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Risk Perception and compliance: a matter of information or situation?

**Fighting pandemics with enhanced risk communication: Messages, compliance and vulnerability during the COVID-19 outbreak (PAN-FIGHT)
12 September 2022, Scandic Holmenkollen Park Hotell, Oslo, Norway**



Shipping in a Tempest off a Rocky Coast.

Bonaventura Peeters

Risk perceptions (Fischhoff et al. 1978, Slovic 1987), biases (Kahneman & Tversky 1979) and feelings (Slovic 2000), Trust (Slovic 1993, Renn& Levine 1991, Löffstedt 2005)

Risk Communication multi-way exchange to support risk/benefit decisions (Way et al. 2020)

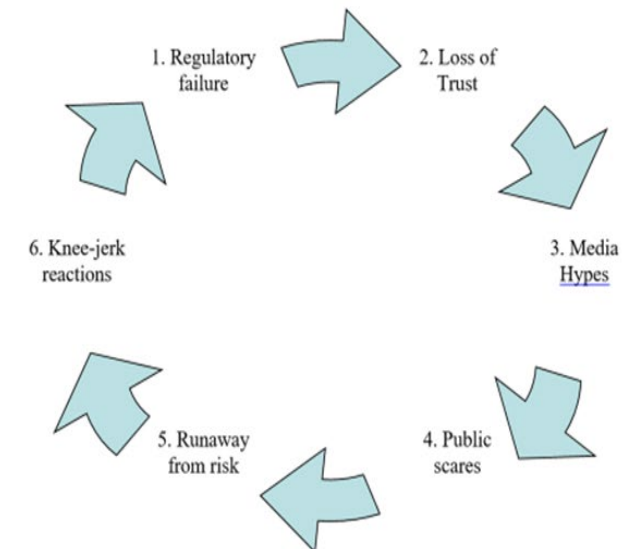
Effective risk communication is challenging (Bouder & Löffstedt 2010, Avrai& RiversIII 2013)

Risk communication and compliance:

- **Overestimate** behavioural change (Way et al. 2020)
- **Disconnects** acceptance from life impacts (Fischhoff 1978; Bouder et al. 2007)



Vicious cycle of risk aversion (Bouder 2008)



Covid19 raises issues about impact of science information

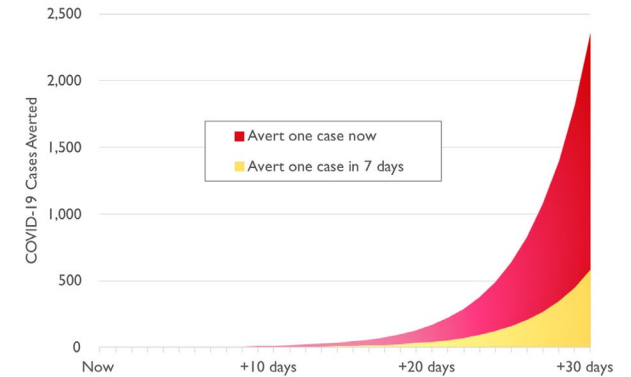
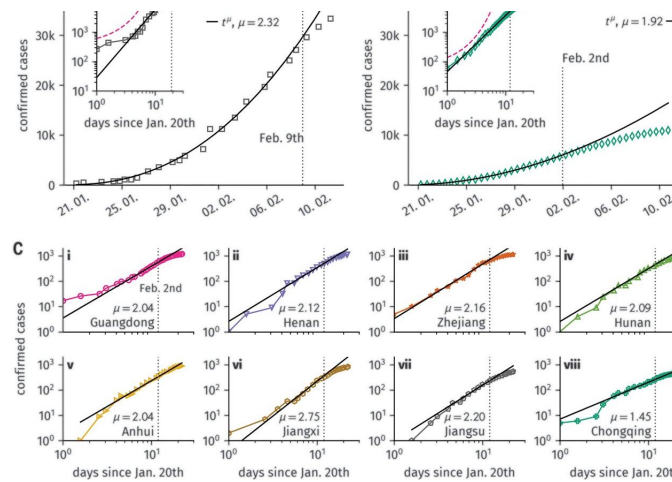
“Follow the Science” (Mercuri 2020) Yet which science? Modellers ony?

Standards of science (Rugeri et al 2020; Aven&Bouder 2020)

Evolving advice- e.g. on face covering (Shapiro & Bouder 2020)

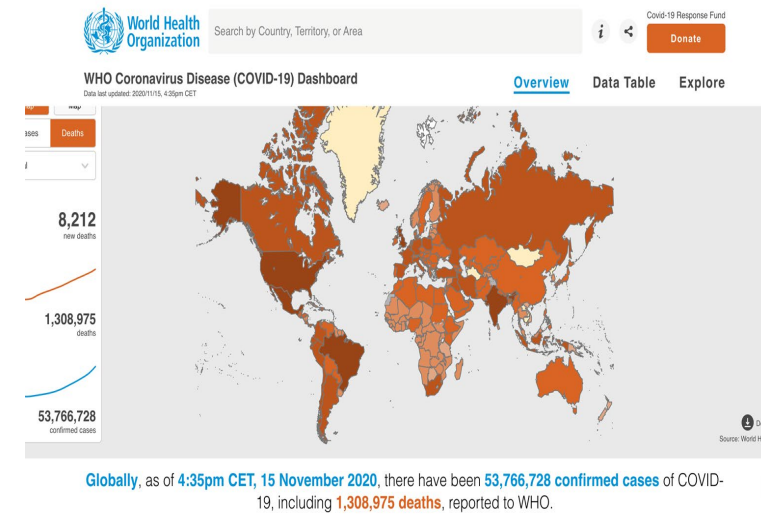
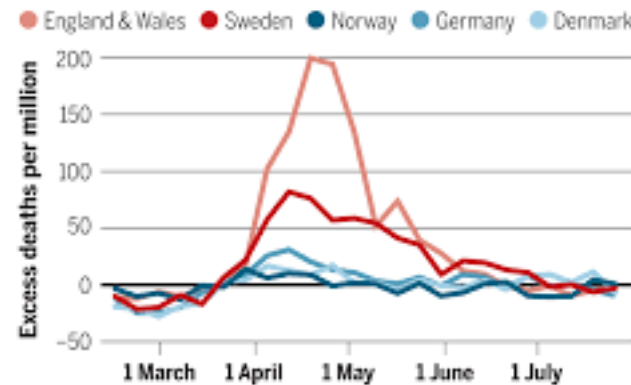
Media and social networks: amplification and attenuation (Kasperson et al. 1988; Pidgeon et al. 2003)

Susceptibility to misinformation (Roozenbeek et al. 2020)



Unwelcome distinction

One measure of COVID-19's impact, excess mortality, was far higher in Sweden than in neighboring countries and Germany, but not as high as in England and Wales.



Compliance and pandemics

Past pandemics

- Connect the views and actions of risk experts with those of the general public (Burton-Jeangros, 2019, p. 109)
- Exchanging critical knowledge to support decision-making (Fischhoff et al. 2017)

This pandemic

- Social norms particularly important (Goldberg et al. 2020)
- Variations across age groups (Bruine de Bruin 2020; Way et al.2020)
- People's disagreements about the risks, variations in perceptions of the need for protective behaviours (Bruine de Bruin & Bennett 2020)
- Have we put facts before feelings?

Anthropological research in Norway

Shapiro et al. 2022

Is compliance derived from trust [in government]? Transparency, efficiency and professionalism (NOU 2021)?

What we found is far more complex: tensions between national interpretations of compliance and people's perceptions

“I don't trust authorities, I don't distrust them. It's more about the feeling of not obeying the rules, like, the signals that you send to your community”

Relational perception of compliance: central role of one own's image as a “good citizen” and “considerate kin”. This may involve tensions and inadequacies between what is asked and what feels right

“This is an open-eyed society, people are following , [and] we can't do so much without people watching us (...) I think this is everyone is trying to keep the rules ”.

Survey across:

- Five countries
Evensen et al. 2022
- 2 countries
Mahdavian et al.
2022

Risk Perception and behaviour

How people rate and interpret the different kinds of risks related to the Covid-19 pandemic?

What do they do with these interpretations in actual life, including the advice they follow or not?

Channels of communication Issues

Where do people get their information from and how satisfied they are with it?

How experts and governments communicated risk?

Adjustments and impacts on lives

How did people adjust their behaviour in this unusual period?

What was the impact on individual behaviour and social relations, including in the family?

Demographics

Some results from the Survey

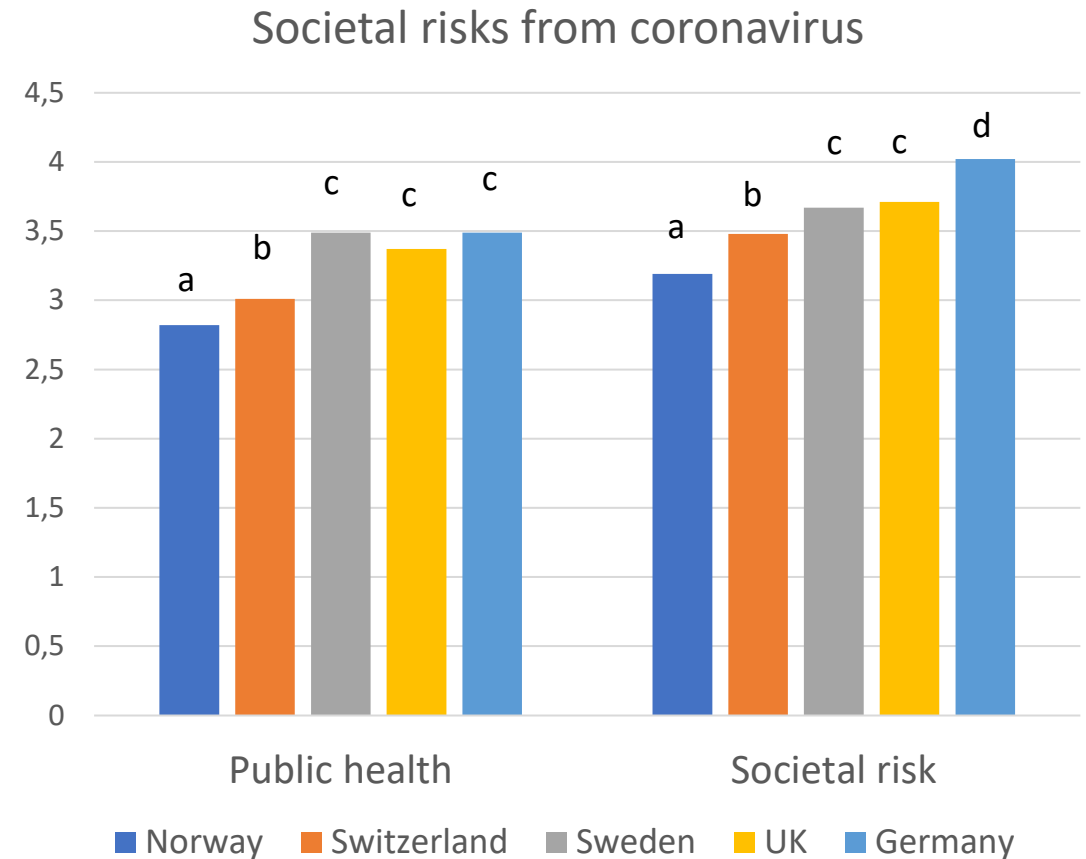
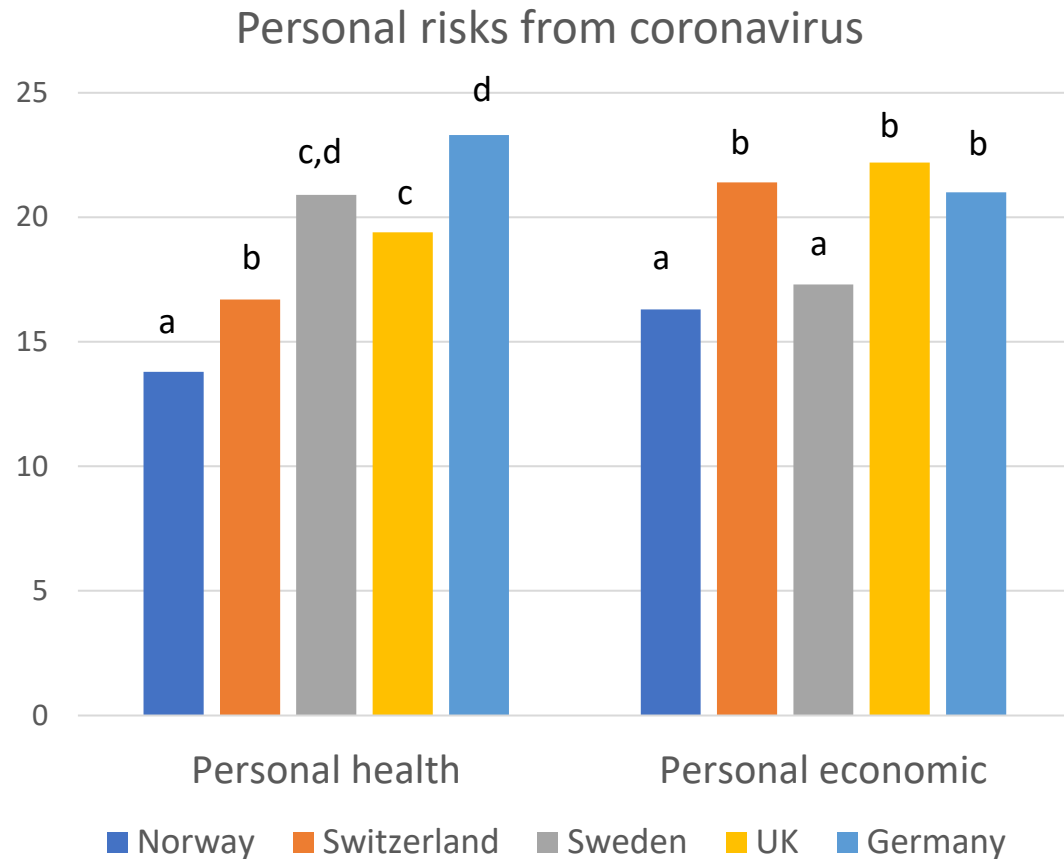
Risk perceptions associated with COVID-19

- Personal health risks (3 items, $\alpha = 0.88$)
 - *Percentage chance: get COVID, hospitalised due to COVID, die from COVID*
- Public health risks (3 items, $\alpha = 0.82$)
 - *Risk more people fall ill, or die, than elsewhere; health services overstretched*
- Personal economic risks (3 items, $\alpha = 0.81$)
 - *Percentage chance: worse financial situation; you, or family, lose job*
- Societal risks (economic and social) (6 items, $\alpha = 0.80$)
 - *Risk of: deep econ. crisis, national debt increase, hard on small businesses, loss of trust in public authorities, lack of community/solidarity, children missing school*
- Correlation of 0.45 between personal factors, 0.32 for health factors, 0.29 for personal economic and societal risk
- Compare these four across: Country, age, man/woman, city size

On a scale of 0 to 100 percent, what is the chance that in the next three months you will:
Percentage chance

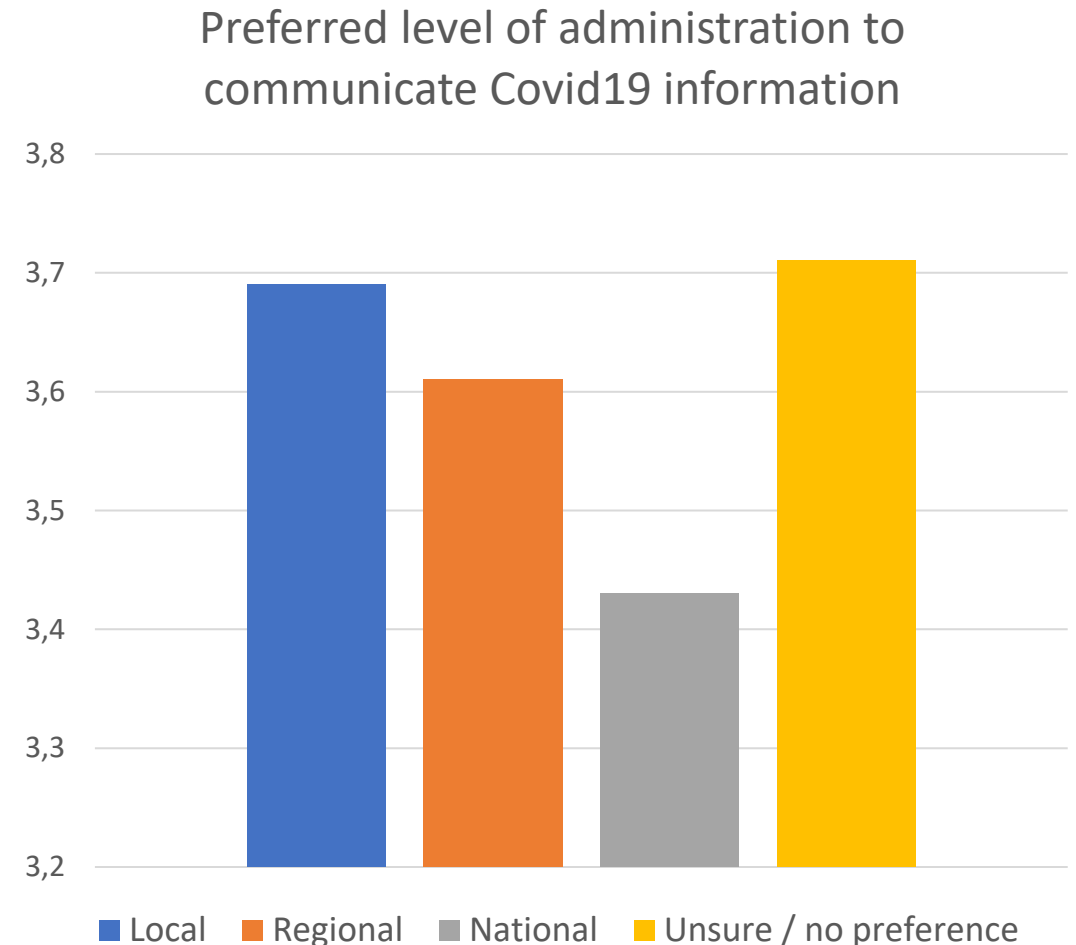
No risk at all	Low level of risk	Moderate level of risk	Significant risk	Severe risk	Don't know
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Perceptions of risks from coronavirus, by country

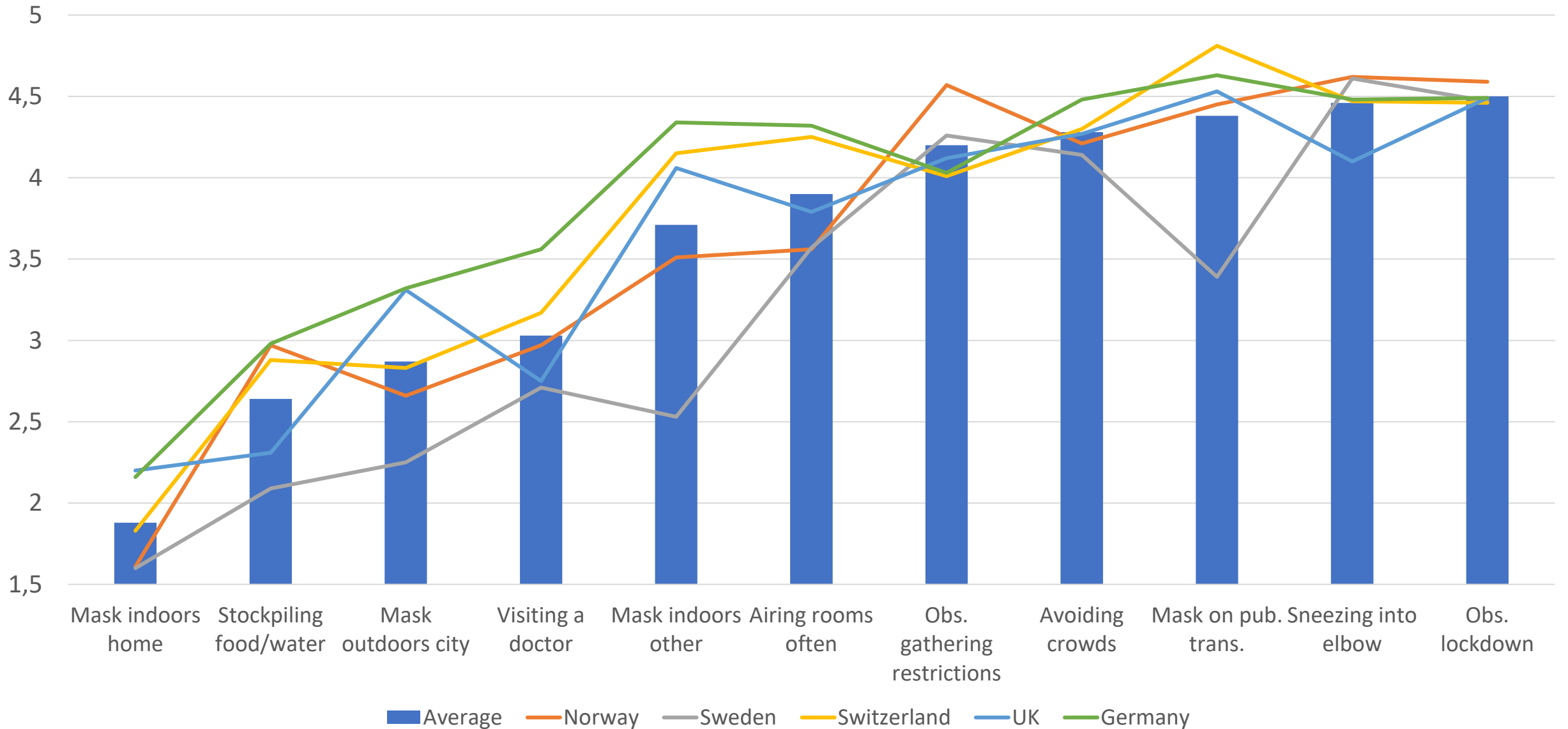


Relationship between trust and risk communication

- Strong correlations for risk of **loss of trust in public authorities** with official **messages being clear/understandable** (-0.29) and official **recommendations being consistent** (-0.33) – strongest in NOR, SWITZ, SWE
- Significantly **higher trust** for people wanting **national regulation** (as opposed to regional or local), and for people thinking the **correct level of information** has been provided by authorities – $p < 0.001$ for all.
- Trust diff. between people wanting local vs national regulation particularly in Norway



Frequency of COVID risk mitigation behaviours



Take home lessons

1. The relationship between perception, communication trust and compliance much more complex than decision makers often like to think – We need to better understand perception
2. In Norway “social norms” coming before institutional trust?
3. Confirmed: people are worried by many more things than direct impact on personal health
4. We observe significant variations across 5 countries in terms of perceived personal health risks , as well as economic and social risks
5. Unlike prevalent approach overly dependent on personal health impact it is therefore important to precisely define personal economic risks plus societal factors. Integrated cross-analysis needed!