	8	7	2	0
SE	52	5	38	25	15	8	1	0
UK	32	7	20	54	4	2	1	1
	1st MOST FREQUENTLY MENTIONED ITEM		2nd MOST FREQUENTLY MENTIONED ITEM		3RD MOST FREQUENTLY MENTIONED ITEM			

Base: those who received a vaccination in the last five years (12,368 respondents)

Source: European barometer 488 (2019)– European's attitudes towards vaccination

Role of HCP during and after pandemic





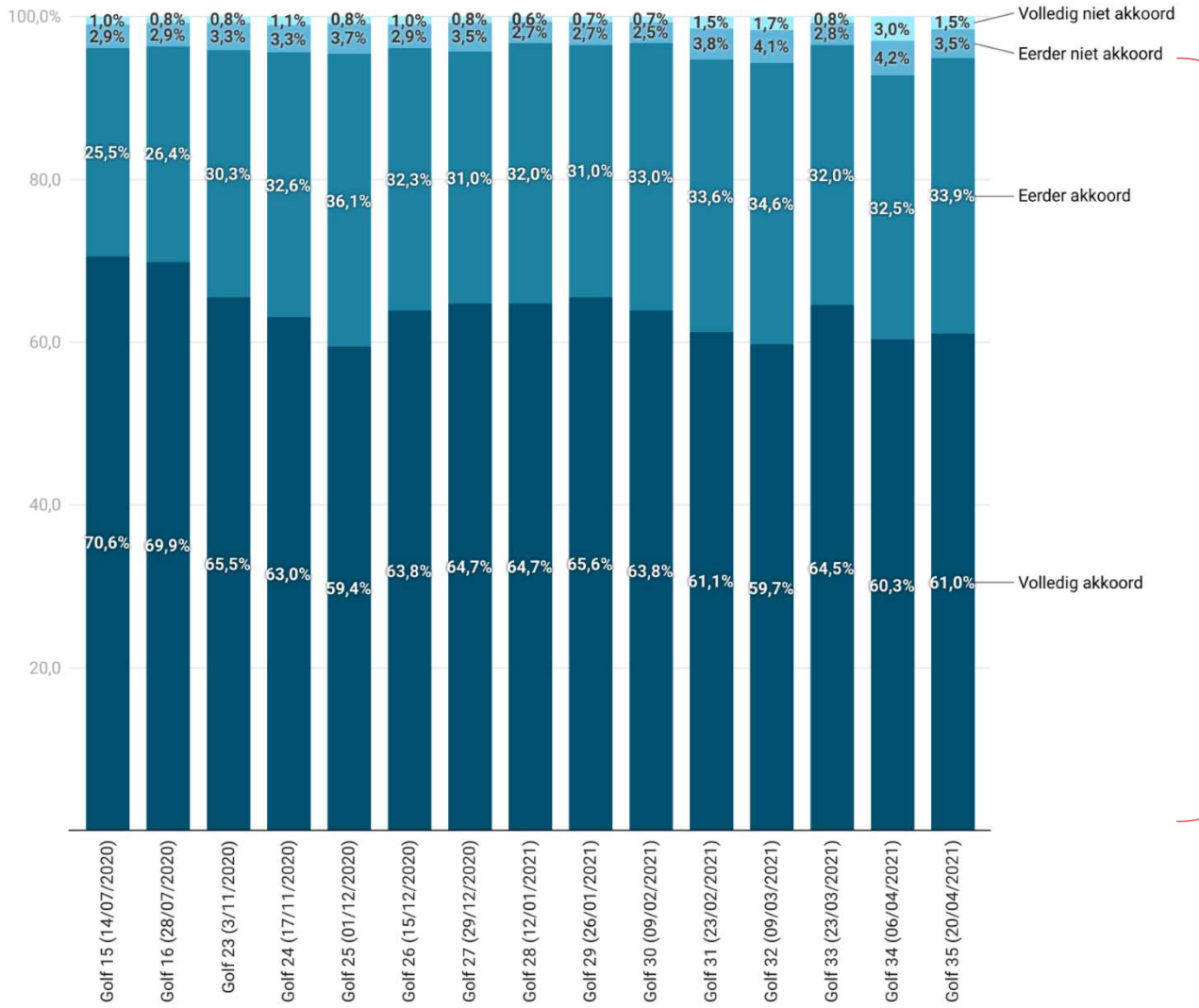
People would like to receive more information on:

- how effective COVID-19 vaccines are (44%),
- how COVID-19 vaccines are being developed, tested and authorised (42%) and
- how safe COVID-19 vaccines are (41%).

One third of respondents would like to receive information on the use of COVID-19 vaccines for specific groups such as children, the elderly and pregnant women

Source: European barometer 505 (2022)– European's attitudes towards vaccination

In general I follow the advice of my doctor



rafiek: UAntwerpen - UHasselt - KU Leuven de Grote Corona studie 2020-2021 - golf 15, 16, 23-35 (gewogen data) • Bron: UAntwerpen • Gecreëerd met Datawrapper

How do healthcare providers impact vaccine confidence?

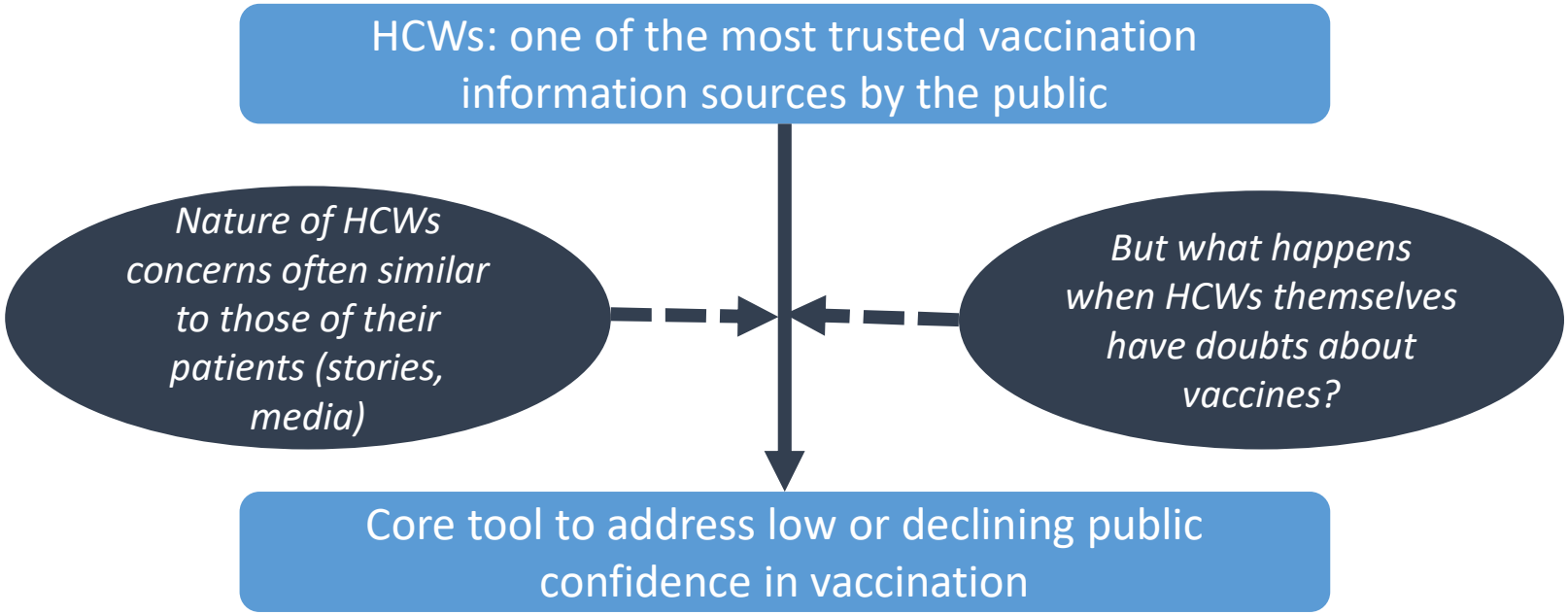
- **Heahtcare providers recommendation and attitudes is a major driver for vaccine uptake**

- **HCP may underestimate their influence**
- **Lacking support and information**
- **Lacking time to talk about vaccines**
- **lack vaccine confidence**

Dubé, E., et al. 2013. Vaccine Hesitancy, An Overview.

University of Antwerp

Health Care Providers Play a Critical Role in Vaccine Confidence.



Courtesy: Emilie Karafillakis, LSHTM, UK

HCP have crucial role to play in maintaining confidence in vaccine

But they can be vaccine hesitant themselves

CJEM. 2021; 23(5): 722–723. PMCID: PMC8237778
Published online 2021 Jun 28. doi: 10.1007/s43678-021-00172-1 PMID: 34181216

Why don't health care workers in France trust the COVID-19 vaccine?

Eric Revue,[1] Xavier Eyer,[1] and Anthony Chauvin[1,2]

Factors affecting COVID-19 vaccine hesitancy among healthcare providers in 23 countries

Jeanna Parsons Leigh [a, 1], Stephana J. Moss [a, 1], Trenton M. White [b], Camila A. Picchio [b], Kenneth H. Rabin [c], Scott C. Ratzan [c], Katarzyna Wyka [c], Ayman El-Mohandes [c, 1], Jeffrey V. Lazarus [b, d, 1]

Show more

> Viruses. 2021 Feb 26;13(3):371. doi: 10.3390/v13030371.

Attitudes towards Anti-SARS-CoV2 Vaccination among Healthcare Workers: Results from a National Survey in Italy

Francesco Di Gennaro [1], Rita Murri [2 3], Francesco Vladimiro Segala [2], Lorenzo Cerruti [4], Amina Abdulle [5], Annalisa Saracino [1], Davide Fiore Bavaro [1], Massimo Fantoni [2 3]

- Reasons for hesitancy included lack of trust in vaccine safety (85%) and receiving little (78%) or conflicting (69%) information about vaccines.

Need of the HCP

Vaccine training barometer

- **Survey to assess the need of in-service training of health-care providers in-service** https://uantwerpen.eu.qualtrics.com/jfe/form/SV_50vcwojdB9TpLg1

Aim/outcome:

1. to assess the **need** for vaccine **training** in HCP
2. to **monitor the confidence** of the HCP to communicate about vaccines
3. to **collect questions HCP** could not answer

Available in Dutch, English, Spanish (and many more languages)

Results of pilot testing of Vaccine Training Barometer

Results Vaccine Training Barometer

	Second Round Flanders (Dec '20)	First round Spain (Dec '20)	Immunion – Coalition For Vaccination (Jun '21)
	820 HCP Ph 22%-MD 16% - N44% - Oth 16%	295 HCP Ph 23%-MD 16% - N 9% - Midw 52%	3298 HCP Ph 23%-MD 44% - N 24% - Midw 1% Oth 8%
Feels confident to answer questions about vaccines	**31.3%**	**21.7%**	**53.9%**
got questions in the last 3 months that they could not answer	**52.1%**	**36.9%**	**53%**
Gained sufficient knowledge through their standard education	**11.1%**	**52.5%**	**20.6%**
Are willing to follow extra courses	**94.8%**	**91.5%**	**89.6%**

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Universitat de Barcelona

Student survey (2020)

- **3515 responses**

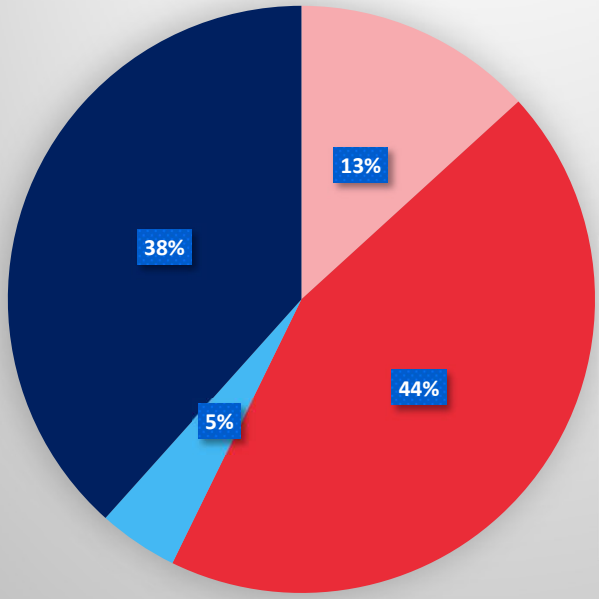
Surveyed:

- **Vaccination status of Students**
- **Student's knowledge**
- **Attention given to vaccination in their curriculum**
- **Student's attitude towards vaccines and vaccination**
- **Student's vaccine confidence**

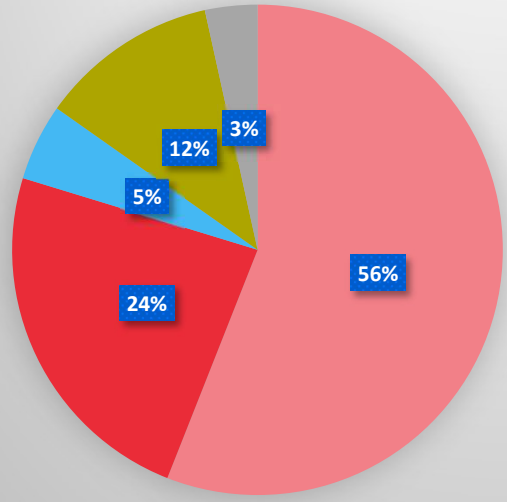
Results Student Survey

respondents 3515 (June – december 2020)

Do you feel enough attention has been paid to vaccinology in your curriculum?



How are courses in vaccination or in vaccinology organized in your curriculum?



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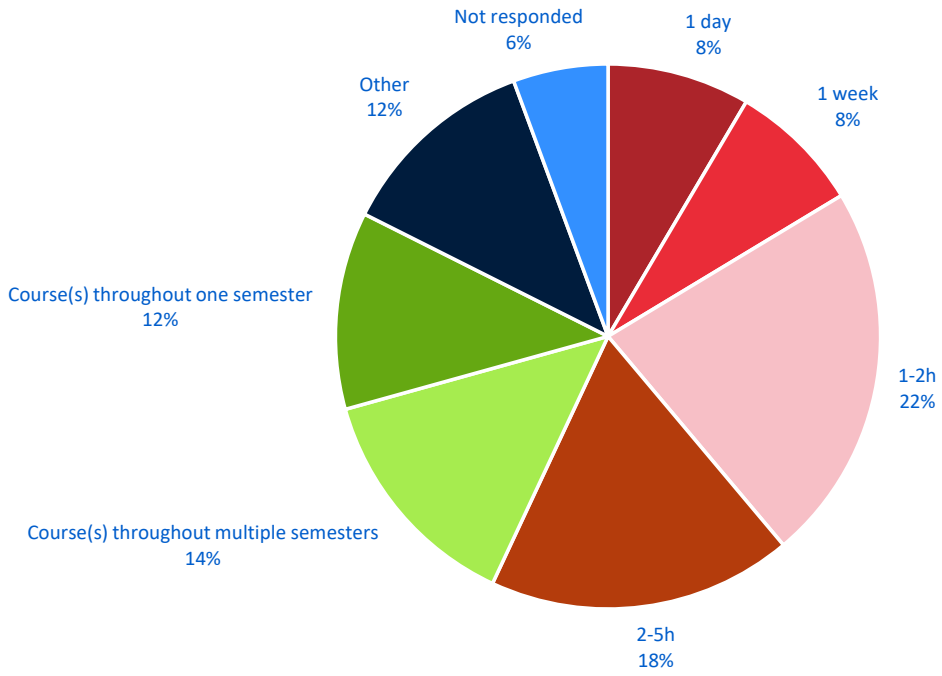
Results Student Survey

respondents 3515 respondents 3515 (June – december 2020)

How much time is spent on vaccines in your curriculum in total



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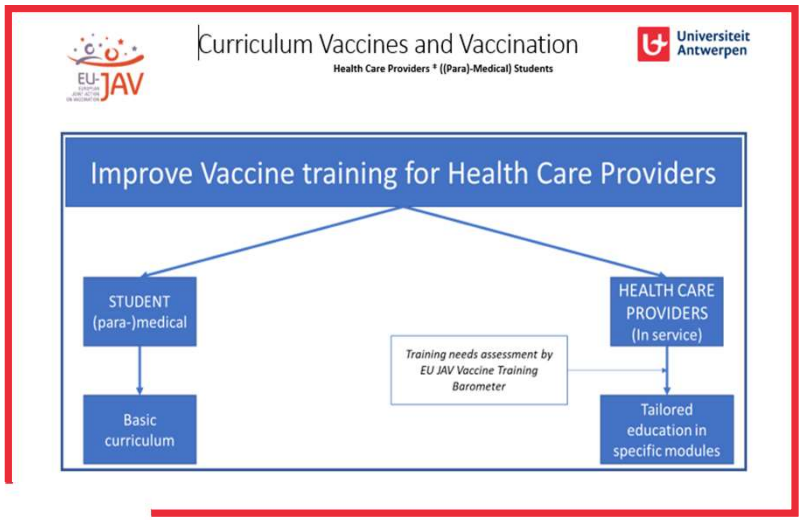
Curriculum

Standardized training curriculum and guidelines for learning outcomes and workload of in-service and pre-service vaccine training

- Curriculum Vaccines and Vaccination
  - **Module 1:** Rationale, context and history of immunization
  - **Module 2:** Immunology/ immunopathology
  - **Module 3:** Key aspects vaccine safety, development, quality
  - **Module 4:** Vaccine preventable diseases
  - **Module 5:** Immunization policies and schedule
  - **Module 6**: Future perspectives
  - **Module 7:** Understanding, active listening and communication about vaccines
  - **Module 8 :** Practical skills

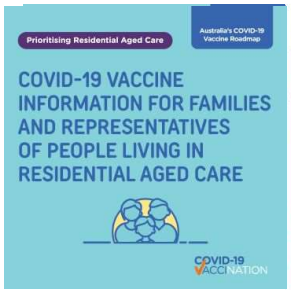


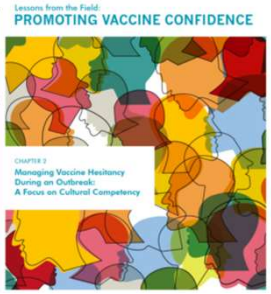
https://www.uantwerpen.be/en/research-groups/centre-for-evaluation-vaccination/research/research-projects/eu-jav/curriculum/

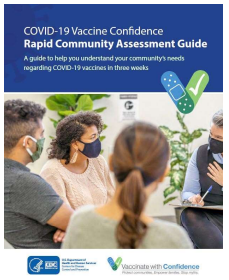
Module		Target group	Training Content: Minimum Content Basic Curriculum	Training Content: MAXIMUM content In depth Education	Learning outcome
	Topic	**STU** (student/ pre service) **HCP** (Health care provider/ In-service)	*This represents the minimum material that all trainers/curriculum managers should include in STU/HCP training, to be presented in the format and order most suitable to the students' existing knowledge and needs*	*This represents material which may be presented additionally to STU/HCP, depending on existing knowledge of students (based on assessment) and their anticipated role in delivering vaccines.*	

Examples of vaccine education for HCP

to restore trust in vaccination







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Increase health literacy of HCP

Students

- Promote the Inclusion of vaccinology in Curriculum
- Summerschool on vaccinology

HCP

- Information channels for all HCP
  - Chatbot for HCP
  - Training by Health authorities or international organisations
  - e.g. Valentijn symposium

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Where can HCP find some information

ECDC (John Kinsman)

WHO (Brett Craig)

Increase communication skills

Communication training : Train the trainers on vaccine confidence and communication

TRAIN THE TRAINERS ON VACCINE CONFIDENCE AND COMMUNICATION

A tailored training for trainers of (future) healthcare providers to improve vaccine confidence and communication about vaccines.

OBJECTIVE

The objective of the training is to support trainers of healthcare providers (HCP) and health students by offering training on vaccine confidence and communication. The training will provide knowledge and tools to trainers, who can then carry this content forward, which will result in better knowledge and confidence of HCP to communicate about vaccines and to deal with questions about vaccination.

TARGET AUDIENCE

Trainers of HCP that are involved in teaching (future) HCP about vaccination:

- Teachers who are currently training any type of (future) HCP that are or will be involved in the vaccination process (nurses, midwives, pharmacists, GPs, pediatricians...), on the topic of vaccines/vaccination (from communication to administering)
- From all EU member states

PROGRAM

13h00-13h30	Opening of the session and introduction
13h30-15h50	Training covering: (a) vaccine confidence/acceptance today (b) HCP-patient relation (c) communication about vaccines (d) Teaching methods - vaccine communication and vaccine acceptance
15h50-16h00	Closing of the session

PRACTICAL INFORMATION AND REGISTRATION

Language: English
Timing: 21/06/2022, 13-16h CEST
Format: online meeting

Registration is free of charge, but required:
registration link
For more information: contact us at
vaxcom@uantwerpen.be

IMMUNION is co-funded by the European Union's Health Programme (2014-2020)

IMMUNION University of Antwerp

University of Antwerp

Create awareness among HCP in session during international events of HCP organisations (CPME, CDE, EPSA)

VACCINE CONFIDENCE & COMMUNICATION

SIDE-SESSION AT THE CPME GENERAL ASSEMBLY
25/03/2022

A side-session organised by the IMMUNION project, in collaboration with the Coalition for Vaccination and CPME.

OBJECTIVE

Advocacy for vaccinology via healthcare providers, with a focus on knowledge and communication.

PROGRAM

9:00-9:10	Role of the healthcare provider - **Brett Craig** *WHO Euro*
9:10-9:25	Vaccine confidence in Europe - **Heidi Larson** *LSHTM, Vaccine Confidence Project*
9:25-9:40	Communication about vaccines - **Angelo Fasce** *University of Coimbra, JITSUVAX* COVID-19 vaccine communication handbook - **Dawn Holford** *University of Bristol, JITSUVAX*
9:40-10:30	**Q/A - expert panel** *Brett Craig, Catharina De Kat-Reynen, Heidi Larson, Angelo Fasce, Dawn Holford, Aurélie De Waele*

CONTACT: VAXCOM@UANTWERPEN.BE

IMMUNION is co-funded by the European Union's Health Programme (2014-2020)

IMMUNION University of Antwerp

In conclusion…

- HCP are the most trust full source for information on vaccination
- Their role in maintaining vaccine confidence is crucial especially their attitude and behaviour can be influencing
- **BUT**
  - **HCP are often not aware of this role**
  - **A significant amount of HCP and health students lacking confidence to answer questions**
  - **There is a need and a willingness to follow training**

Communication about vaccines

Dr. Philipp Schmid

Department Media and Communication Science , University of Erfurt
Department of Implementation Research, Bernhard-Nocht-Institute for Tropical Medicine

Presenter acknowledges support from the European Commission (Horizon 2020 grant agreement No 964728 JITSUVAX)

Co-funded by the Horizon 2020 programme
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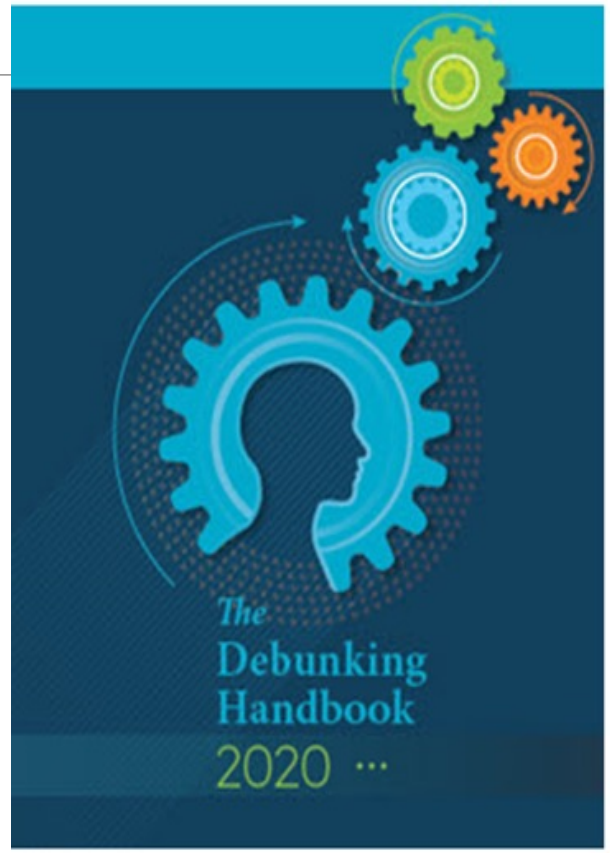
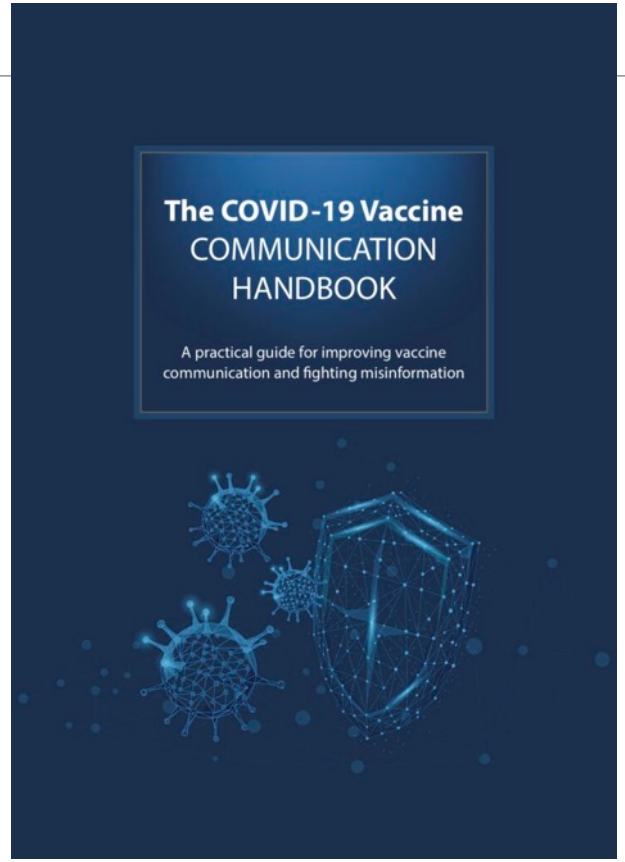
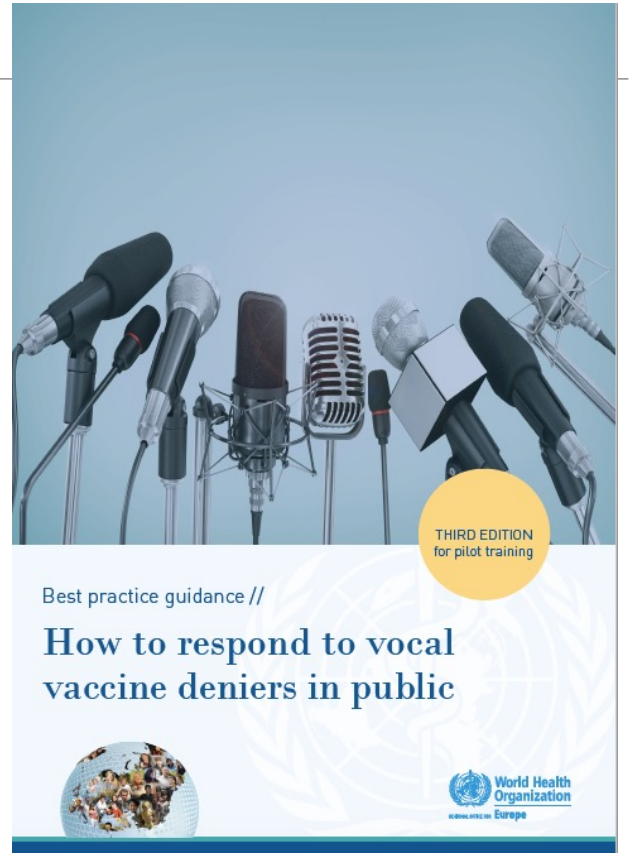

The
Debunking
Handbook
2020


The COVID-19 Vaccine
COMMUNICATION
HANDBOOK
A practical guide for improving vaccine communication and fighting misinformation


THIRD EDITION
for pilot training
Best practice guidance //
How to respond to vocal vaccine deniers in public
World Health Organization
Europe

Countering Science Denialism

Schmid, P., & Betsch, C. (2019). Effective strategies for rebutting science denialism in public discussions. *Nature Human Behaviour*, *3*(9), 931-939.

Countering Science Denialism

Debunking

Cook & Lewandowsky, 2011; Lewandowsky, Ecker, Seifert, Schwarz, & Cook, 2012

Inoculation

1. Threat
2. Refutational preemption

McGuire, 1961a, 1961b; Banas & Rains, 2010

Schmid, P., & Betsch, C. (2019). Effective strategies for rebutting science denialism in public discussions. *Nature Human Behaviour*, *3*(9), 931-939.

Countering Science Denialism

Rebuttal

Exposing misinformation as misleading at the very moment it is about to reach a wide audience.

1. Technique Rebuttal
2. Topic Rebuttal

Schmid & Betsch, 2019; Schmid, MacDonald, Habersaat & Butler, 2016; Schmid, Schwarzer & Betsch under review

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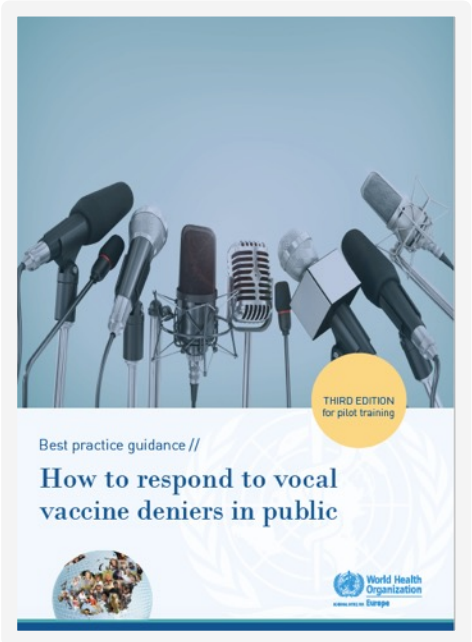


nature human behaviour

ARTICLES

https://doi.org/10.1038/s41562-019-0632-4

Effective strategies for rebutting science denialism in public discussions

Philipp Schmid [1,2*] and Cornelia Betsch [1,2]

Vaccine 36 (2018) 196–198

Contents lists available at ScienceDirect

Vaccine

journal homepage: www.elsevier.com/locate/vaccine

Commentary

Commentary to: How to respond to vocal vaccine deniers in public ☆

Philipp Schmid [a,*], Noni E. MacDonald [b], Katrine Habersaat [c], Robb Butler [c]

[a] Center for Empirical Research in Economics and Behavioral Sciences, University of Erfurt, Germany
[b] Department of Paediatrics, Dalhousie University, Canadian Centre for Vaccinology, IWK Health Centre, Halifax, Canada
[c] World Health Organization, Regional Office for Europe, Copenhagen, Denmark

journal of cognition

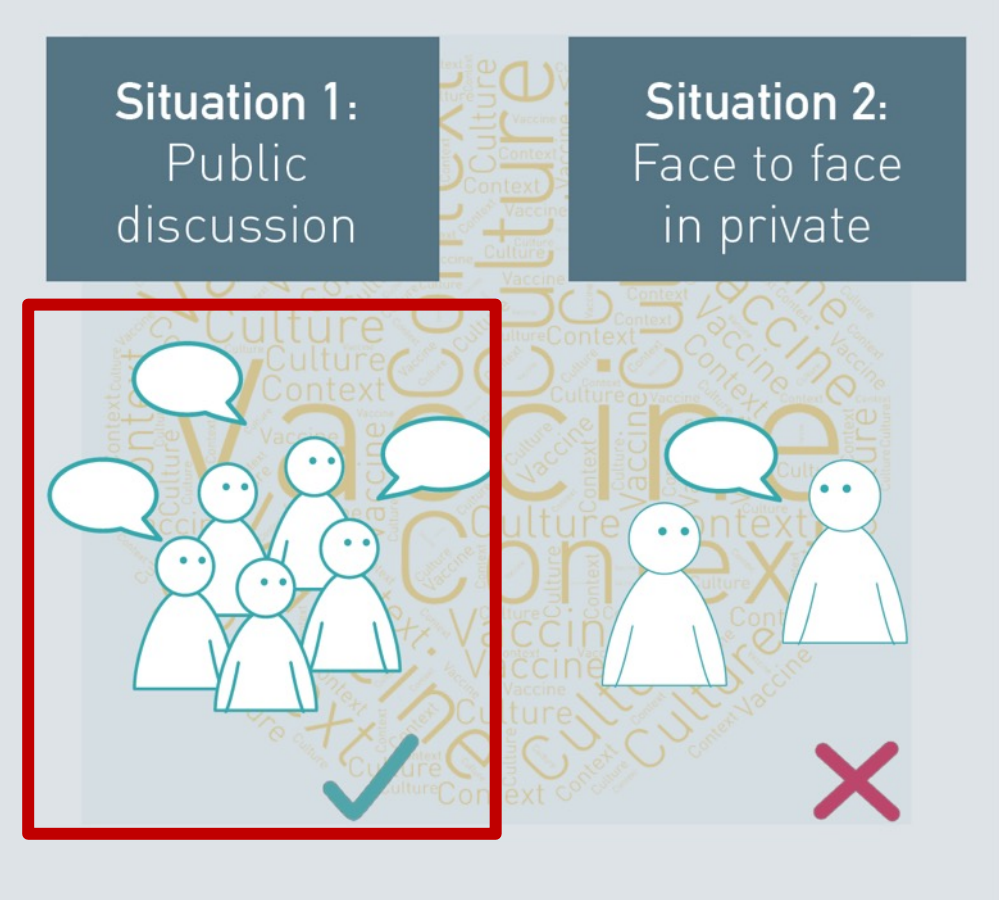
Schmid, P., et al. 2020 Weight-of-Evidence Strategies to Mitigate the Influence of Messages of Science Denialism in Public Discussions. *Journal of Cognition*, 3(1): 36, pp. 1–17. DOI: https://doi.org/10.5334/joc.125

RESEARCH ARTICLE

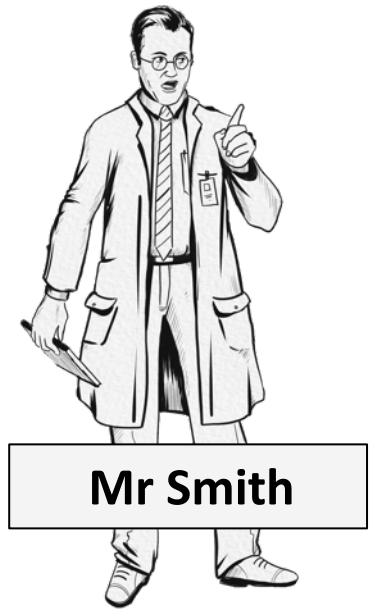
Weight-of-Evidence Strategies to Mitigate the Influence of Messages of Science Denialism in Public Discussions

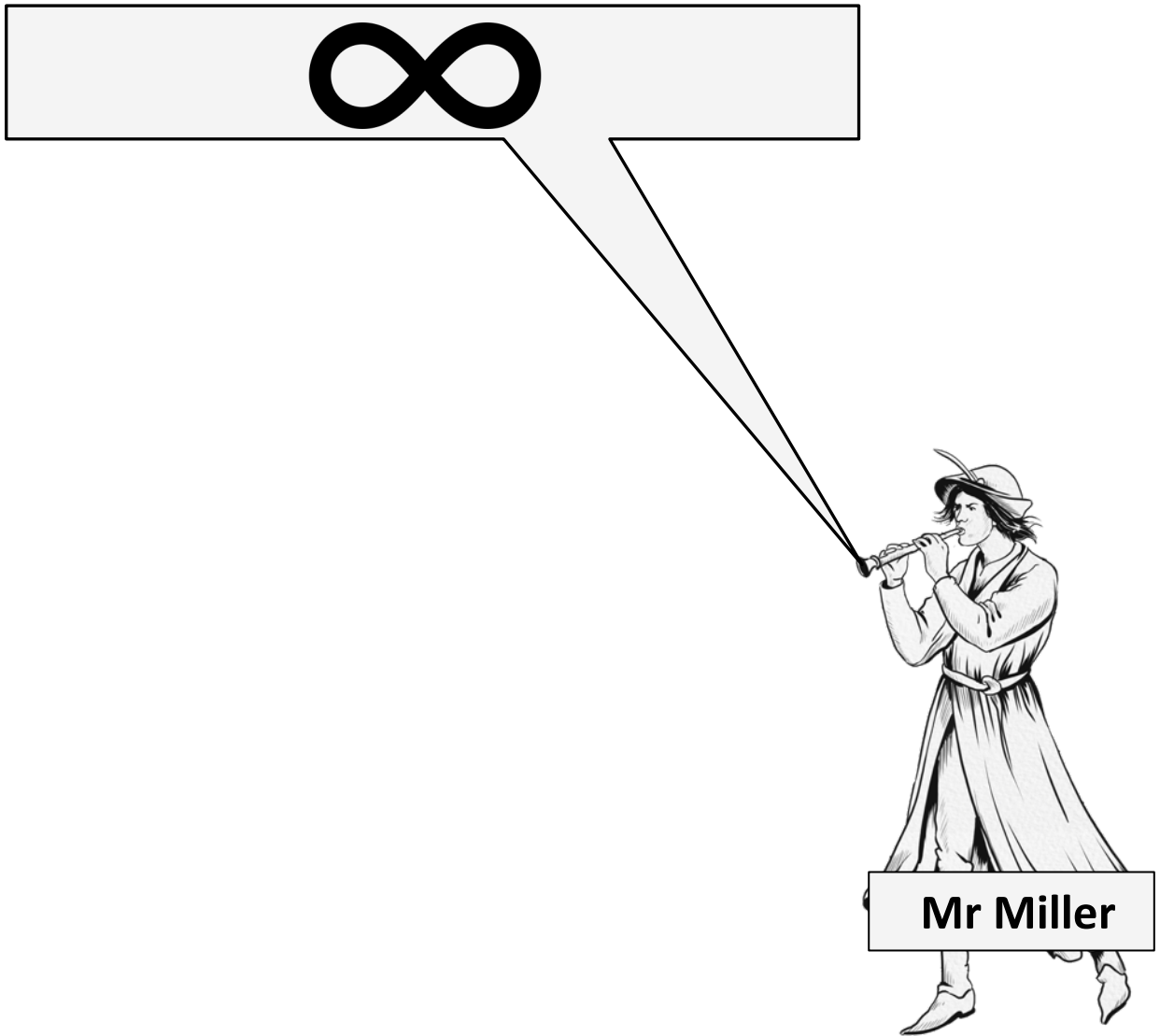
Philipp Schmid[1,2], Marius Schwarzer[3] and Cornelia Betsch[1,3]

Target group



World Health Organization. (2016). *How to respond to vocal vaccine deniers in public: best practice guidance* (No. WHO/EURO: 2017-2899-42657-59427). World Health Organization. Regional Office for Europe.





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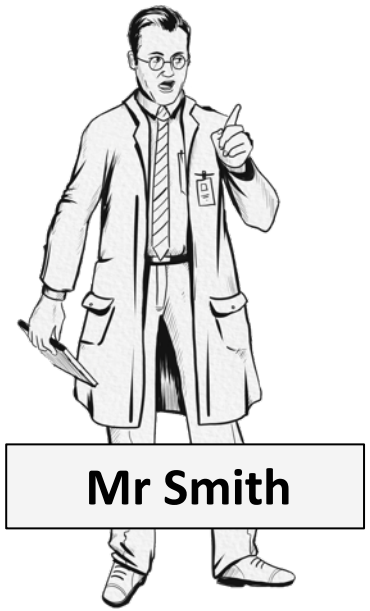

Mr Smith

Mr Miller

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topic rebuttal

Threat of disease	Safety	Alternatives	Trust	Effectiveness

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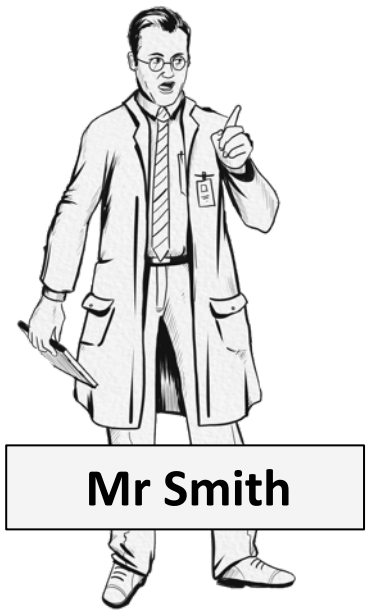

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topic rebuttal

5x5

Threat of disease	Safety	Alternatives	Trust	Effectiveness

technique rebuttal

- Selectivity
- Impossibel expectations
- Conspiracy theories
- False logic
- False experts

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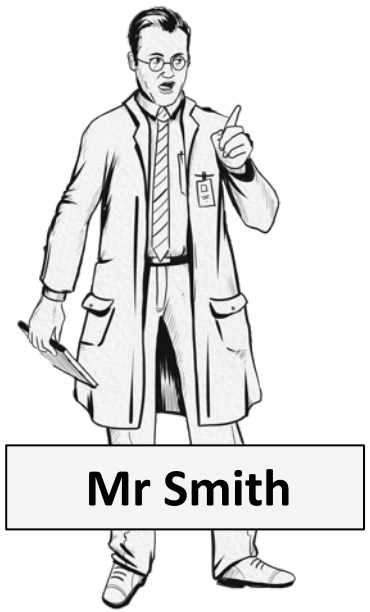

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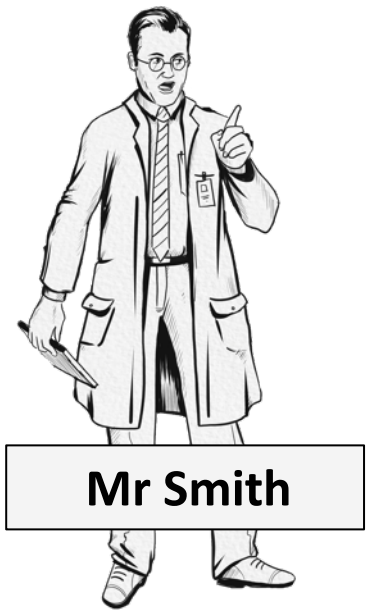
The *lack of safety* is an important issue of the dysomeria vaccine. The side effects and risks of the vaccine are incalculable. As a patient, you do not know how the body reacts to the vaccine before administration. Even if you feel healthy immediately after the shot, harmful substances may have entered your body. Doctors cannot guarantee in advance that there will not be any complications. In my opinion, you cannot expect any fellow citizen to vaccinate as long as the vaccine is not 100% safe. Surely it is not too much to ask that a product that is injected into a healthy human body is 100% safe.



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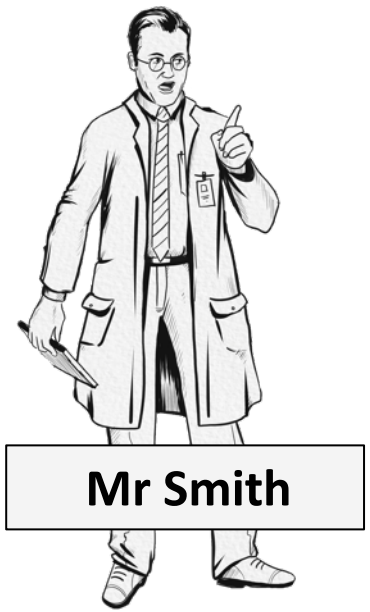

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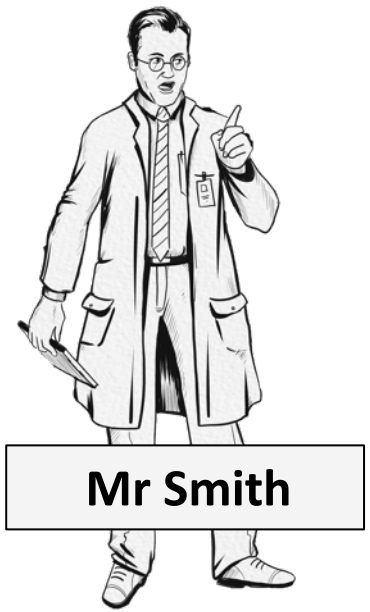

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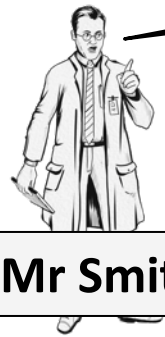
The scientific evidence is clear; the vaccine against dysomeria is a safe way to avoid the disease. The risk of dysomeria by far exceeds the risk of vaccination. And please let me add the following regarding the safety of the vaccine: we follow a very strict protocol to ensure the high quality of vaccines in the United States. This is also demonstrated by the fact that every batch of the vaccine against dysomeria is constantly monitored and independently screened by official control laboratories. Let us stay with the facts: the vaccine improves the health standard of all individuals and that is why we recommend it for citizens of all ages.



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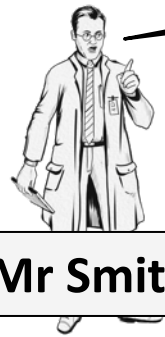

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topic rebuttal

5x5

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Persuasion-psychology

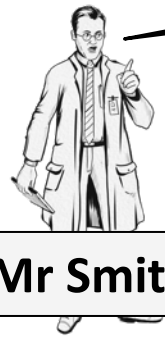
Receiver
(e.g. need for cognition: *Cacioppo, Petty, & Morris, 1983*; persuasion knowledge: *Friestad & Wright, 1994*)
Sender
(e.g. credibility: *Pornpitakpan, 2004*; likeability: *Chaiken, 1980*)
Message features
(e.g. type of evidence: *Hronikx, 2005*; message sidedness: *Allen, 1991*).

Combination: Two-Process Theories

Persuasion is more likely when high-quality messages are used.

Persuasion is more likely when peripheral cues strengthen the message, e.g., the sheer length of the argument.

(elaboration likelihood model: Petty & Cacioppo, 1986; heuristic-systematic model: Chaiken, 1980)

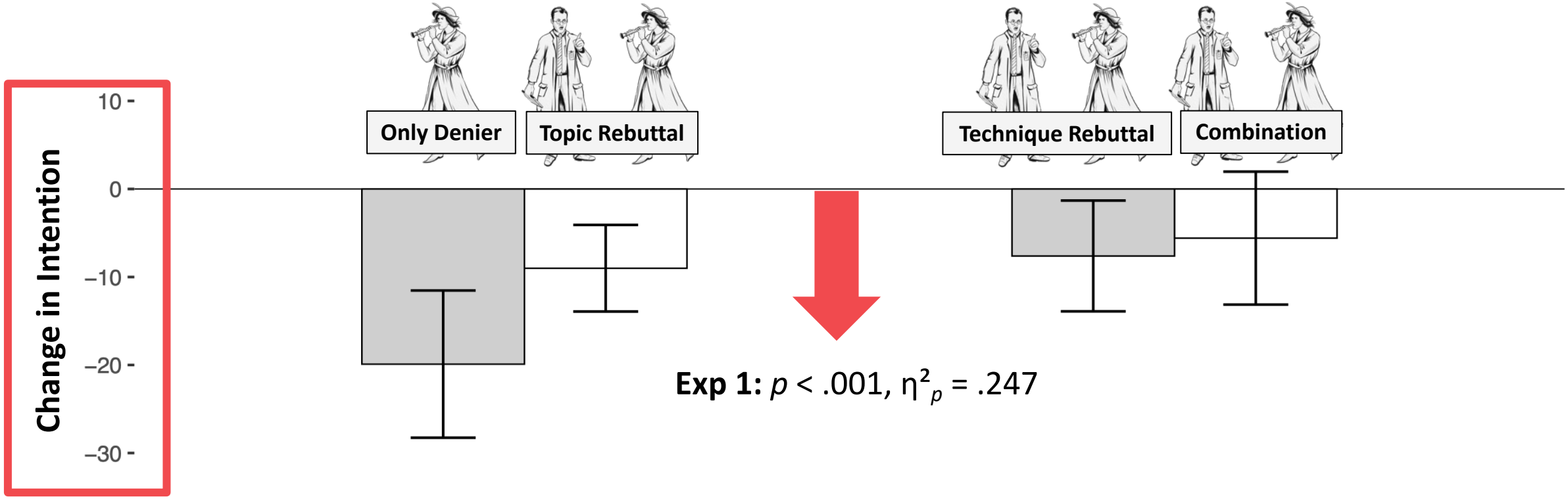


Mr Smith

Mr Miller

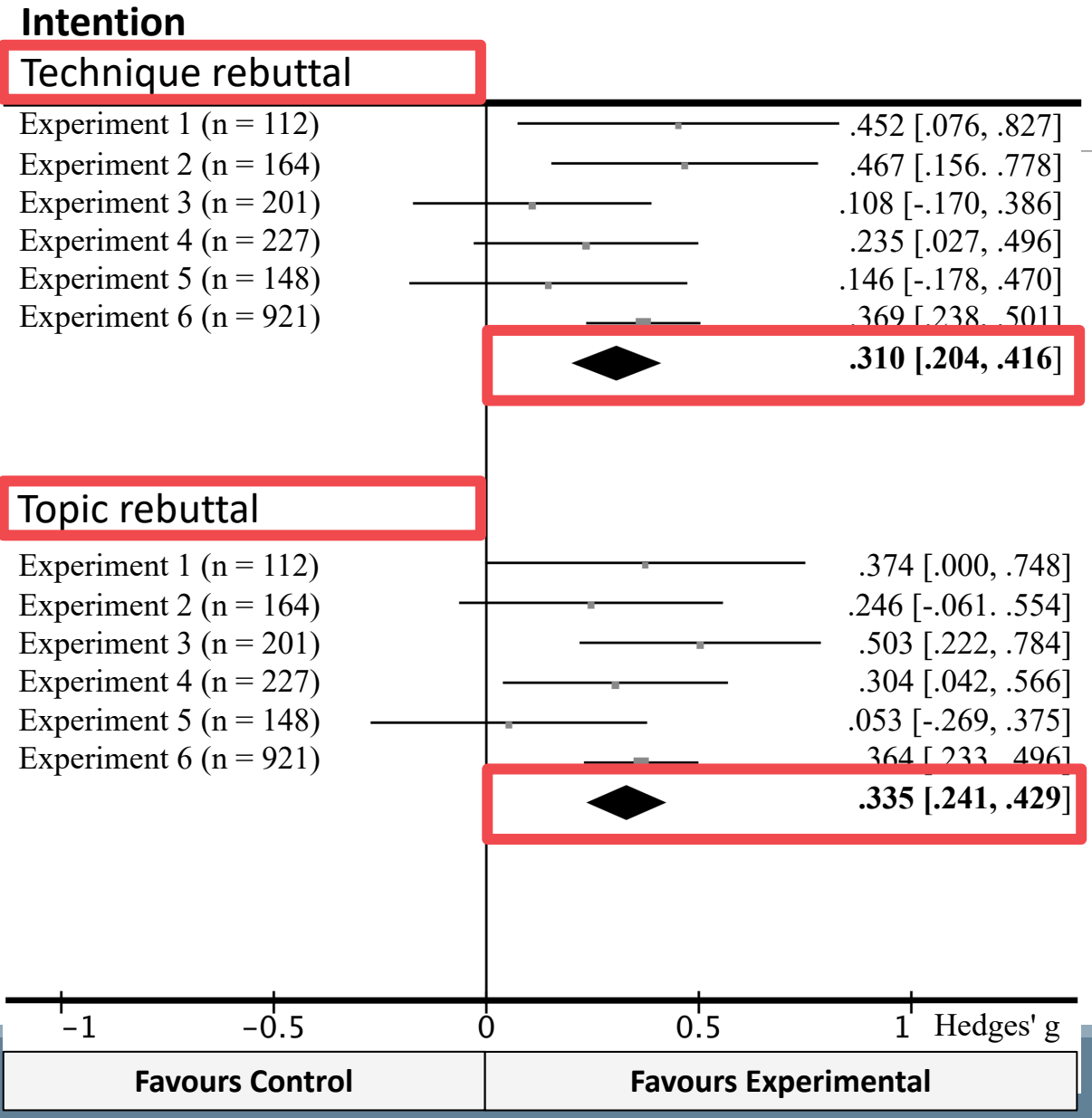
Schmid, P., & Betsch, C. (2019). Effective strategies for rebutting science denialism in public discussions. *Nature Human Behaviour*, *3*(9), 931-939.

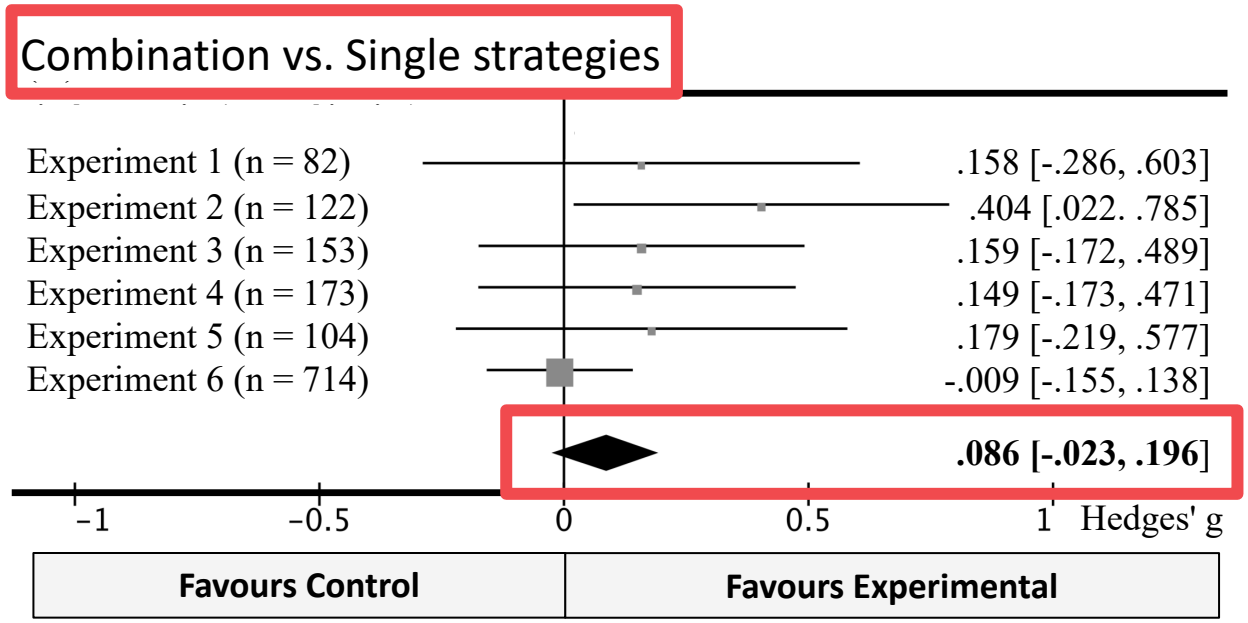
Results



Schmid, P., & Betsch, C. (2019). Effective strategies for rebutting science denialism in public discussions. *Nature Human Behaviour*, *3*(9), 931-939.

Results





Schmid, P., & Betsch, C. (2019). Effective strategies for rebutting science denialism in public discussions. *Nature Human Behaviour*, *3*(9), 931-939.

Step 1: Identify the technique	Step 2: Identify the topic	Step 3: Respond with key message
Conspiracies Example: The government is systematically hiding the real data.	**Threat of disease** Example: Diseases are under control. There is absolutely no need to ask children to run the risk of vaccination.	Example: „Being a researcher does not make a vaccination expert, and your source is a so-called fake expert. Among vaccine researchers there is wide consensus that **diseases are only under control if we stay vigilant and continue to vaccinate. There are small children and people with diseases who cannot be vaccinated – we all have a responsibility to protect them by being vaccinated. Vaccine-preventable diseases can be very severe, and still cause millions of deaths per year."**
Fake experts Example: A new research manifest signed by 30 university researchers has been published. It says that...	**Trust** Example: The government receives kick-back from the pharmaceutical industry – it is a very profitable business for them.	Example: „Mr Jones' conspiratory notion completely ignores **the mass of scientific evidence produced by independent scientists all over the world on the benefits of vaccination in protecting public health and wellbeing.** It also overestimates the power and tries to discredit the motives of health authorities everywhere."
Selectivity Example: This paper proves that 30% of people who are vaccinated against measles are not protected against the virus.	**Alternatives** Example: Natural prevention is so much better for our children than chemical and artificial solutions.	Example: „Mr Jones is using false logic when claiming that something is bad because it is not natural. Sometimes unnatural is good – for example hip replacement – sometimes it is bad – for example chemical weapons. I will repeat what **is supported by an overwhelming body of scientific evidence: There are no alternatives that are as safe and effective as vaccines."**
Impossible expectations Example: I am not against vaccination, but I will not recommend it to anyone until it is 100% safe.	**Effectiveness** Example: The progress in health today is due to clean drinking water, better housing and better living conditions in general – not vaccination.	Example: „Mr Jones is cherry picking the data. The fact is that **there is overwhelming scientific evidence showing that vaccination has saved the lives of millions, some say more than 20 million people, and it is one of the most succesful public health interventions ever."**
Misrepresentation / False logic Example: Vaccines are unnatural and therefore unhealthy for a natural organism like the human being.	**Safety** Example: How can I vaccinate my daughter if her safety cannot be guaranteed?	Example: „Expecting 100% safety is impossible; no medical product or intervention, from aspirin to heart surgery, can ever be guaranteed 100% safe. What we do know for sure is that **the risks of these vaccine-preventable diseases far outweigh those of vaccines. In the worst of cases, these diseases kill."**

THIRD EDITION
for pilot training

Best practice guidance //

How to respond to vocal vaccine deniers in public

World Health Organization Europe

Schmid, P., MacDonald, N. E., Habersaat, K., & Butler, R. (2018). Commentary to: How to respond to vocal vaccine deniers in public. *Vaccine*, *36*(2), 196-198.

Practice 1 – No recording

Scenario

Andrew Wakefield has produced a new film that has been shown in many theaters. The film revolves around an alleged link between MMR vaccination and autism. The guests interviewed in the film claim to have gathered sufficient evidence to prove a link between MMR and autism. The impact of the film has been far-reaching and is expected to become even greater, as the film has gained widespread popularity, particularly on online networks.

In response, the health department in your country has launched an extensive information campaign to debunk the false claims. As part of this campaign, medical doctors are invited to answer questions from the public about the film.

Various television channels have also organized public debates on the subject.

You are invited to participate in such a debate in your capacity as a doctor for the health authority. A well-known vaccination critic has also been invited to the debate.

The denier says…

The government is systematically hiding the real data. The government receives kick-back from the pharmaceutical industry – it is a very profitable business for them.

A new research manifest signed by 30 university researchers has been published. It says that diseases are under control. There is absolutely no need to ask parents to run the risk of vaccinating their children.

This paper proves that 30% of people who are vaccinated against measles are not protected against the virus. The progress in health today is due to clean drinking water, better housing and better living conditions in general – not vaccination.

I am not against vaccination, but I will not recommend it to anyone until it is 100% safe. How can I vaccinate my daughter if her safety cannot be guaranteed?

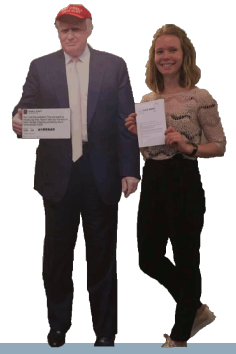
Step 2: Debunking

Backfire effects...

No evidence of backfire

Backfire

When asked immediately after reading the flyer, people successfully identified the myths. However, when queried 30 minutes after reading the flyer, some people actually scored worse after reading the flyer. The debunking reinforced the myths.



Schwarz et al. (2007) — Overkill Backfire Effect

Nyhan (2015) — Worldview Backfire Effect

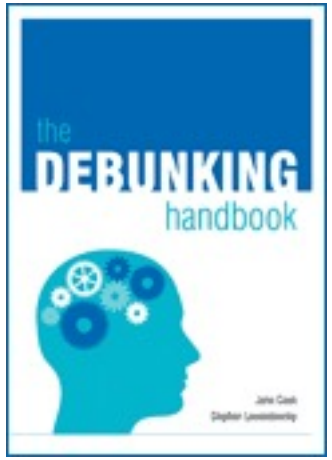
Skurnik et al. (2005) — Familiarity Backfire Effect

Cook, J., Lewandowsky, S. (2011), The Debunking Handbook. St. Lucia, Australia: University of Queensland. November 5. ISBN 978-0-646-56812-6. [http://sks.to/debunk]

Didn‘t you say backfire?

OLD: Ideally, avoid mentioning the myth altogether while correcting it.

NEW: As a precaution, avoid mentioning the myth unnecessarily while correcting it.



No evidence of backfire	Backfire
Ecker at al. (2018)	Schwarz et al. (2007)
Haglin (2017)	Nyhan (2015)
Swire (2017)	Skurnik et al. (2005)

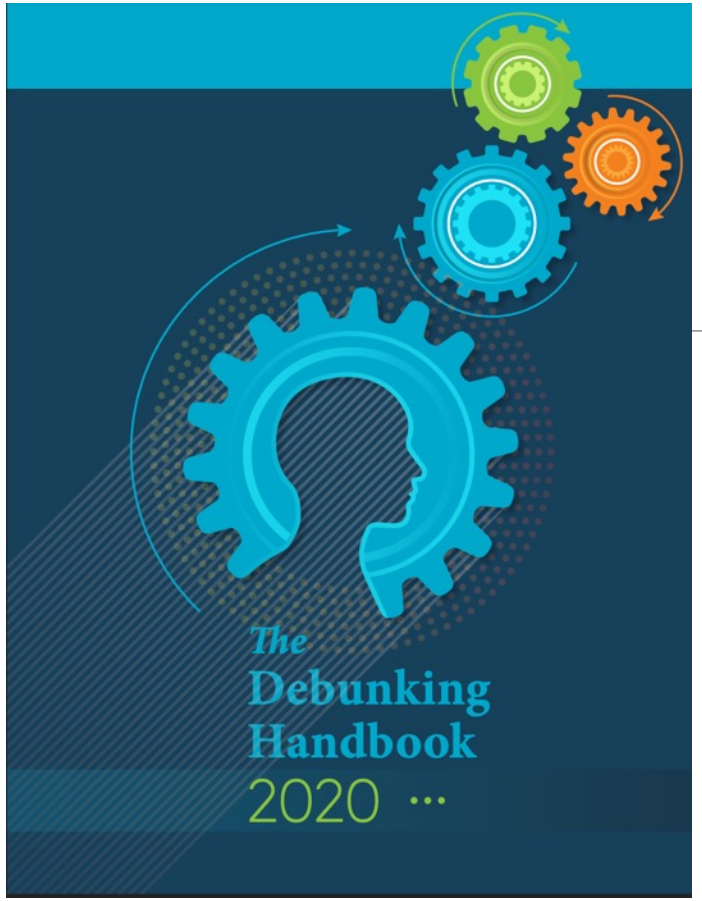
I guess...those findings might have been exaggerated.

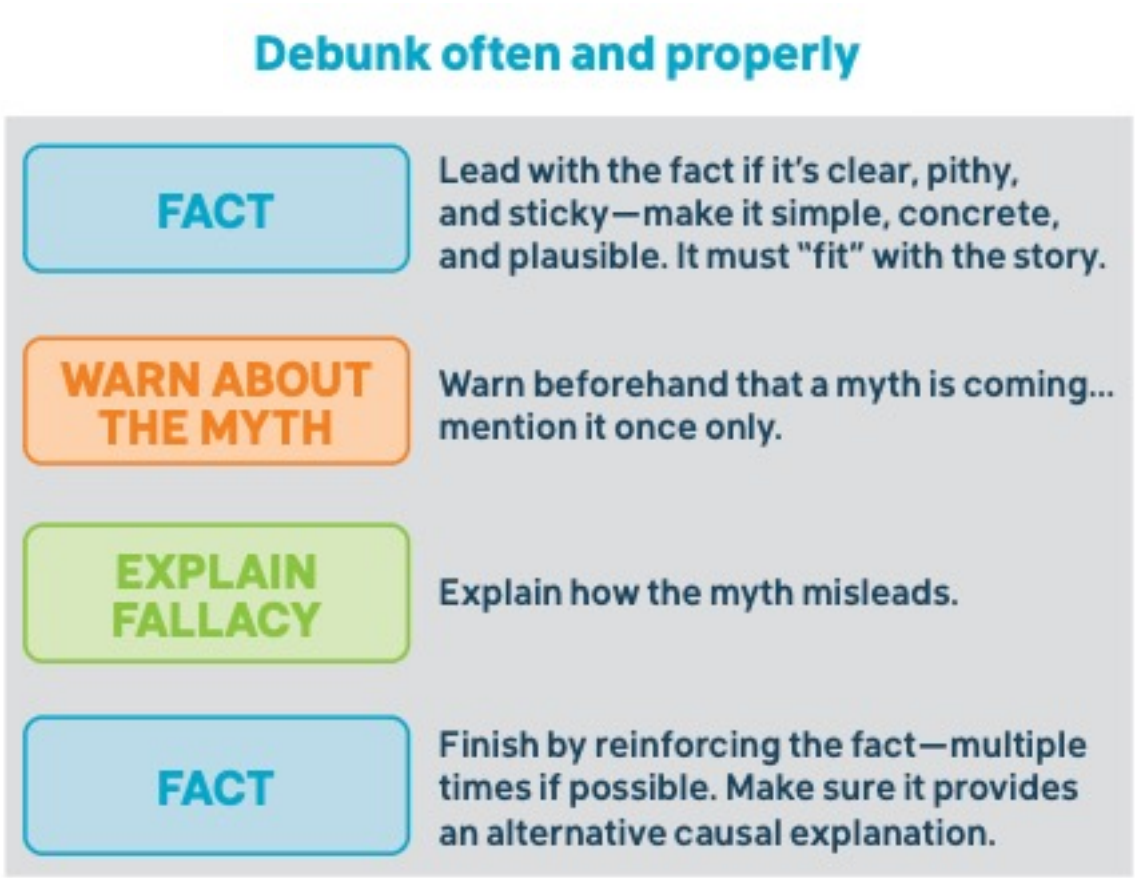
Overkill Backfire Effect

Worldview Backfire Effect

Familiarity Backfire Effect

Cook, J., Lewandowsky, S. (2011), The Debunking Handbook. St. Lucia, Australia: University of Queensland. November 5. ISBN 978-0-646-56812-6. [http://sks.to/debunk]





Debunking

Lewandowsky, S., Cook, J., Ecker, U. K. H., Albarracín, D., Amazeen, M. A., Kendeou, P., Lombardi, D., Newman, E. J., Pennycook, G., Porter, E. Rand, D. G., Rapp, D. N., Reifler, J., Roozenbeek, J., Schmid, P., Seifert, C. M., Sinatra, G. M., Swire-Thompson, B., van der Linden, S., Vraga, E. K., Wood, T. J., Zaragoza, M. S. (2020). *The Debunking Handbook 2020*. https://doi.org/10.17910/b7.1182


RKI
Wirkweise und potentielle Risiken der mRNA-Impfstoffe gegen COVID1...
Link kopier...
Ansehen auf YouTube

Elite party cues increase vaccination intentions among Republicans

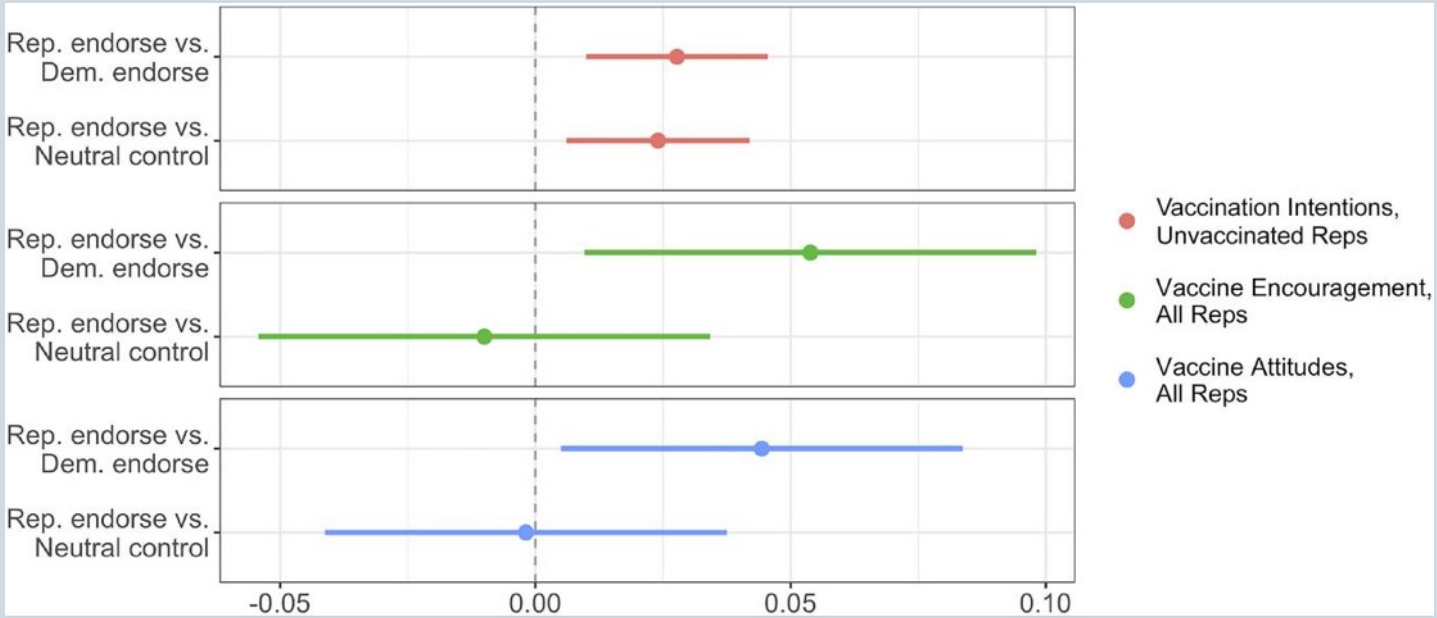
Pink, S., Chu, J., Druckman, J., Rand, D., & Willer, R. (2021). Elite Party Cues Increase Vaccination Intentions among Republicans. PNAS

	Democrats Endorse	*Republicans Endorse*
Video		
Essay Excerpt	"President **Joseph Biden** and his administration have led the effort to develop and deliver the COVID-19 vaccines, and are now encouraging all Americans to get vaccinated [...] In the end, we will all thank **President Biden and Democratic leadership** for their contributions to this historic effort that will save lives and restart our economy."	"President **Donald Trump** and his administration have led the effort to develop and deliver the COVID-19 vaccines, and are now encouraging all Americans to get vaccinated [...] In the end, we will all thank **President Trump and Republican leadership** for their contributions to this historic effort that will save lives and restart our economy."

In a preregistered survey experiment (*n* = 1,480), we varied whether self-identified Republicans saw endorsements of the vaccine from prominent Republicans (including video of a speech by former President Donald Trump), from the Democratic Party (including video of a speech by President Joseph Biden), or a neutral control condition including no endorsements.

Elite party cues increase vaccination intentions among Republicans

Pink, S., Chu, J., Druckman, J., Rand, D., & Willer, R. (2021). Elite Party Cues Increase Vaccination Intentions among Republicans. PNAS



In a preregistered survey experiment (*n* = 1,480), we varied whether self-identified Republicans saw endorsements of the vaccine from prominent Republicans (including video of a speech by former President Donald Trump), from the Democratic Party (including video of a speech by President Joseph Biden), or a neutral control condition including no endorsements.

Practice 2 – No recording

Task

You see a debunking text for a common misinformation. Please read the debunking. What do you think: Is this a good(bad example of debunking? Why?

Flu vaccination causes the flu!

According to a survey, a large proportion of the unvaccinated believe that the flu vaccine causes the flu.

In fact, infection by this route is not possible because there are no complete pathogens in the vaccine.

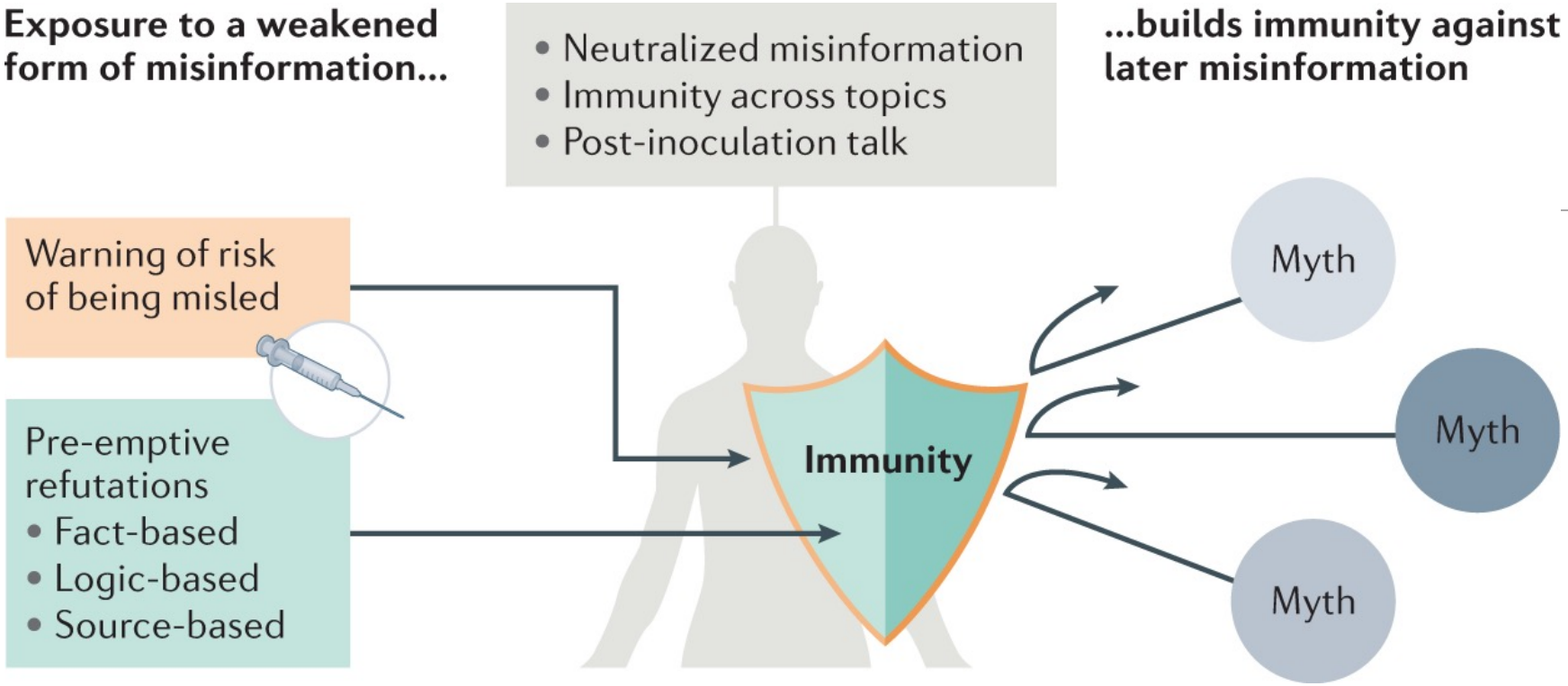
Flu vaccination protects against the flu!

It is a common misconception,

that the flu vaccine could cause the flu. In fact, infection by this route is not possible because there are no complete pathogens in the vaccine.

Some people feel tired or feverish after vaccination. This is a sign that the immune system is reacting to the vaccination and is just at work to arm you against a possible infection. These vaccine reactions are harmless symptoms that may occur as a natural response of your immune system to vaccination and are without long-term health consequences.

Step 3: Pro-active prevention



Inoculation

Ecker, U. K., Lewandowsky, S., Cook, J., Schmid, P., Fazio, L. K., Brashier, N., ... & Amazeen, M. A. (2022). The psychological drivers of misinformation belief and its resistance to correction. *Nature Reviews Psychology*, *1*(1), 13-29.

Inoculation

Threat

Refutational preemption

Forewarnings can increase resistance to misinformation.
(van der Linden et al., 2017; Kumkale & Albarracin, 2004)

‘By preemptively exposing people to a weakened version of a (counter)-argument, and by subsequently refuting that argument, attitudinal resistance can be conferred against future persuasion attempts.’
(Roozenbeek & van der Linden, 2018)

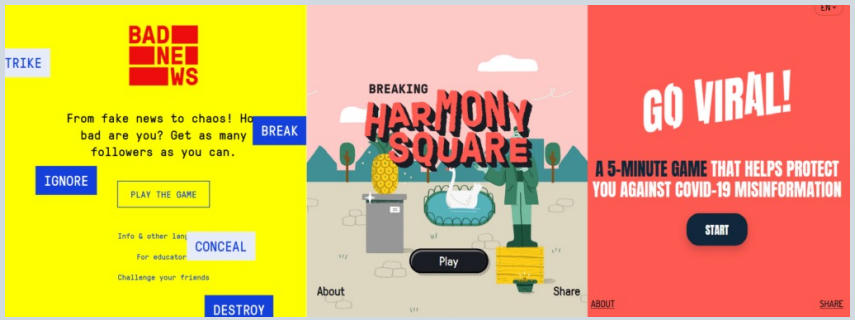
ARTICLE

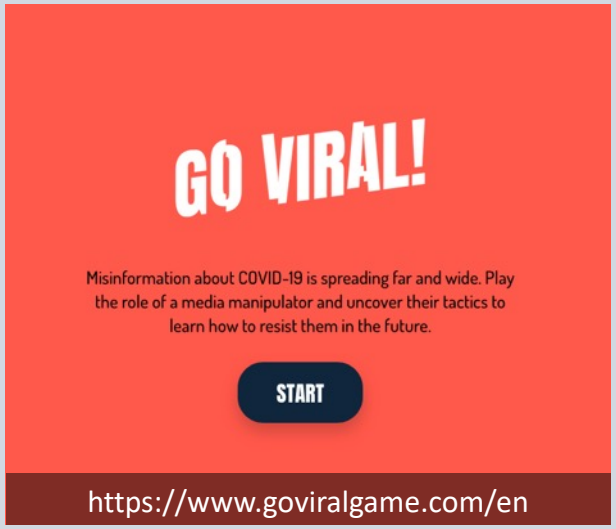
https://doi.org/10.1057/s41599-019-0279-9 OPEN

Fake news game confers psychological resistance against online misinformation

Jon Roozenbeek[1] & Sander van der Linden[2]

Roozenbeek, J., & van der Linden, S. (2018). The fake news game: actively inoculating against the risk of misinformation. *Journal of Risk Research*, 1-11.





https://www.goviralgame.com/en

Inoculation: The game interventions from Cambridge

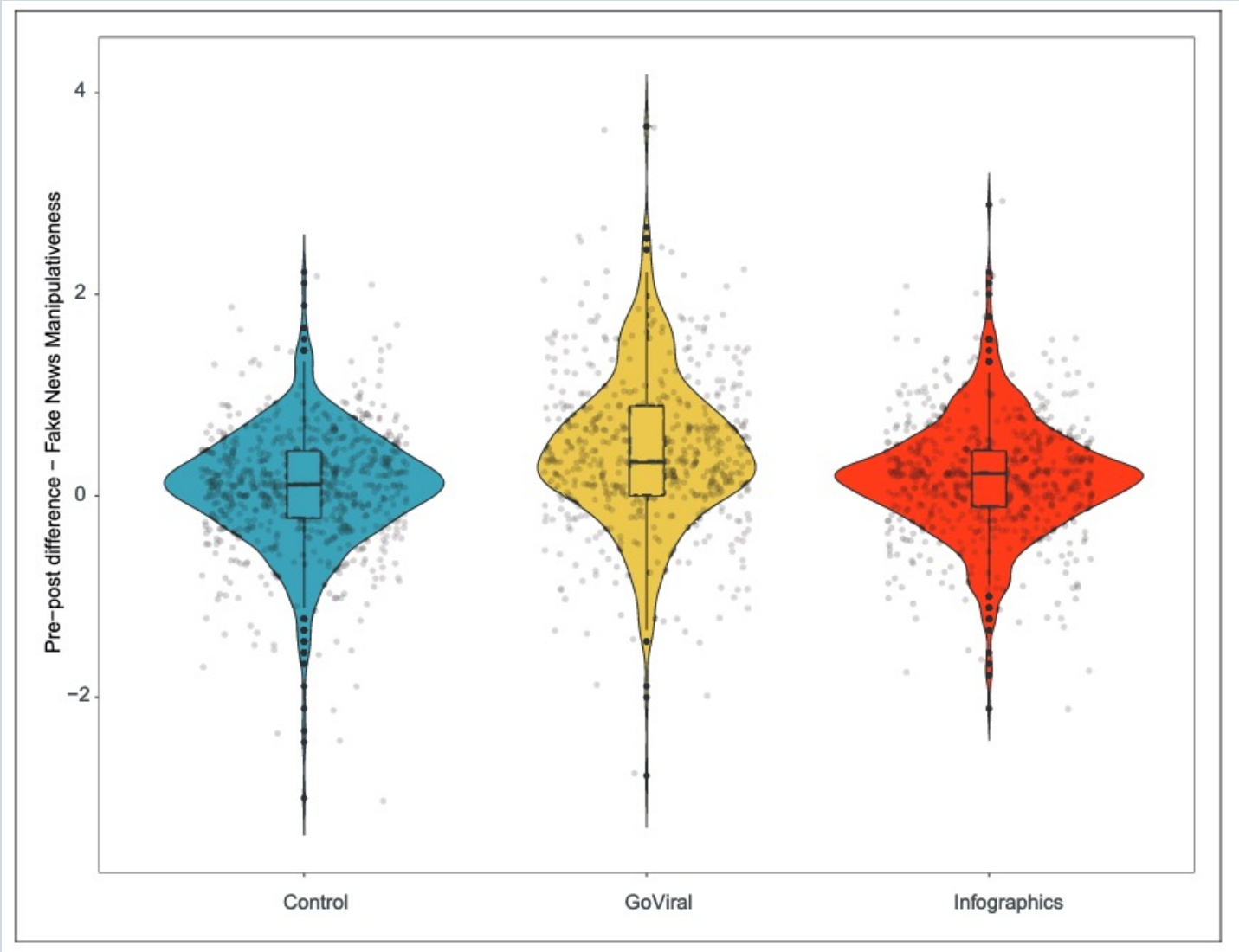
Basol, M., Roozenbeek, J., Berriche, M., Uenal, F., McClanahan, W.P., & van der Linden, S. (2021). Towards psychological herd immunity: Cross-cultural evidence for two prebunking interventions against COVID-19 misinformation. Big Data & Society.

Roozenbeek, J., & van der Linden, S. (2020). Breaking Harmony Square: A game that "inoculates" against political misinformation. The Harvard Kennedy School Misinformation Review 1(8).

Roozenbeek, J., & van der Linden, S. (2019). Fake news game confers psychological resistance against online misinformation. Nature Palgrave Communications 5, 65, 10.1057/s41599-019-0279-9.

Inoculation: The game interventions from Cambridge

Basol, M., Roozenbeek, J., Berriche, M., Uenal, F., McClanahan, W. P., & Linden, S. V. D. (2021). Towards psychological herd immunity: Cross-cultural evidence for two prebunking interventions against COVID-19 misinformation. *Big Data & Society*, *8*(1), 20539517211013868.



Special evaluations of the ARD/ZDF mass communication long-term study. Effects of the corona pandemic on media use, motives and ratings

Birgit van Eimeren, Bernhard Kessler und Thomas Kupferschmitt (2020). Media Perspektiven.

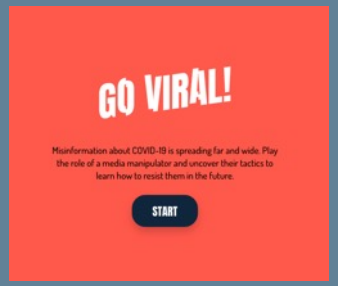


Tabelle 10 *(Fortsetzung)*

Mediennutzung: Tagesreichweiten 2020 – vor und während des Corona-„Lockdowns"

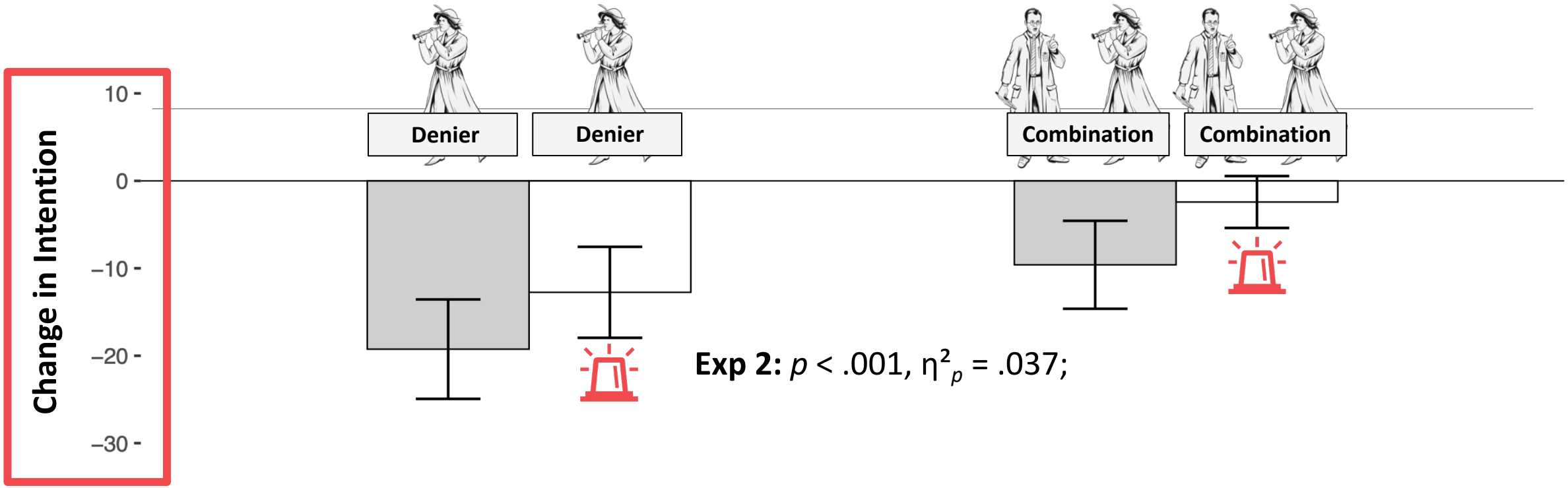
Nutzung gestern, Mo-So, 5.00-24,00 Uhr, in %

	50-69 J.			ab 70 J.		
	vor	während	Diff.	vor	während	Diff.
Medien gesamt (netto)	**99**	**99**	**±0**	**98**	**100**	**+2**
Video gesamt (netto)	**86**	**92**	**+6**	**86**	**95**	**+9**
Fernsehen zum Zeitpunkt der Ausstrahlung ansehen	81	84	+3	85	93	+8
selbst aufgenommene Fernsehsendungen ansehen	*	*	*	*	*	*
Fernsehsendungen in Mediatheken oder auf YouTube ansehen (netto)	*	*	*	*	*	*
Videos bei Streamingdiensten wie Netflix/Amazon ansehen	5	7	+2	*	*	*
Videos auf YouTube ansehen	*	*	*	*	*	*
Videos in soz. Medien o. auf anderen Portalen im Internet ansehen	*	*	*	*	*	*
Audio gesamt (netto)	**84**	**83**	**–1**	**77**	**76**	**–1**
Radio zum Zeitpunkt der Ausstrahlung hören	82	78	–4	76	74	–2
Radiosendungen bzw. -beiträge zeitversetzt/Podcasts hören	*	*	*	*	*	*
Musik über YouTube hören	*	*	*	*	*	*
Musik über Streamingdienste wie Spotify/Amazon Music hören	*	*	*	*	*	*
Musik auf CD/mp3/Download hören	5	5	±0	*	*	*
Hörbücher/Hörspiele auf CD/mp3/Download hören	*	*	*	*	*	*
Text gesamt (netto)	**46**	**47**	**+1**	**61**	**71**	**+10**
gedruckte Zeitung/Zeitschrift lesen	29	25	–4	45	54	+9
gedruckte Bücher lesen	11	15	+4	22	30	+8
Artikel/Berichte im Internet/App lesen, alle Plattformen (netto)	12	14	+2	10	7	–3
E-Books lesen	*	*	*	*	*	*
Nichtmediales Internet inkl. Kommunikation (netto)	**49**	**51**	**+2**	**25**	**32**	**+7**
online shoppen/etwas erledigen/Onlinebanking	5	5	±0	*	*	*
Kommunikation über Chat/E-Mail/Messenger/WhatsApp	35	40	+5	20	23	+3
Onlinespiele gespielt	6	7	+1	*	*	*
kurz informiert/schnelle Suche	10	14	+4	5	6	+1
einfach nur gesurft	9	6	–3	*	*	*

Basis: Deutschspr. Bevölkerung ab 14 Jahren (n=3 003). Vor Lockdown 26.1.2020-15.3.2020: n=1 237; während Lockdown 16.3.2020-26.4.2020: n=1 766.

Quelle: ARD/ZDF-Massenkommunikation Langzeitstudie.

Results



Exp 2: $p < .001$, $\eta^2_p = .037$;

Schmid, P., Schwarzer, M., & Betsch, C. (2020). Weight-of-evidence strategies to mitigate the influence of messages of science denialism in public discussions. *Journal of cognition*, *3*(1).

Prebunking message A (mRNA Vaccine)

Wanting to be well informed is good. It is also important to know that some people may spread false information (disinformation) in **different ways**:

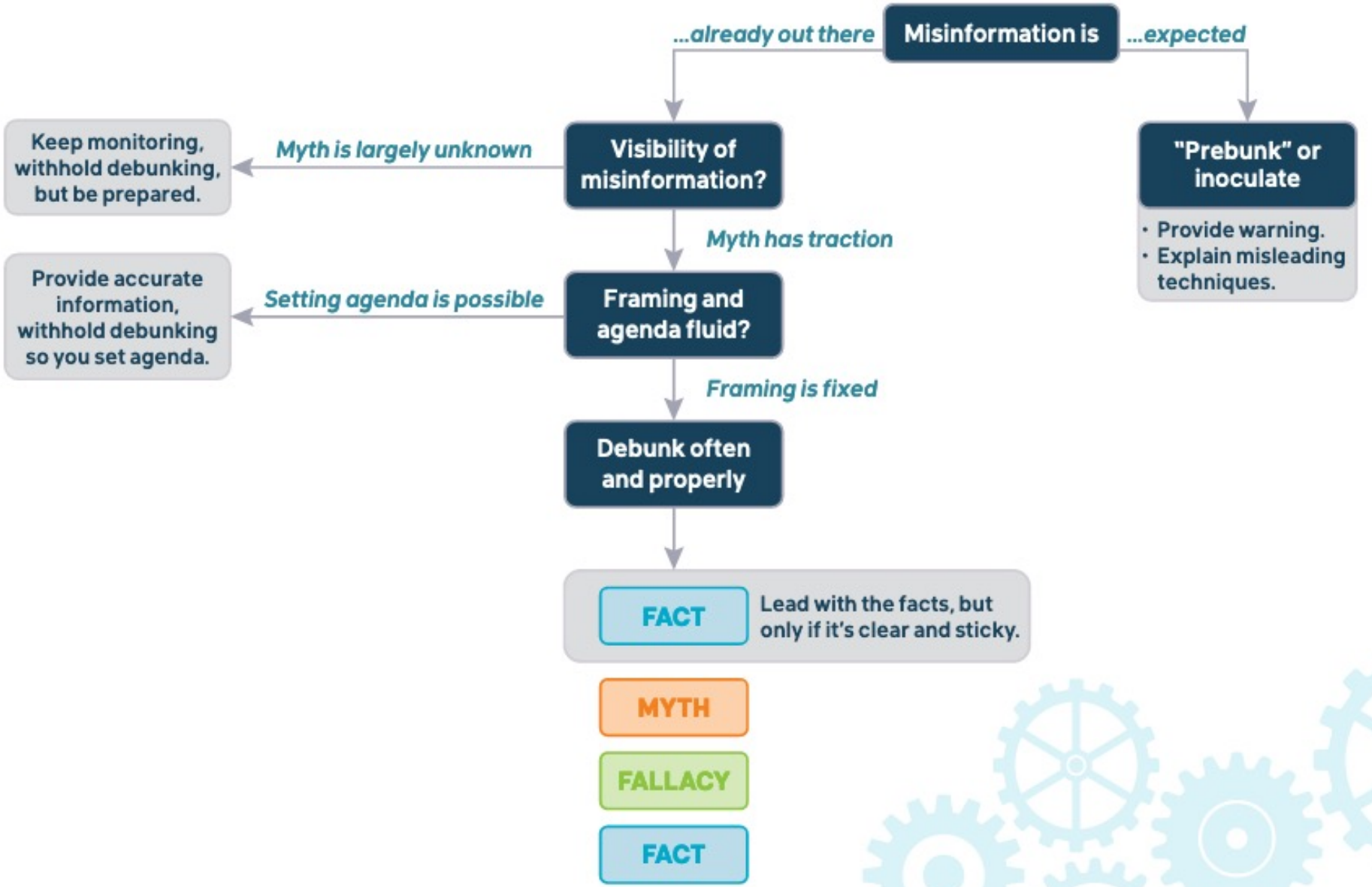
False information about the COVID-19 vaccines' technology - messenger RNA (mRNA) - circulates online. You may encounter scary claims about the potential **permanent genetic change that** mRNA vaccines could do to our DNA.

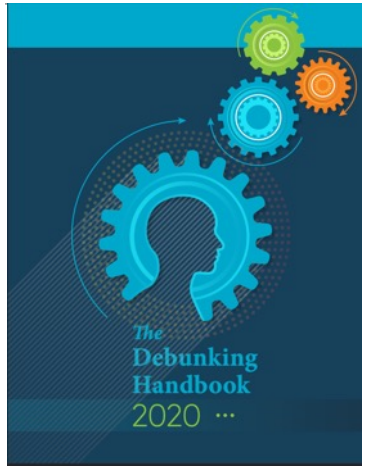
Those false claims tend to rely on the following techniques to mislead you:

- Scaring people with shocking claims: for example, "mRNA vaccines can change your DNA forever!"
- Cherry-picking information or experts and using them out of context: for example, "Dr Robert said that mRNA vaccines are risky"
- Presenting false claims as though they are valid and accepted by everyone: for example, "mRNA vaccines attack your DNA"

The truth is, scientists have been studying mRNA vaccines for decades. This technology works the same way as other vaccines: it stimulates the immune system to protect people from infections. The mRNA vaccines tell our cells to create a defense against COVID-19 using little mRNA particles containing temporary messages. These messages **don't last long** and are destroyed by the body after use. They **cannot** damage our DNA.

Vivion, M., Anassour Laouan Sidi, E., Betsch, C., Dionne, M., Dubé, E., Driedger, S. M., ... & Canadian Immunization Research Network (CIRN). (2022). Prebunking messaging to inoculate against COVID-19 vaccine misinformation: An effective strategy for public health. *Journal of Communication in Healthcare*, 1-11.


Misinformation is
...already out there
...expected
Visibility of misinformation?
Myth is largely unknown
Keep monitoring, withhold debunking, but be prepared.
Myth has traction
Framing and agenda fluid?
Setting agenda is possible
Provide accurate information, withhold debunking so you set agenda.
Framing is fixed
Debunk often and properly
"Prebunk" or inoculate
• Provide warning.
• Explain misleading techniques.
FACT
Lead with the facts, but only if it's clear and sticky.
MYTH
FALLACY
FACT


The
Debunking
Handbook
2020

Step 4: Motivational Interviewing

"Ensure that the entire health workforce has a comprehensive understanding of the value of immunization and has the capacity to effectively communicate the benefits of immunization and address questions and concerns raised by the public."

Target group

World Health Organization. (2016). *How to respond to vocal vaccine deniers in public: best practice guidance* (No. WHO/EURO: 2017-2899-42657-59427). World Health Organization. Regional Office for Europe.

Doctor:
It is im[illegible]t that you vac[illegible]e you[illegible]hild! Did[illegible]ou k[illegible]w [illegible]ople die [illegible]m it? [illegible]u the other side effects...
Patient: …

Open Questions

Reflective Listening

Affirmation

Doctor:
What do you think of the benefits of vaccination?
Patient: Well, vaccinations may protect, but I'm concerned that something will happen. This one study by…

Doctor:
You recognize the benefits of vaccinations, but only if they are sufficiently safe. I see you have informed yourself a lot! You're right. There was one study, but...

Motivational Interviewing

Goal: Strengthen the relationship, show empathy and interest.
Question: What is the actual reality of the individual?

Gagneur, A., Gosselin, V., & Dubé, È. (2018). Motivational interviewing: A promising tool to address vaccine hesitancy. *Vaccine*, *36*(44), 6553-6555.

Traditional

HCP: It's important to immunize your child. If not, you're putting him in danger. Do you know there are still cases of measles in Canada? This disease could be very dangerous. And what about meningitis? It could be fatal, you know? You should update your child's vaccinations as he is already late according to the schedule. We could do that now if you want.
Mother: I don't see the urgency. And autism is worse than measles! There are more problems than solutions with this vaccine. Moreover, it's completely unbelievable to give so many vaccines at the same time!
HCP: Studies have demonstrated that there is no link between autism and the measles vaccine. The vaccine is safe, I assure you. You should be aware of the information that you could find on the Internet. Giving several vaccines at the same time is safe and is not associated with more pain. We should update his vaccines now.
Mother: I've heard something else and not only on the Internet. I've read a lot, and vaccination is not mandatory, I can do what I want.

Gagneur A. (2020). Motivational interviewing: A powerful tool to address vaccine hesitancy. *Canada communicable disease report = Releve des maladies transmissibles au Canada*, *46*(4), 93–97. https://doi.org/10.14745/ccdr.v46i04a06

MI

HCP: What do you think about the advantages of vaccination? [Open-ended question]
Mother: Well, I know that vaccines protect children against several diseases that we don't see anymore. My child received all his first vaccines but I'm worried that the measles vaccine could cause autism. For other vaccines, I have fewer doubts but I'm still hesitating.
HCP: As you said, vaccines have reduced diseases in such an important way that they are now much less frequent. It's why you have vaccinated your child when he was a baby. If I understood you correctly, with the exception of measles vaccine, other vaccines seem safe to you. [Summary; Complex Reflection]
Mother: Yes, I know it's a good thing to prevent those infections. But about measles, I'm conflicted. You know, I've read a lot of books and articles. Lots of people are worried about the link between the measles vaccine and autism.
HCP: So, you find that it's important to protect your child against diseases when the vaccines are safe, but you're

Gagneur A. (2020). Motivational interviewing: A powerful tool to address vaccine hesitancy. *Canada communicable disease report = Releve des maladies transmissibles au Canada*, *46*(4), 93–97. https://doi.org/10.14745/ccdr.v46i04a06

Practice 3 – No recording

Task 4

…

HCP: [Open-ended question]
Patient:
HCP: [Reflection] [Affirmation] [Offer Information]
Patient:
HCP:

Three key messages

The scientific consensus

"90% of medical professionals agree vaccines are safe"

van der Linden, S. L., Clarke, C. E., & Maibach, E. W. (2015). Highlighting consensus among medical scientists increases public support for vaccines: evidence from a randomized experiment. *BMC public health*, *15*(1), 1207.

The recommendation of the doctor

"I strongly recommend to get vaccinated."

The community protection

"By getting vaccinated, you also protect others who cannot be vaccinated."

Betsch C, Böhm R, Korn L, & Holtmann C (2017). On the benefits of explaining herd immunity in vaccine advocacy. *Nature Human Behaviour*

Brewer, N. T., Chapman, G. B., Rothman, A. J., Leask, J., & Kempe, A. (2017). Increasing vaccination: putting psychological science into action. *Psychological Science in the Public Interest*, *18*(3), 149-207.

The emotional path to action: Empathy promotes physical distancing and wearing of face masks during the COVID-19 pandemic

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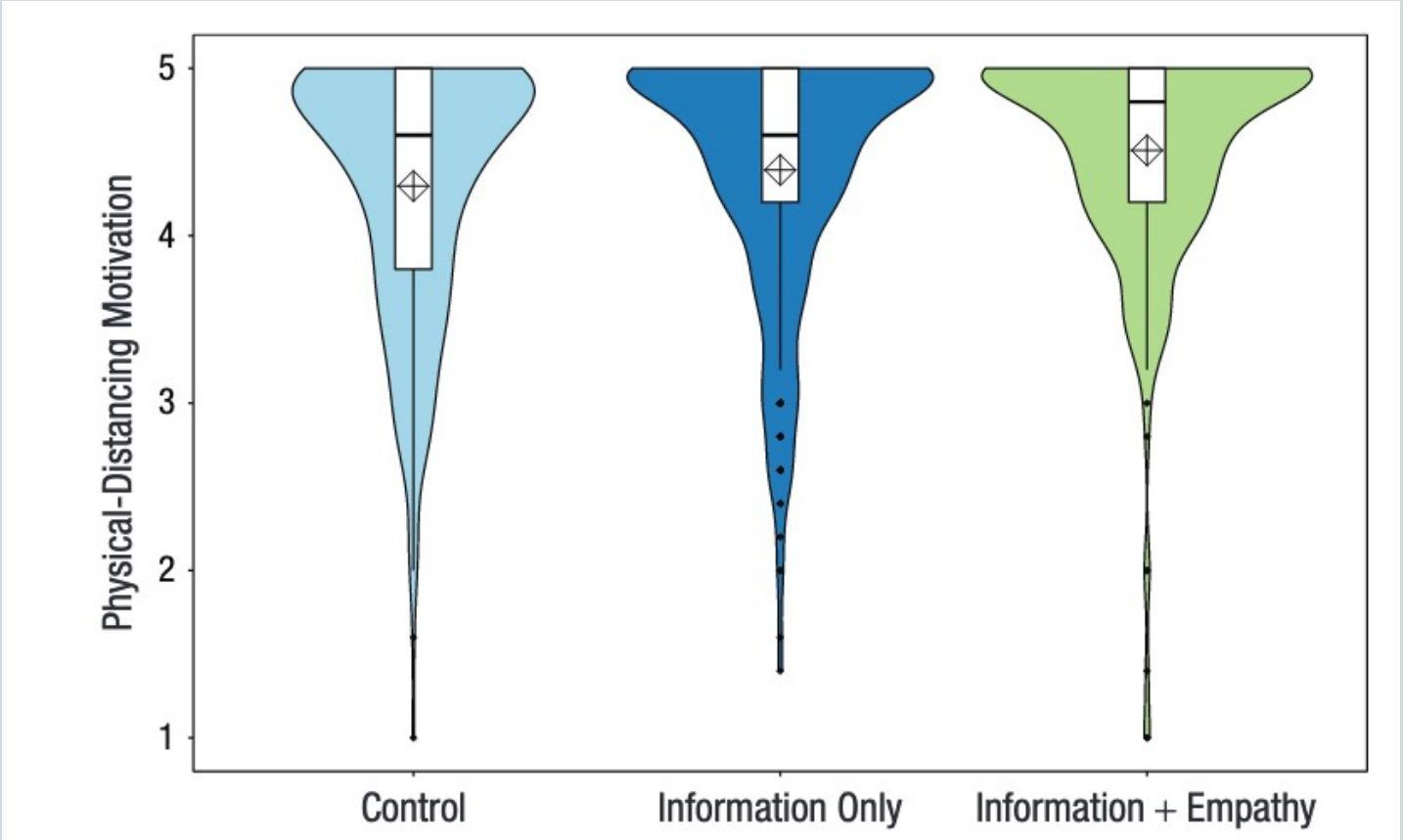

nature

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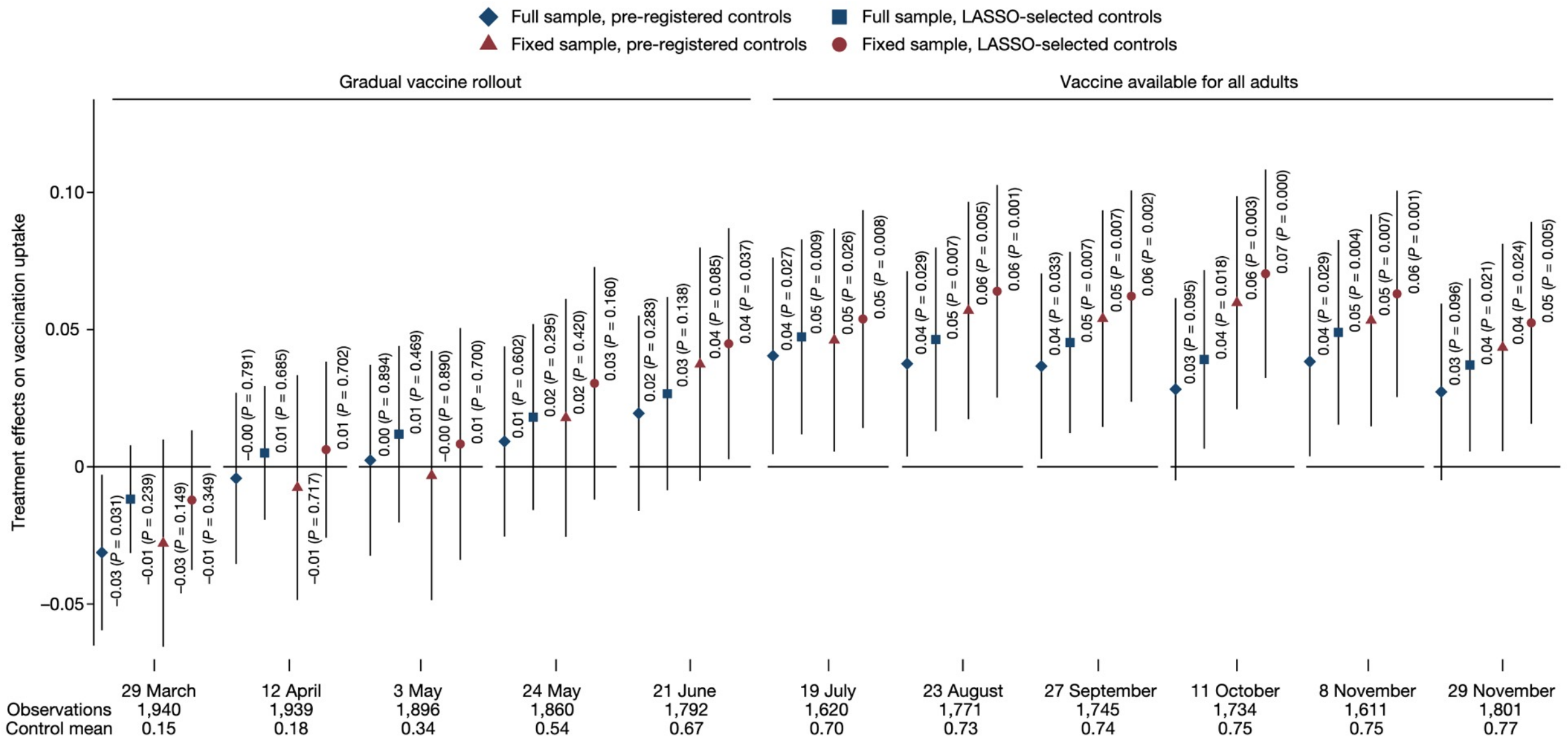
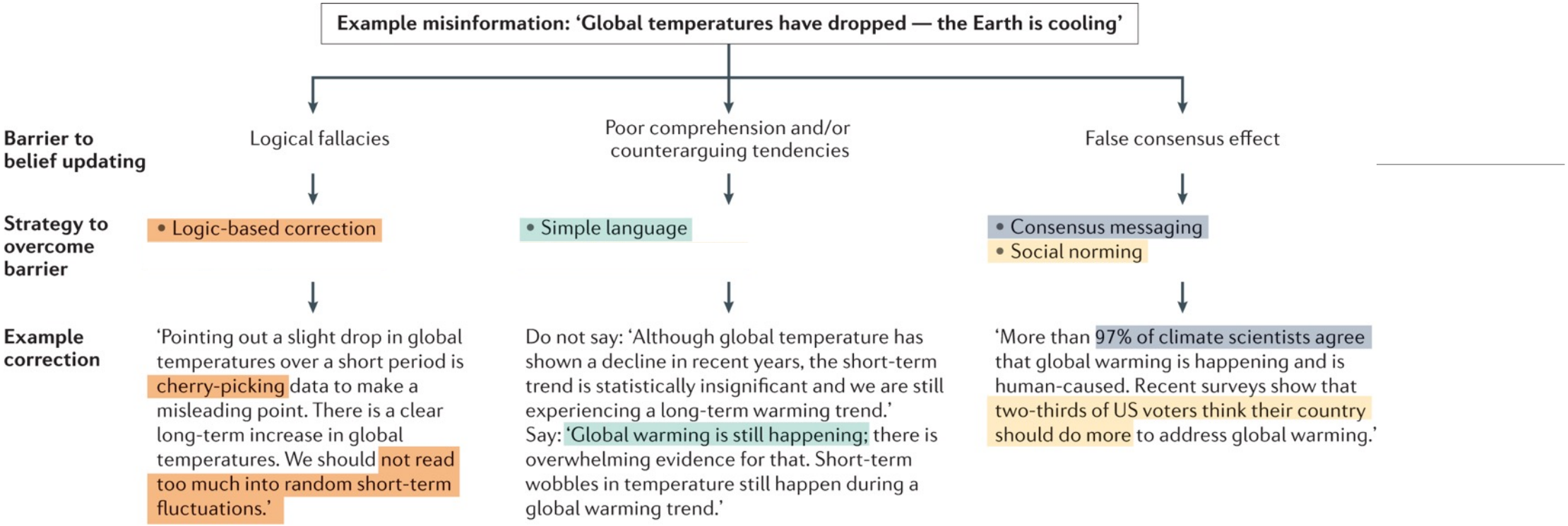
Communicating doctors' consensus persistently increases COVID-19 vaccinations

Vojtěch Bartoš ✉, Michal Bauer, Jana Cahlíková & Julie Chytilová

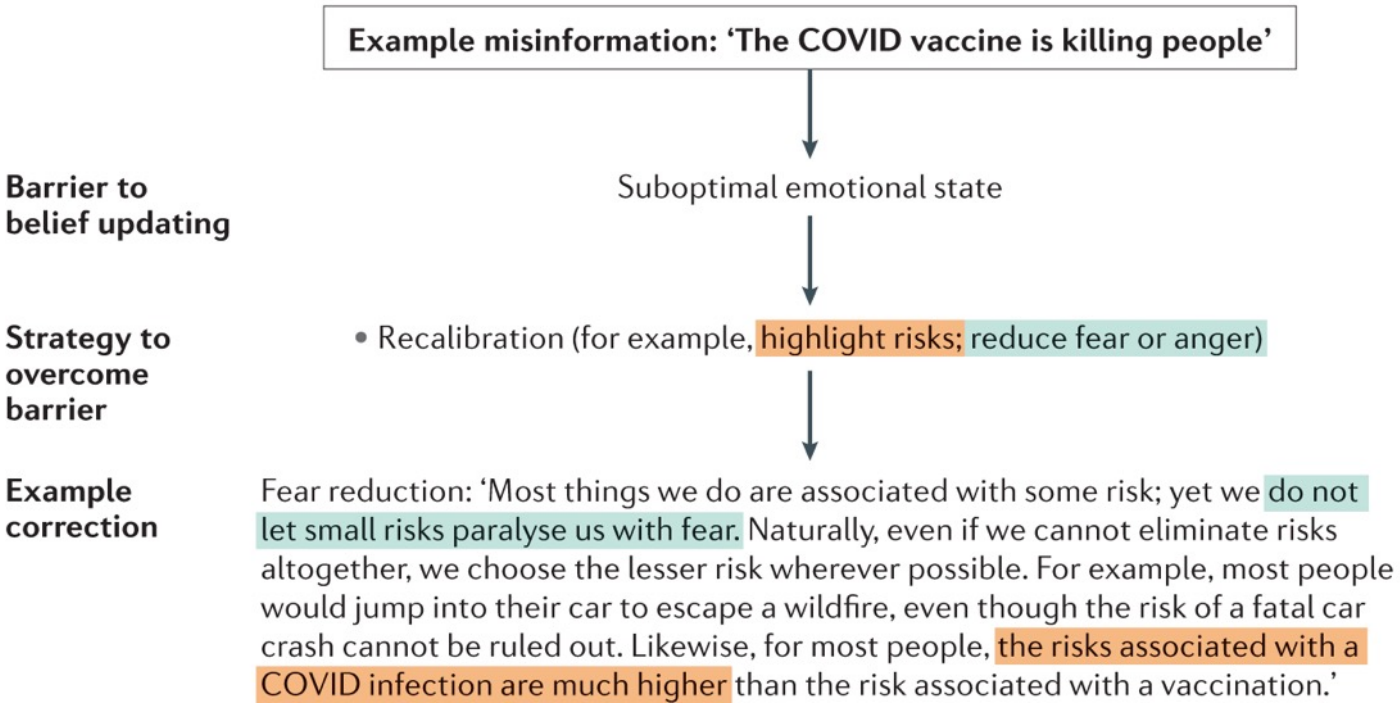
Nature (2022) | Cite this article


Full sample, pre-registered controls
Full sample, LASSO-selected controls
Fixed sample, pre-registered controls
Fixed sample, LASSO-selected controls
Gradual vaccine rollout
Vaccine available for all adults
Treatment effects on vaccination uptake
0.10
0.05
0
−0.05
−0.03 (P = 0.031)
−0.01 (P = 0.239)
−0.03 (P = 0.149)
−0.01 (P = 0.349)
−0.00 (P = 0.791)
0.01 (P = 0.685)
−0.01 (P = 0.717)
0.01 (P = 0.702)
0.00 (P = 0.894)
0.01 (P = 0.469)
−0.00 (P = 0.890)
0.01 (P = 0.700)
0.01 (P = 0.602)
0.02 (P = 0.295)
0.02 (P = 0.420)
0.03 (P = 0.160)
0.02 (P = 0.283)
0.03 (P = 0.138)
0.04 (P = 0.085)
0.04 (P = 0.037)
0.04 (P = 0.027)
0.05 (P = 0.009)
0.05 (P = 0.026)
0.05 (P = 0.008)
0.04 (P = 0.029)
0.05 (P = 0.007)
0.06 (P = 0.005)
0.06 (P = 0.001)
0.04 (P = 0.033)
0.05 (P = 0.007)
0.05 (P = 0.007)
0.06 (P = 0.002)
0.03 (P = 0.095)
0.04 (P = 0.018)
0.06 (P = 0.003)
0.07 (P = 0.000)
0.04 (P = 0.029)
0.05 (P = 0.004)
0.05 (P = 0.007)
0.06 (P = 0.001)
0.03 (P = 0.096)
0.04 (P = 0.021)
0.04 (P = 0.024)
0.05 (P = 0.005)
29 March
12 April
3 May
24 May
21 June
19 July
23 August
27 September
11 October
8 November
29 November
Observations 1,940 1,939 1,896 1,860 1,792 1,620 1,771 1,745 1,734 1,611 1,801
Control mean 0.15 0.18 0.34 0.54 0.67 0.70 0.73 0.74 0.75 0.75 0.77



Barriers to belief updating

Ecker, U. K., Lewandowsky, S., Cook, J., Schmid, P., Fazio, L. K., Brashier, N., ... & Amazeen, M. A. (2022). The psychological drivers of misinformation belief and its resistance to correction. *Nature Reviews Psychology*, *1*(1), 13-29.



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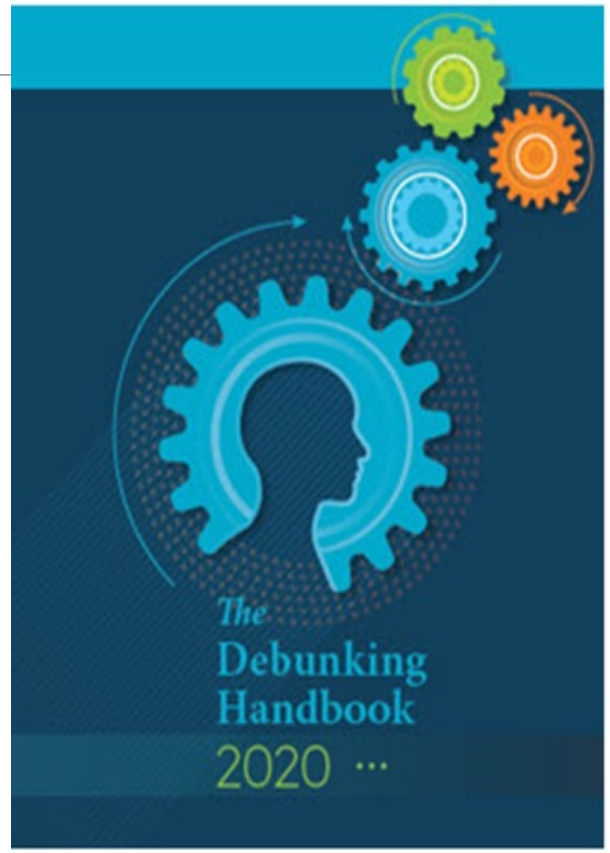
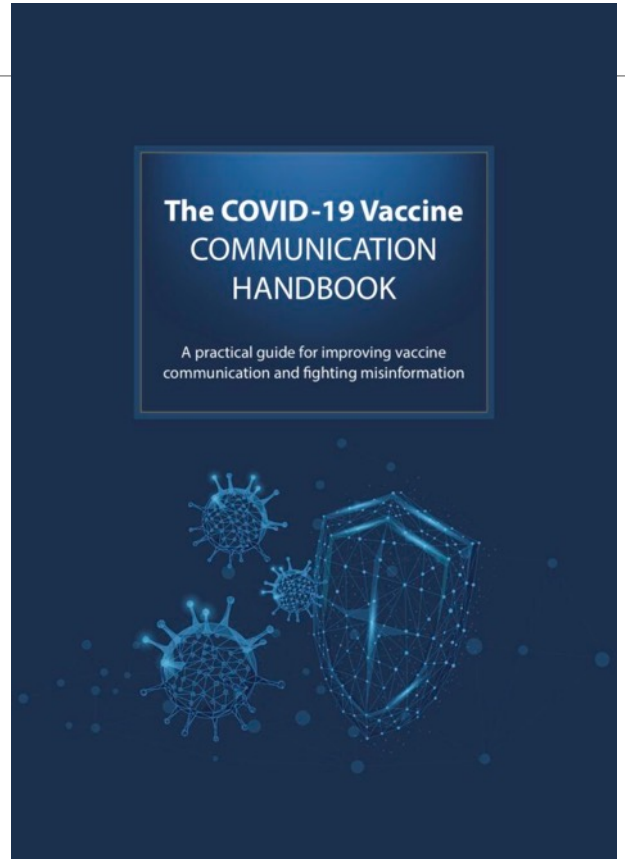
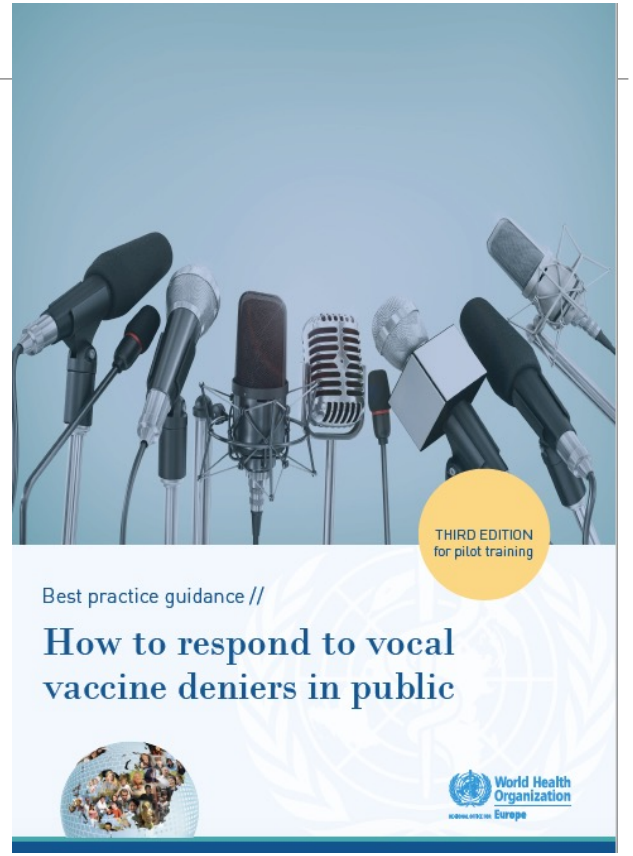

The
Debunking
Handbook
2020


The COVID-19 Vaccine
COMMUNICATION
HANDBOOK
A practical guide for improving vaccine communication and fighting misinformation

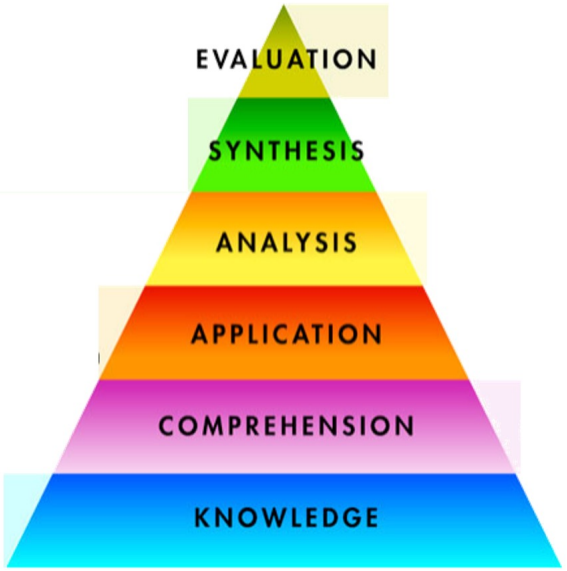

THIRD EDITION
for pilot training
Best practice guidance //
How to respond to vocal vaccine deniers in public
World Health Organization
Europe

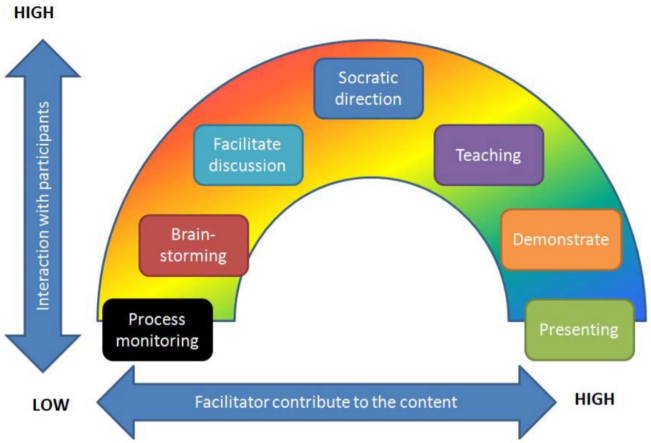
https://jitsuvax.github.io/


Thank yo

EPSA TRAINING

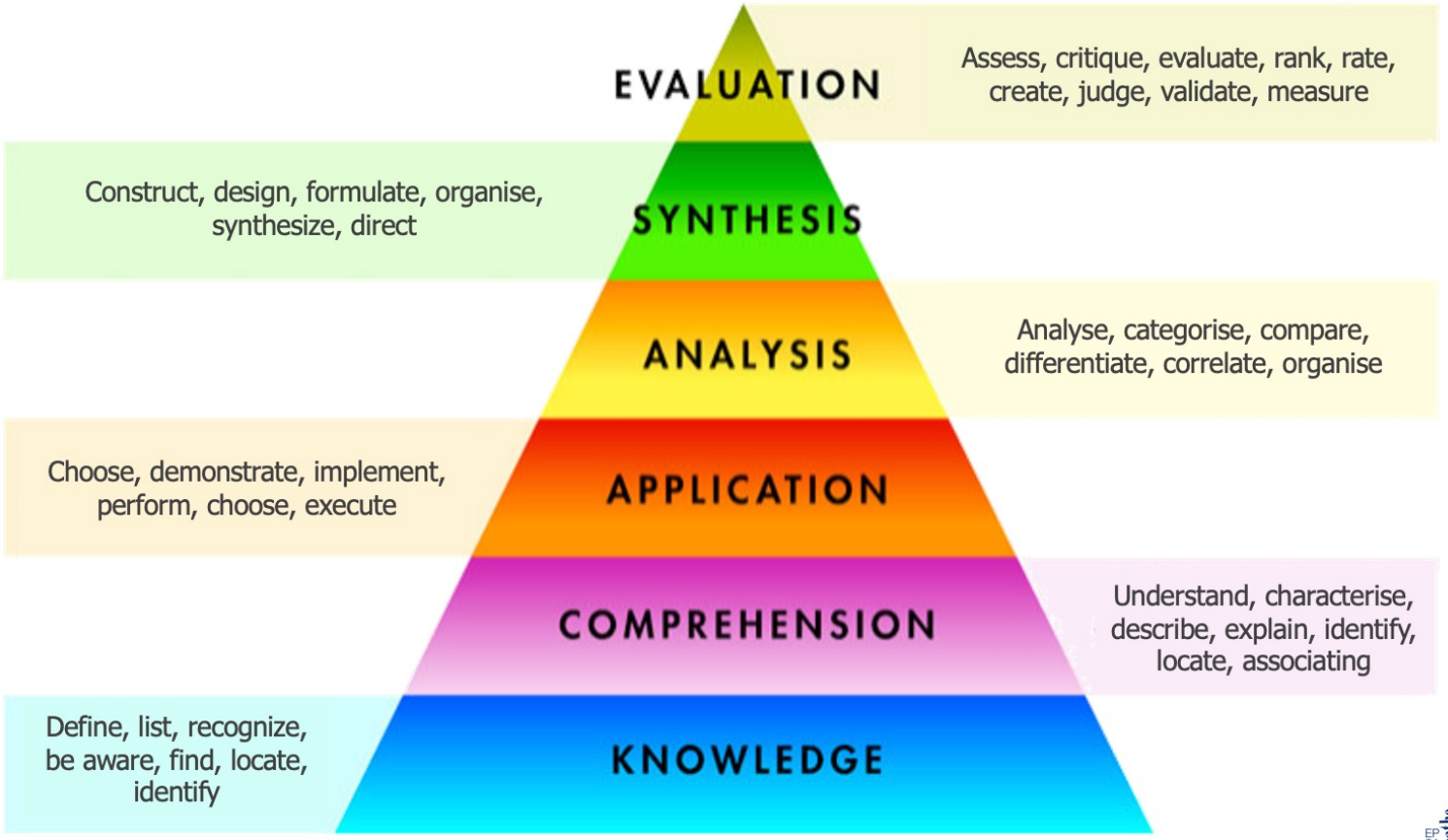
Tipps & Tricks for Teaching





EPSA TRAINING

Set Learning Goals



EPSA TRAINING

Have a structured session

EPSA TRAINING

Engage your audience