

PSYCHOLOGICAL SCIENCE MEETS POLICY



SYMPOSIUM LESSONS LEARNED FROM THE PANDEMIC



KU LEUVEN



PART 1: THEMATIC SESSIONS

Motivation and risk perception



Vaccination and communication



Wellbeing

MOTIVATION AND RISK PERCEPTION

Mathias Schmitz & Olivier Luminet

Motivation: two key questions

- 1 Which motivational factors play a role in predicting people's adherence to the measures?
- 2 Are stricter measures demotivating?

Which motivational factors play a critical role?

Which motivational factors play a critical role in adherence?

1 Autonomous motivation (« want-ivation »)

- Internalization & ownership of the measures (meaningful, coherent, aligned with values)
- Self-driven and sustainable over time
- Best predictor of adherence (even for difficult measures)

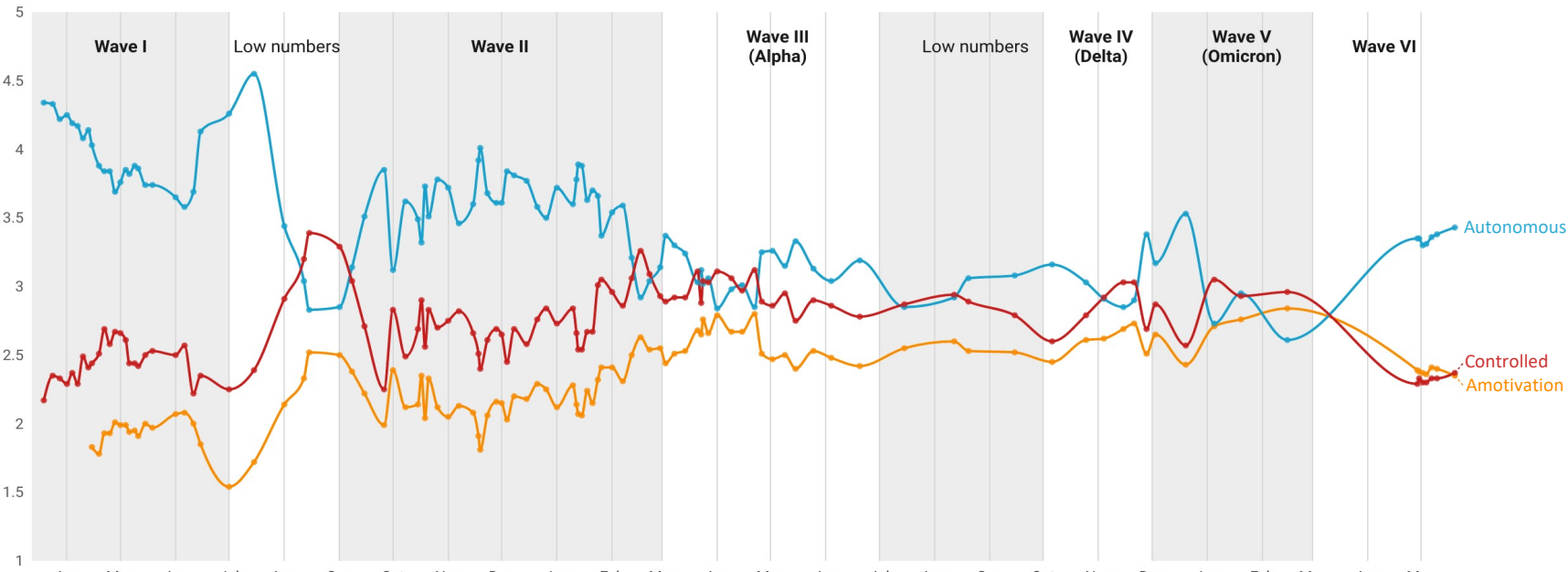
2 Controlled motivation (« must-ivation »)

- External pressures (rewards/sanctions, social approval)
- Short-lived (disappear when pressures are lifted)
- May have a negative impact on adherence (backfire, reactance)

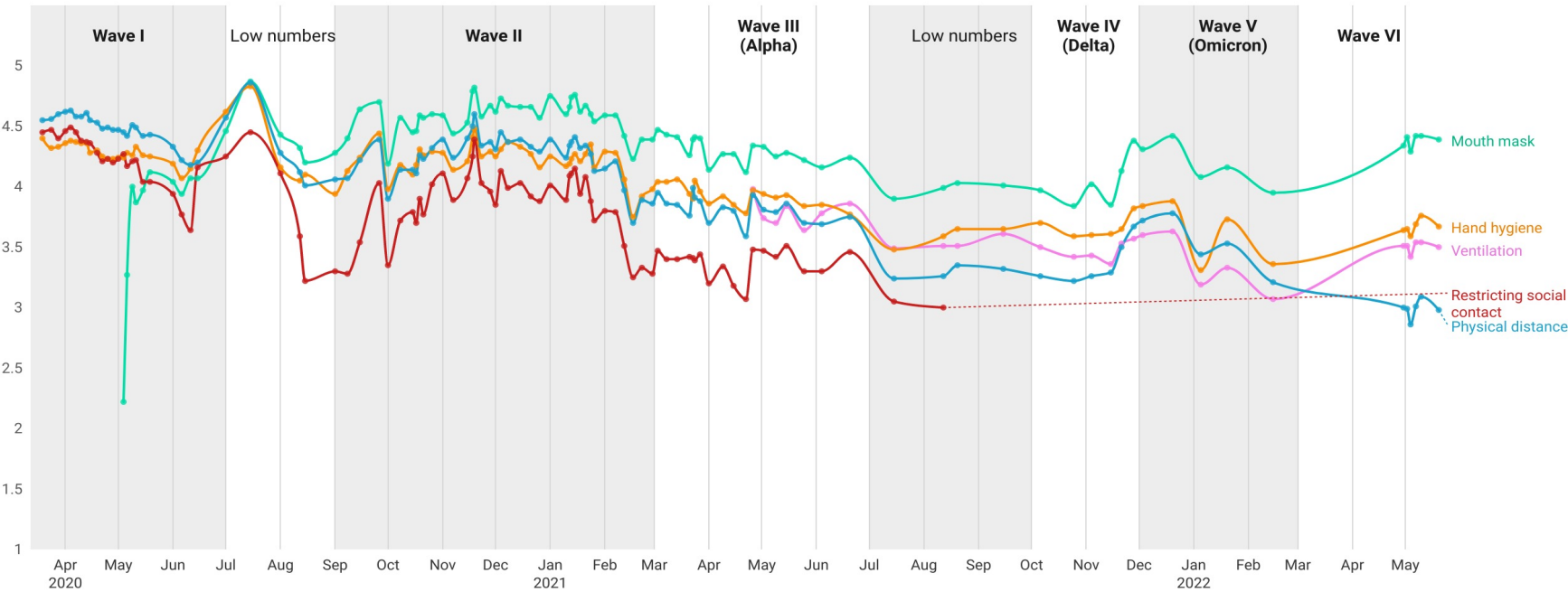
3 Amotivation (lack of motivation)

- Measures not perceived as effective
- Takes too much effort

Motivation during the COVID-19 pandemic in Belgium



Adherence during the COVID-19 pandemic in Belgium



Which factors affect motivation?

Motivation is affected by:

- **Social norms:** We tend to imitate what people around us do and believe
- **Sense of competence:** Do I have the capacity to carry out and stick to the measures? (e.g., hand washing vs. social contact limitation)
- (Lack of) **trust in the politicians** (e.g., second wave, see Report 37)
- **Epidemiological situation & risk perception** (detailed later)

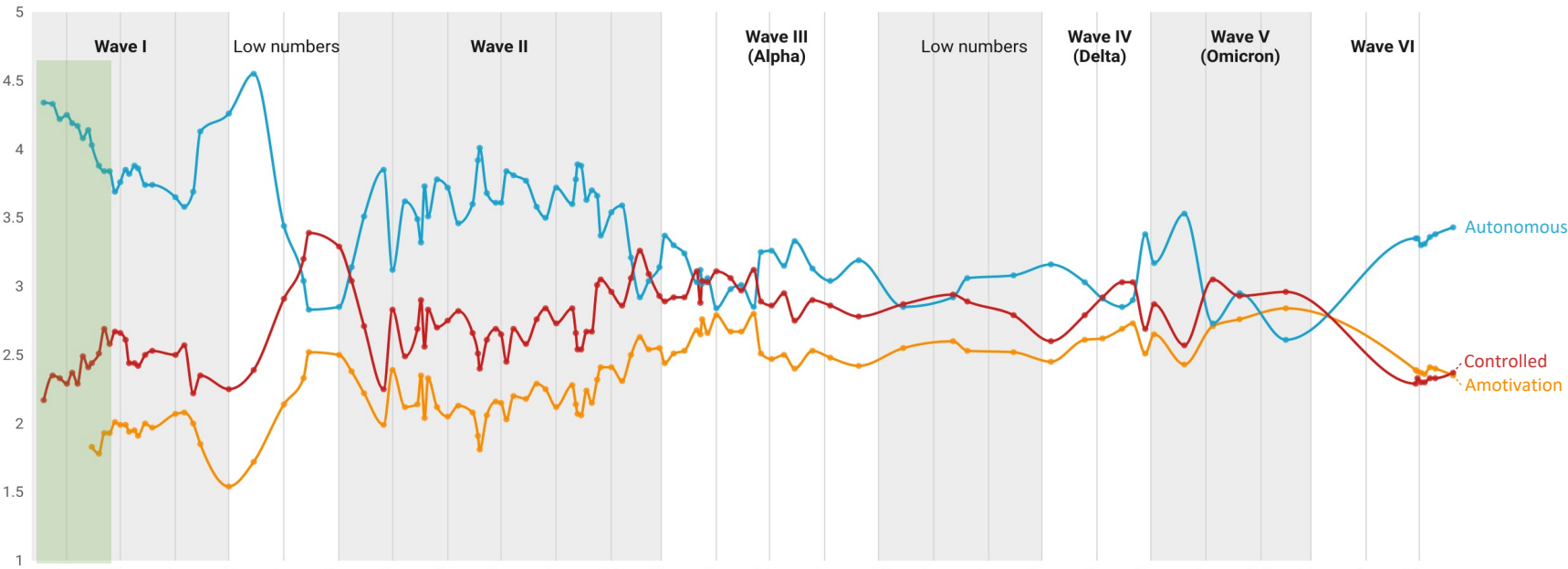
Are stricter measures demotivating?

- Hesitancy in politicians to take stricter measures because of fear to demotivate people
- Not necessarily the case! **No linear relation between strictness and demotivation**
- People will follow **strict measures** if:
 - **Meaningful** (fit between risk and strictness)
 - **Coherent** (e.g., across life domains, across time)
- Conversely, people will not follow if meaningless and incoherent
- Some examples...

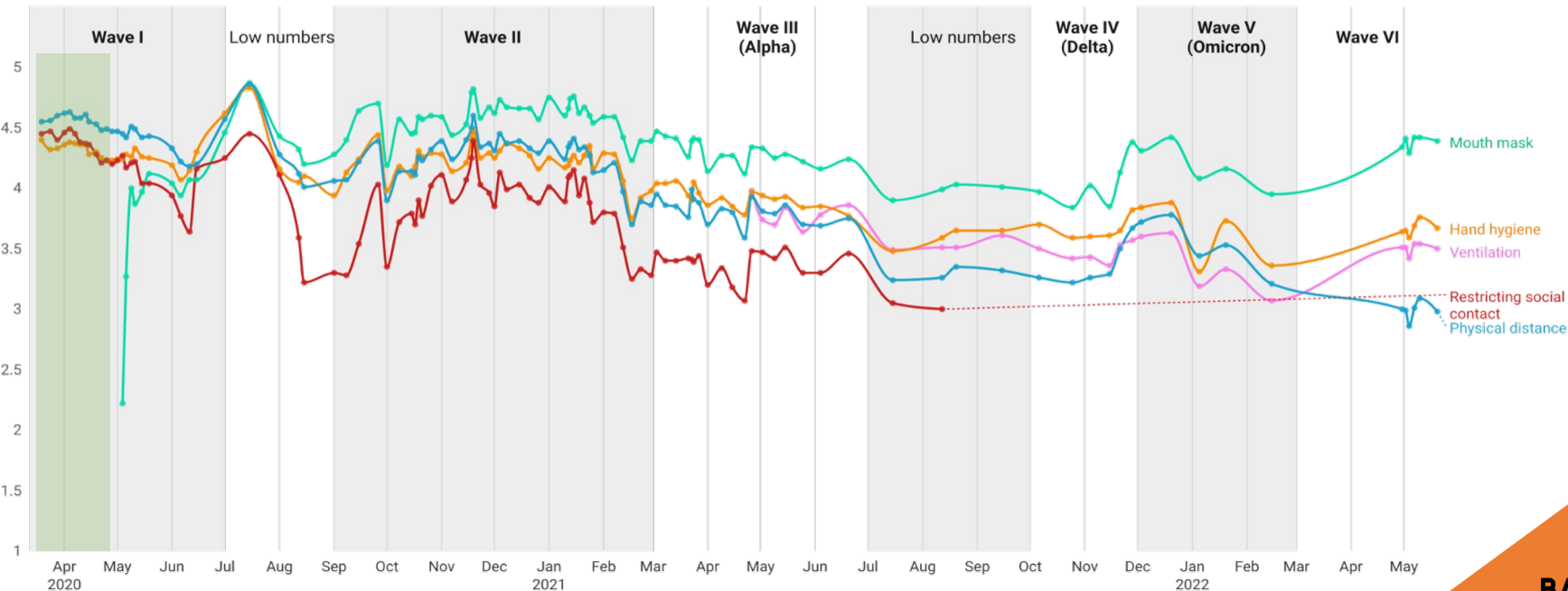
Fear of the virus during the first lockdown, uncertainty.

→ Ready to accept intrusive measures to protect themselves and others

Motivation during the COVID-19 pandemic in Belgium



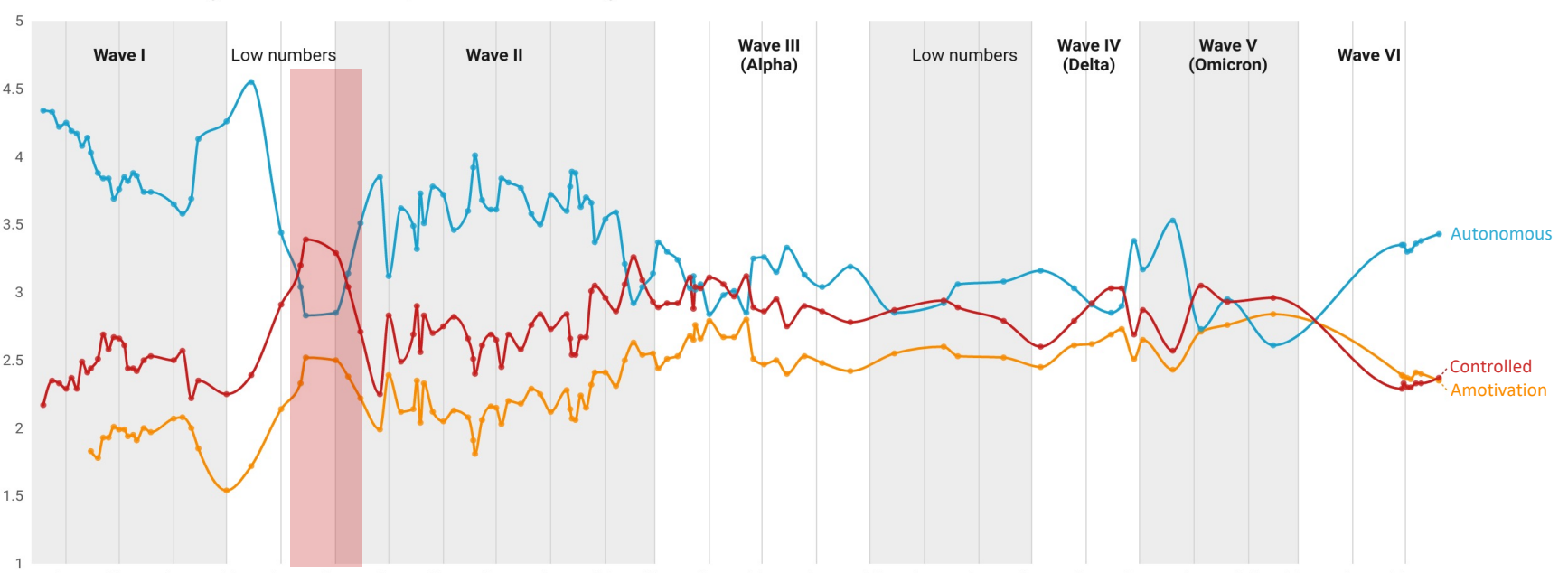
Adherence during the COVID-19 pandemic in Belgium



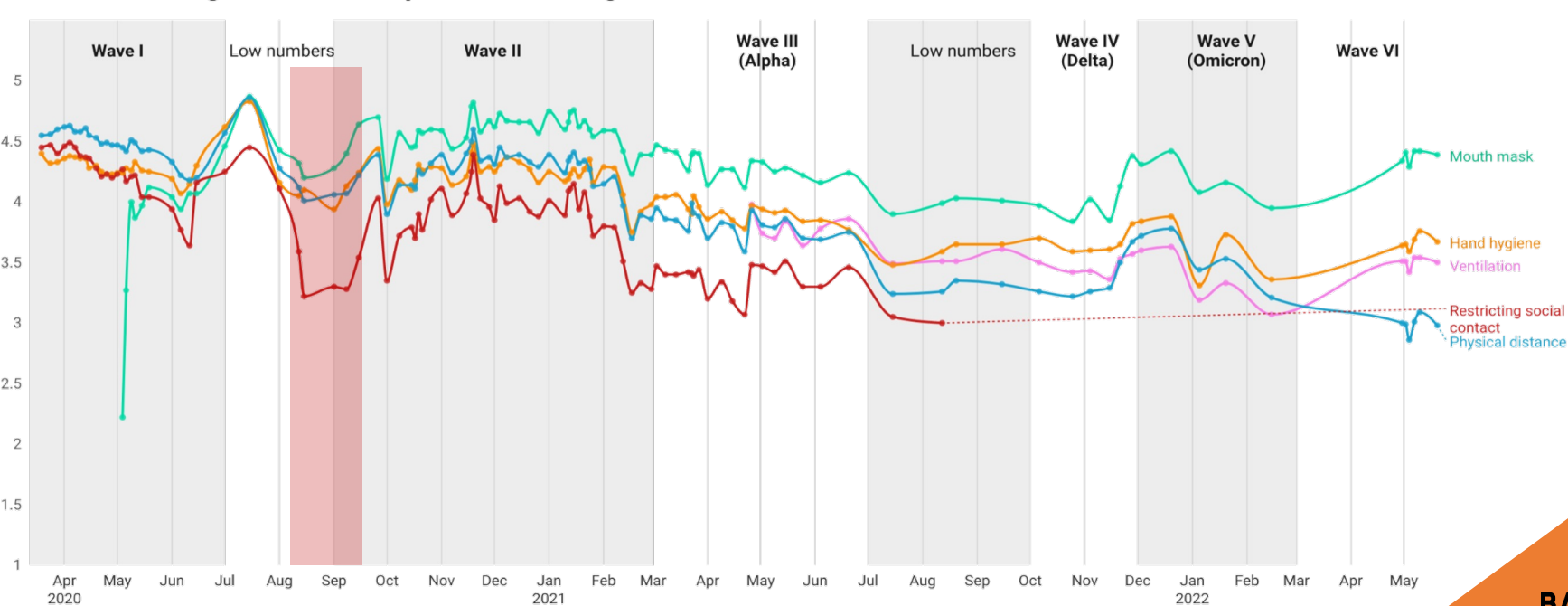
Relaxation of measures in Sept. 2020:
extending number of
close contacts.

→ Drop in motivation
due to a drop in risk
perception

Motivation during the COVID-19 pandemic in Belgium



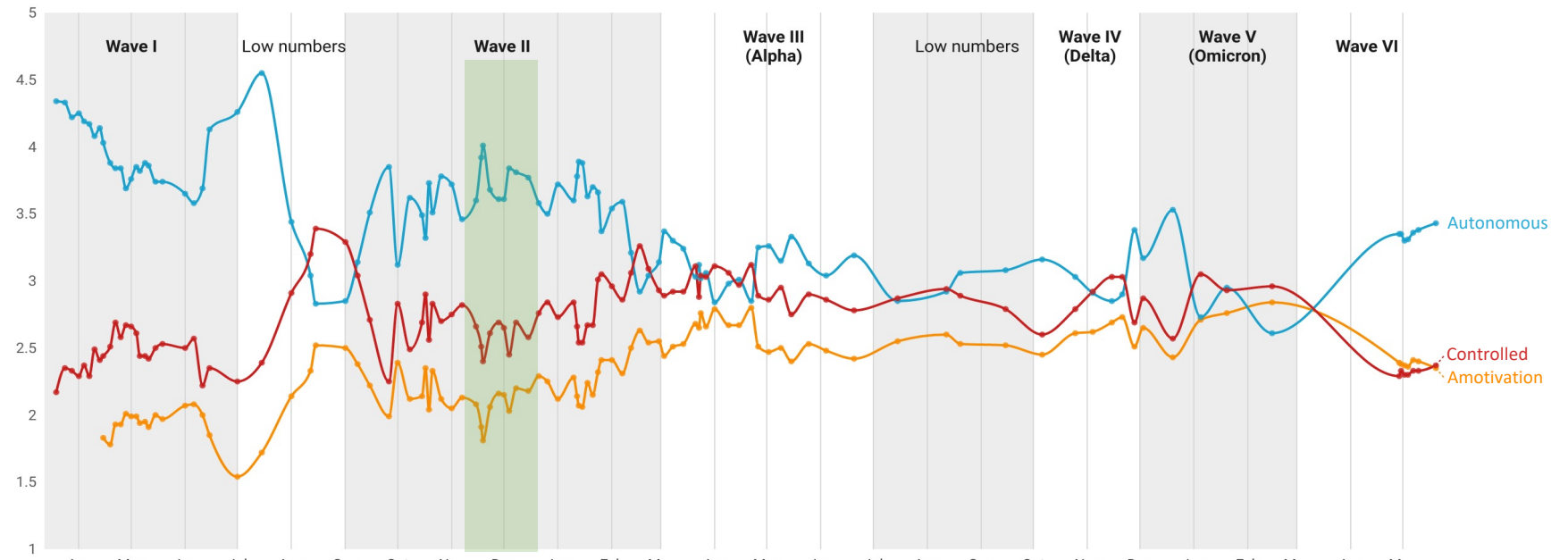
Adherence during the COVID-19 pandemic in Belgium



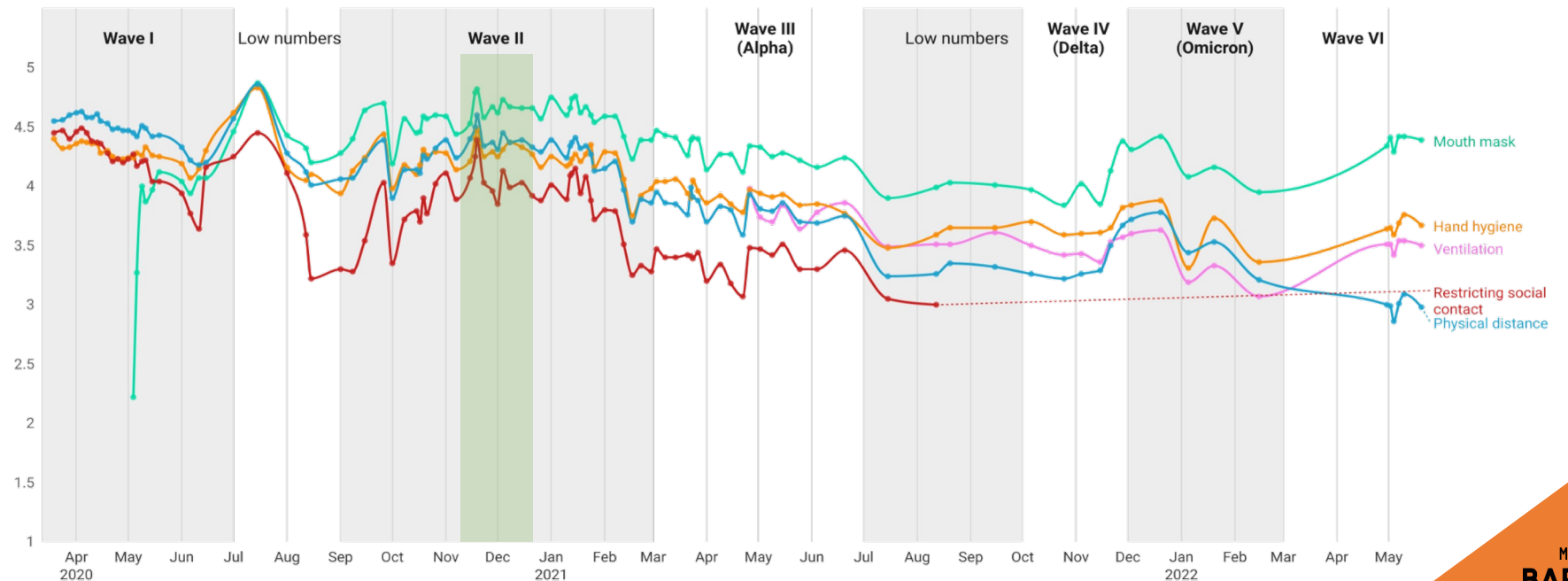
Stricter measures: only 1 contact in Christmas. Reasons and consequences clearly explained

→ People understand the situation, take responsibility, and are more voluntarily motivated

Motivation during the COVID-19 pandemic in Belgium



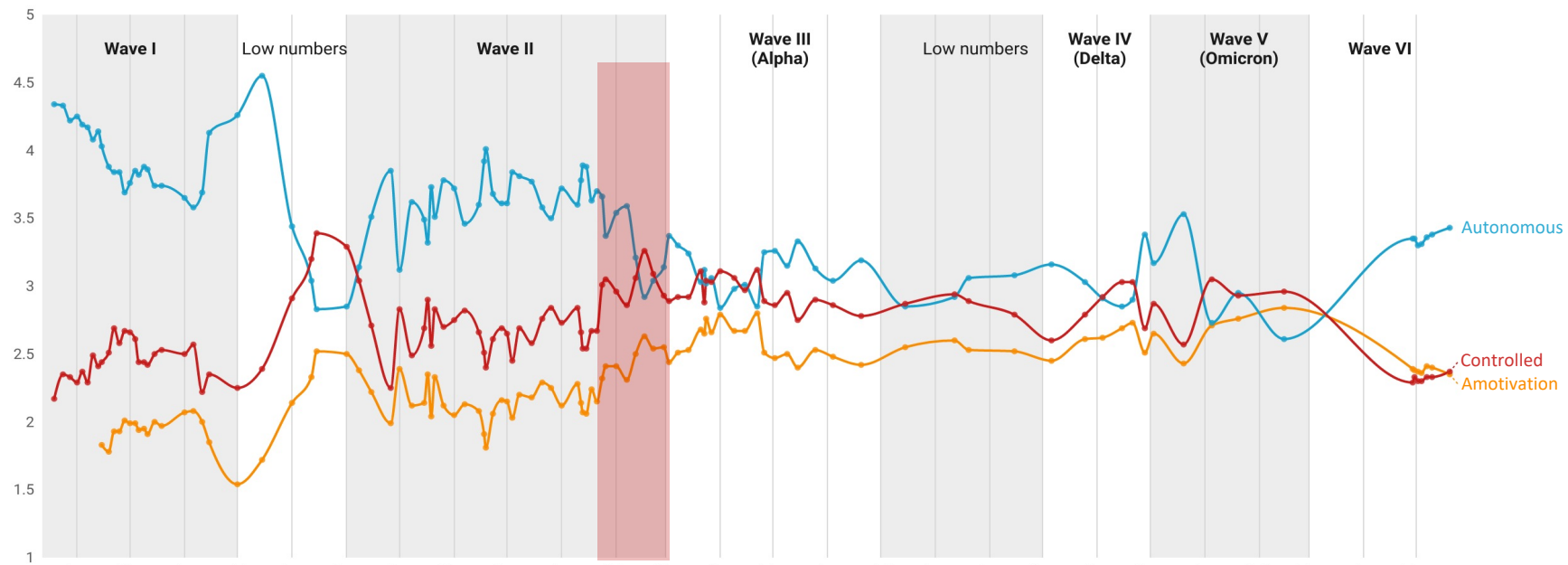
Adherence during the COVID-19 pandemic in Belgium



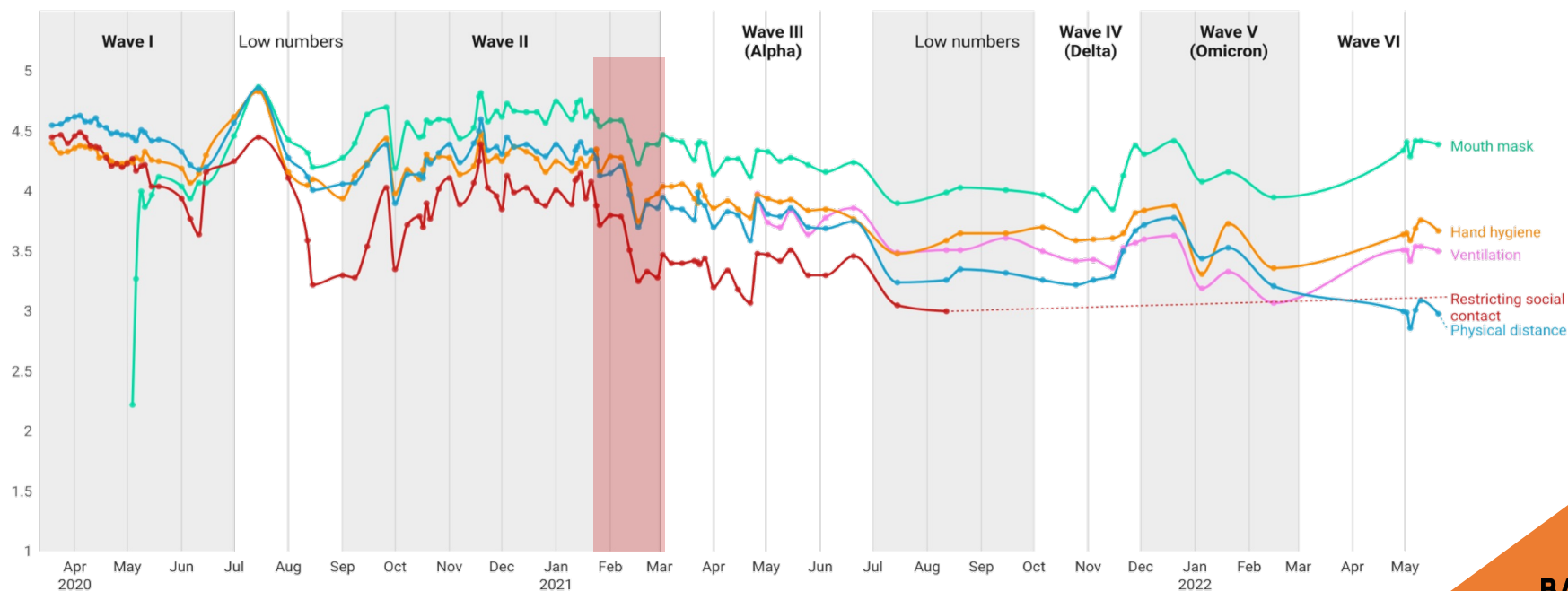
Relaxation of measures in Feb. 2021: Opening of the hairdressers but some close contact sports not allowed

→ Drop in motivation because measures seem inconsistent and meaningless

Motivation during the COVID-19 pandemic in Belgium



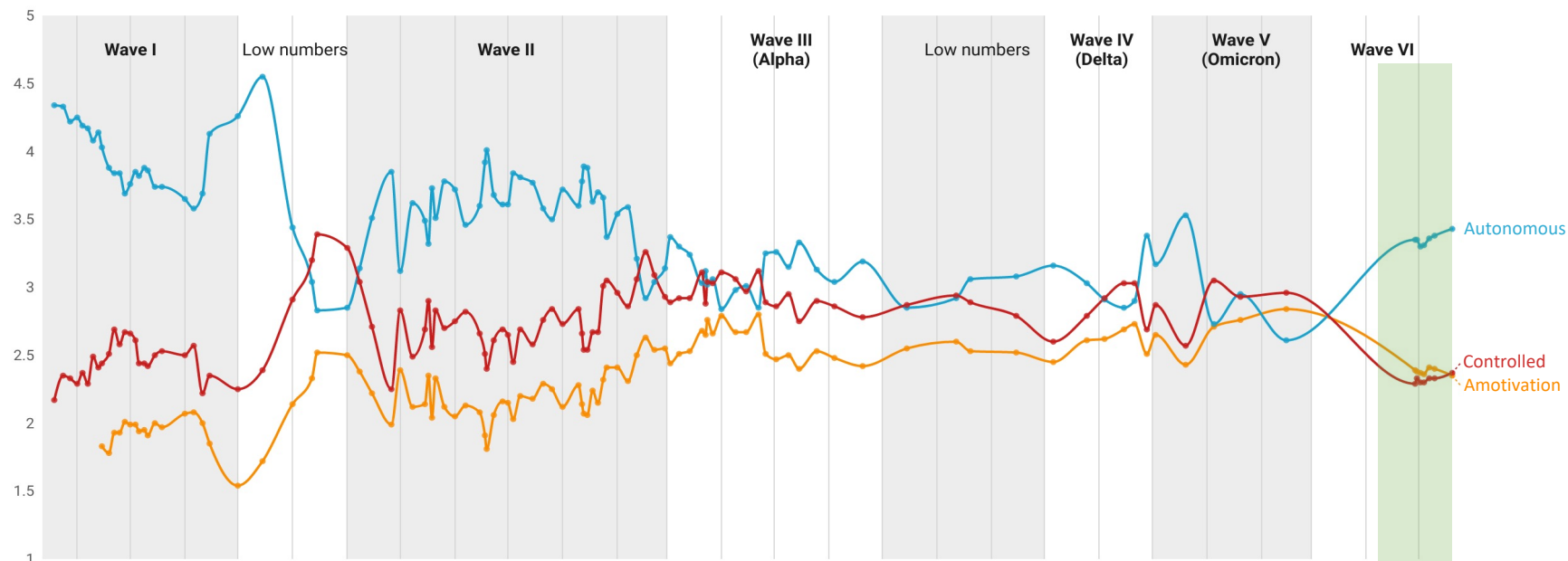
Adherence during the COVID-19 pandemic in Belgium



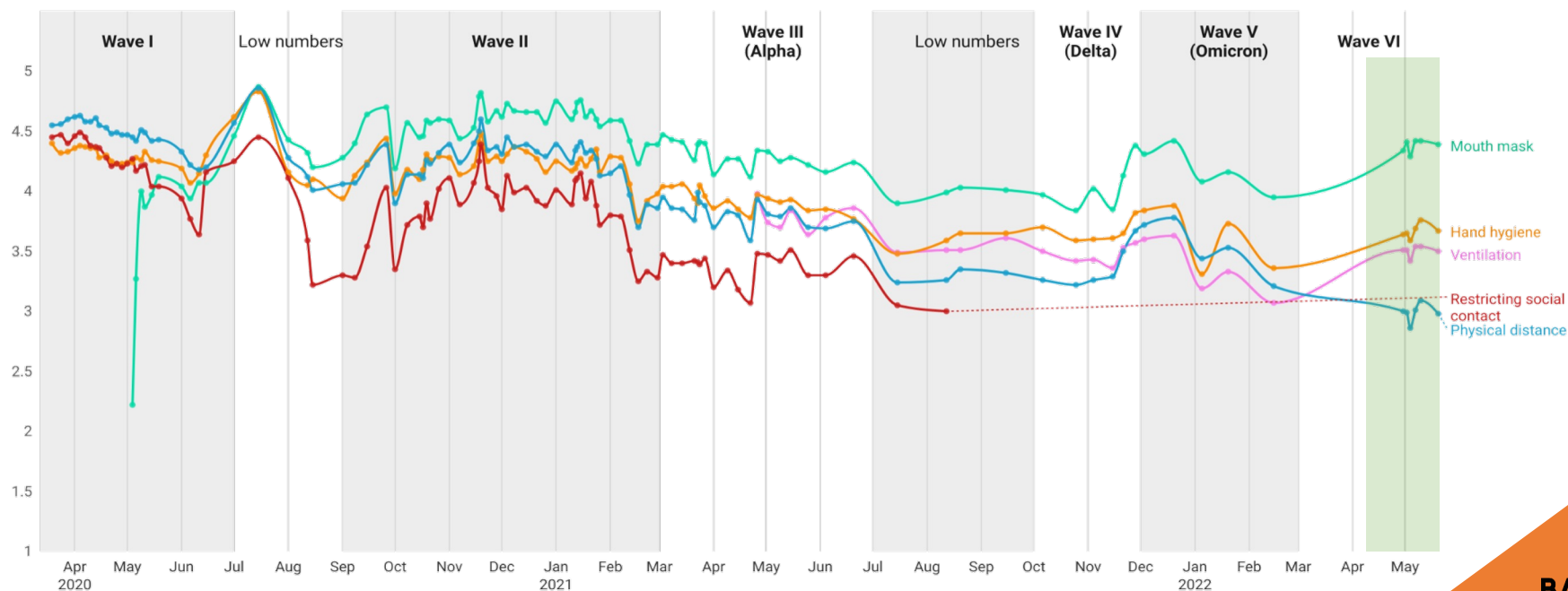
Relaxation of the measures in line with the epidemiological situation (less virus)

- Meaningful
- Easier to follow the measures
- Internalization of the measures over time

Motivation during the COVID-19 pandemic in Belgium



Adherence during the COVID-19 pandemic in Belgium



Recommendations

- **Personalize motivation:** following the rules not because “important” but because meaningful (e.g., “to go back to a normal life”, “to protect the most vulnerable”, “to lift the burden on the medical sector”)
- **Clear communications and consistency,** what is expected from people
- **Empathic communication:** Take the perspective of others (e.g., how effortful it is for youngsters), highlights collective and progressive effort

Risk perception: two key questions

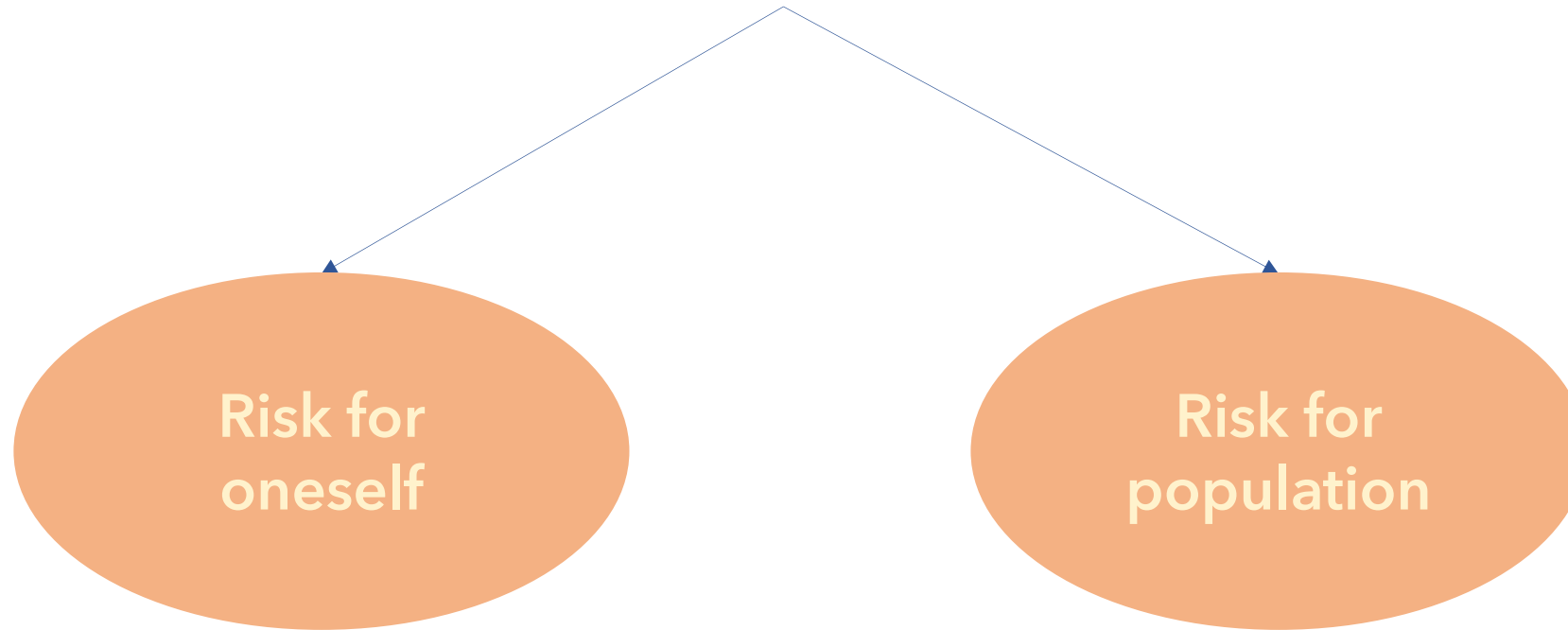
- 1 Which dimensions of risk perception play a critical role in people's adherence to sanitary measures?
- 2 How Omicron changed the situation?

Which dimensions of risk perception play a critical role in people's adherence to sanitary measures?

Risk perception: definition

- Perceiving health threat = condition for individuals to change their health behaviors (Renner & Schupp, 2011)
- If someone unaware of the risky nature of their actions => not motivated to change them

Risk perception: targets



- Population > Oneself
 - People underestimate likelihood of experiencing a negative event
 - Particularly in comparison with others in a similar situation (Weinstein, 1982)

Risk perception: components

Probability of becoming
infected

Severity of illness

Variations with perceived level of:

- virus circulation
- threat of the illness
- protection level provided by vaccines

Concerns

Form of repetitive negative thinking that is

- not solution-oriented
- associated with negative emotional states
- inducing avoidance behaviors

Adherence to the measures

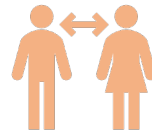
"washing your hands frequently"



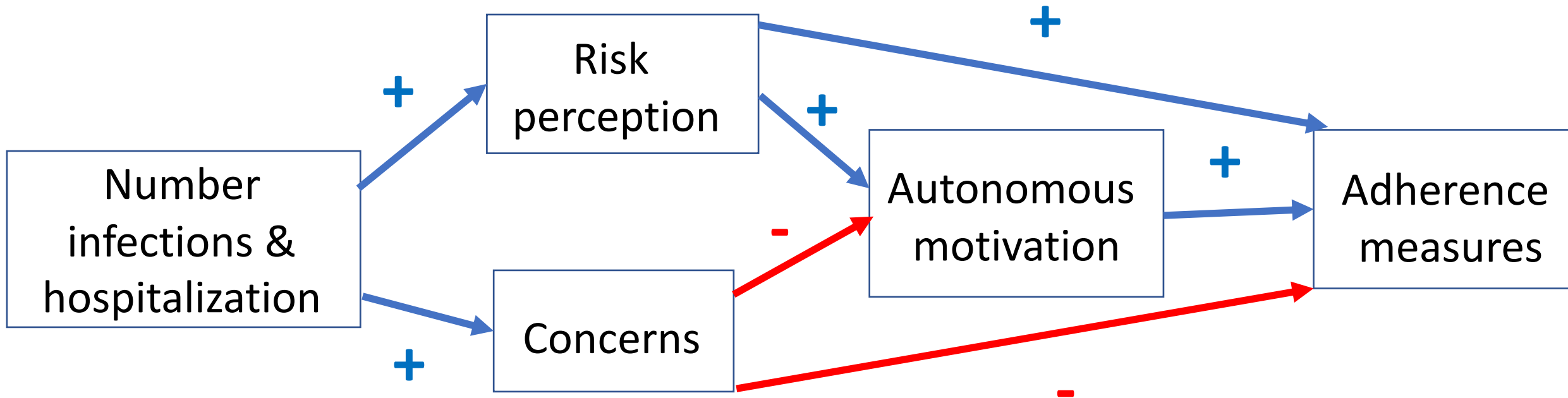
"wearing your face mask when mandatory or recommended"



"maintaining physical distance from other"



From hospitalization to adherence to measures



Three critical phases



From September 2020:

- Second wave

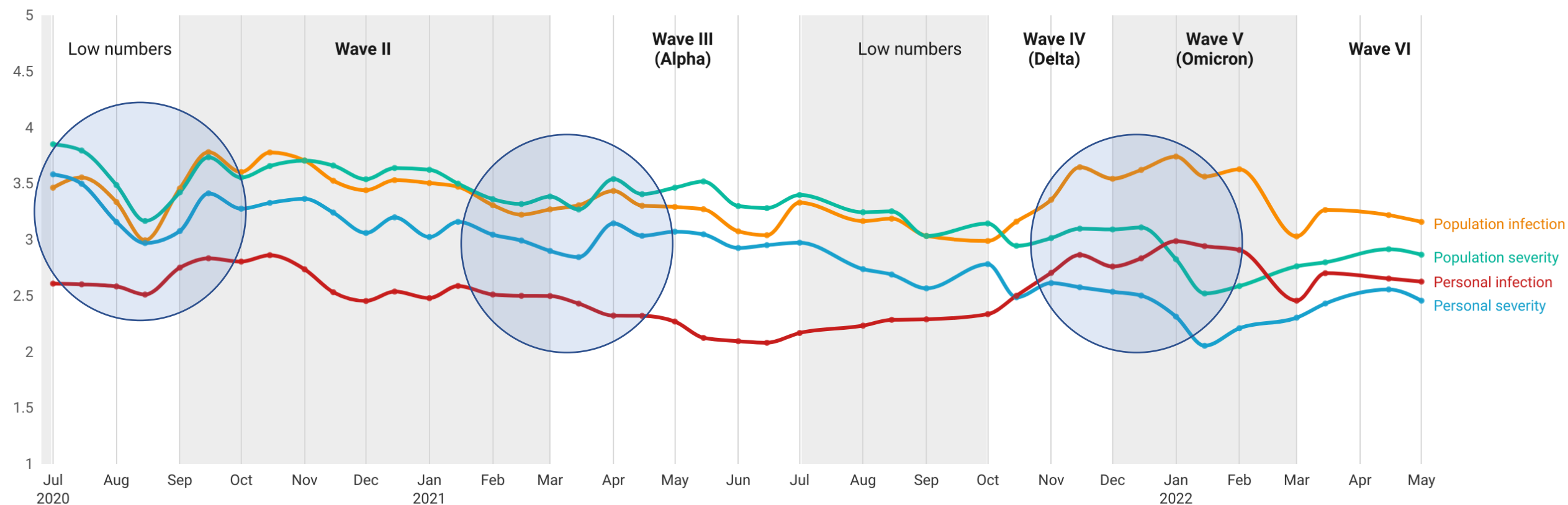
March 2021:

- Decrease in infection numbers

Nov-Dec 2021:

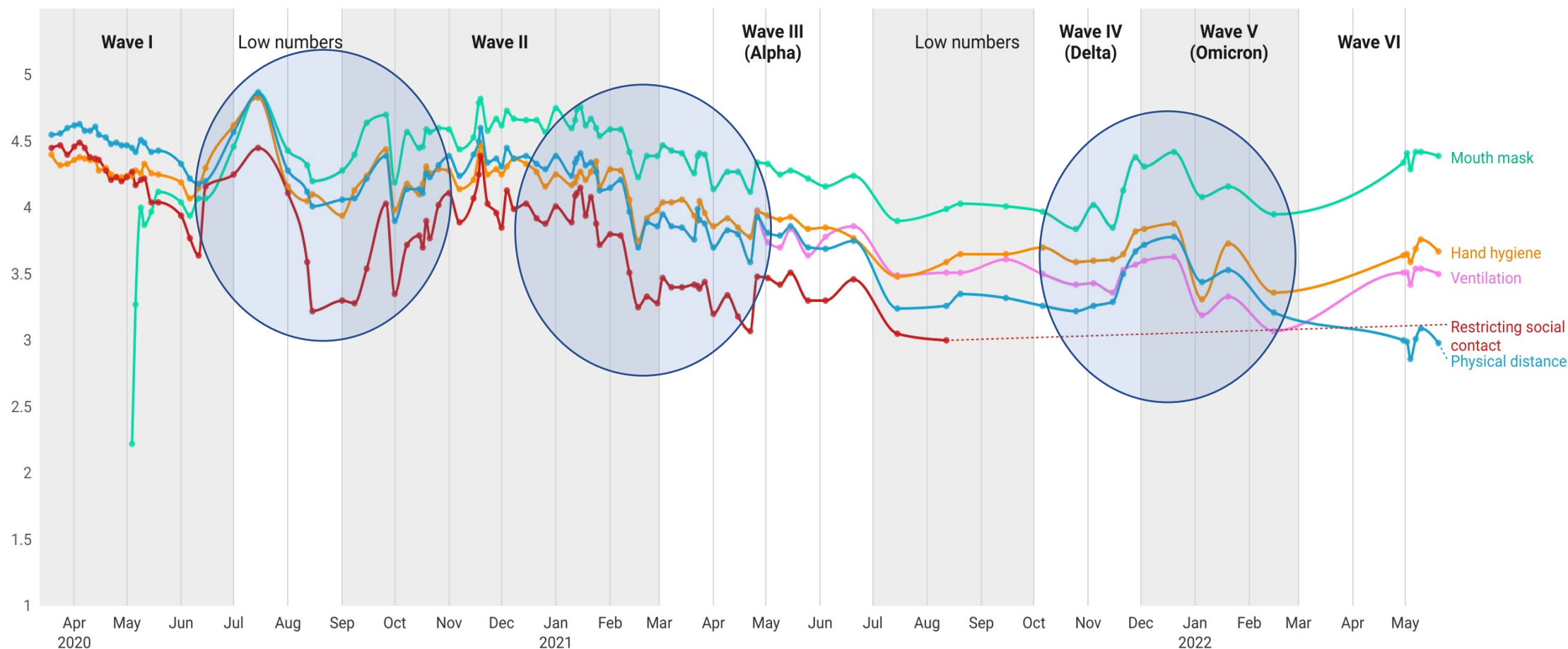
- Delta variant

Evolution of risk perception



Weights are based on age, gender, education and region
Source: Motivationbarometer • Created with Datawrapper

Evolution of sanitary behavior adherence



Study 1: How these three variables interact?

- Variation risk perception related to variation in
 - autonomous motivation?
 - adherence to sanitary measures?
- Concerns in addition to risk perception?

Waterschoot et al. (in prep)

Results

- Days during which risks perceived to be more elevated
 - people being more adherent
 - because higher autonomous motivation
- Concerns
 - negatively correlated to autonomous motivation
 - hampering individuals' willing to endorse the measures on a given day

Waterschoot et al. (in prep)

How Omicron changed the situation?

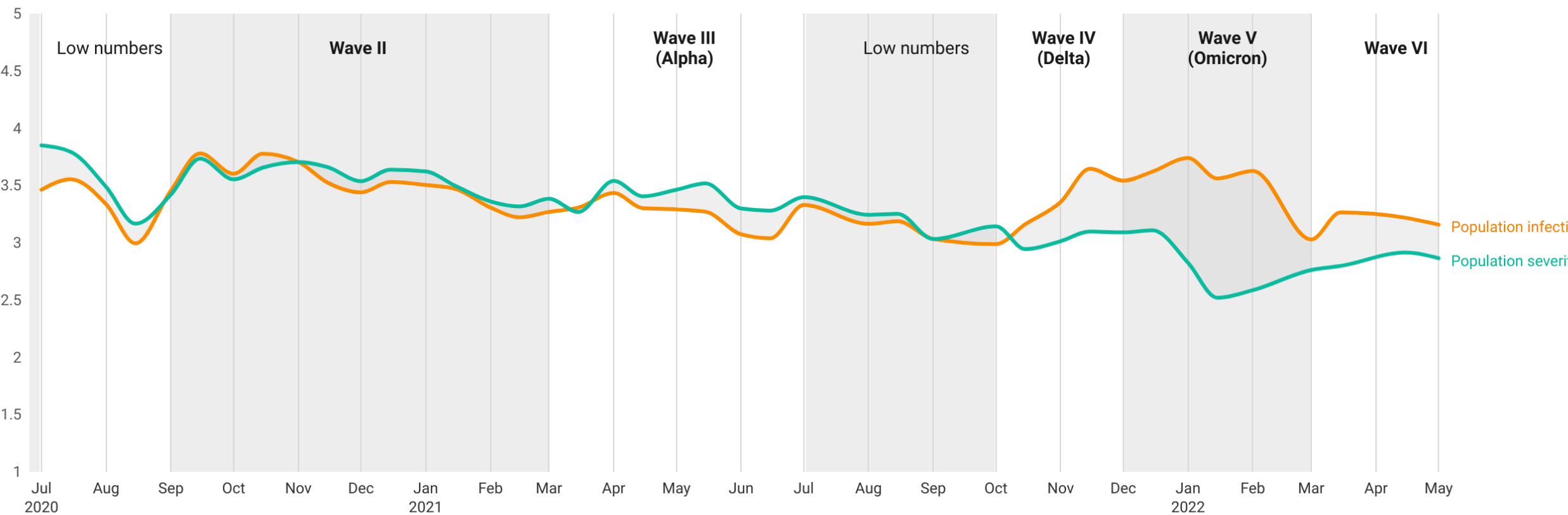
Variations in risk perception across the pandemic

- Most of the crisis, **probability** and **severity** moving in parallel
- But with Omicron:
 - Less severe
 - Highly contagious

➔ Different role to predict autonomous motivation and adherence to behaviors?

Omicron: Dissociation probability infection vs. severity symptoms

Risk perception during the COVID-19 pandemic



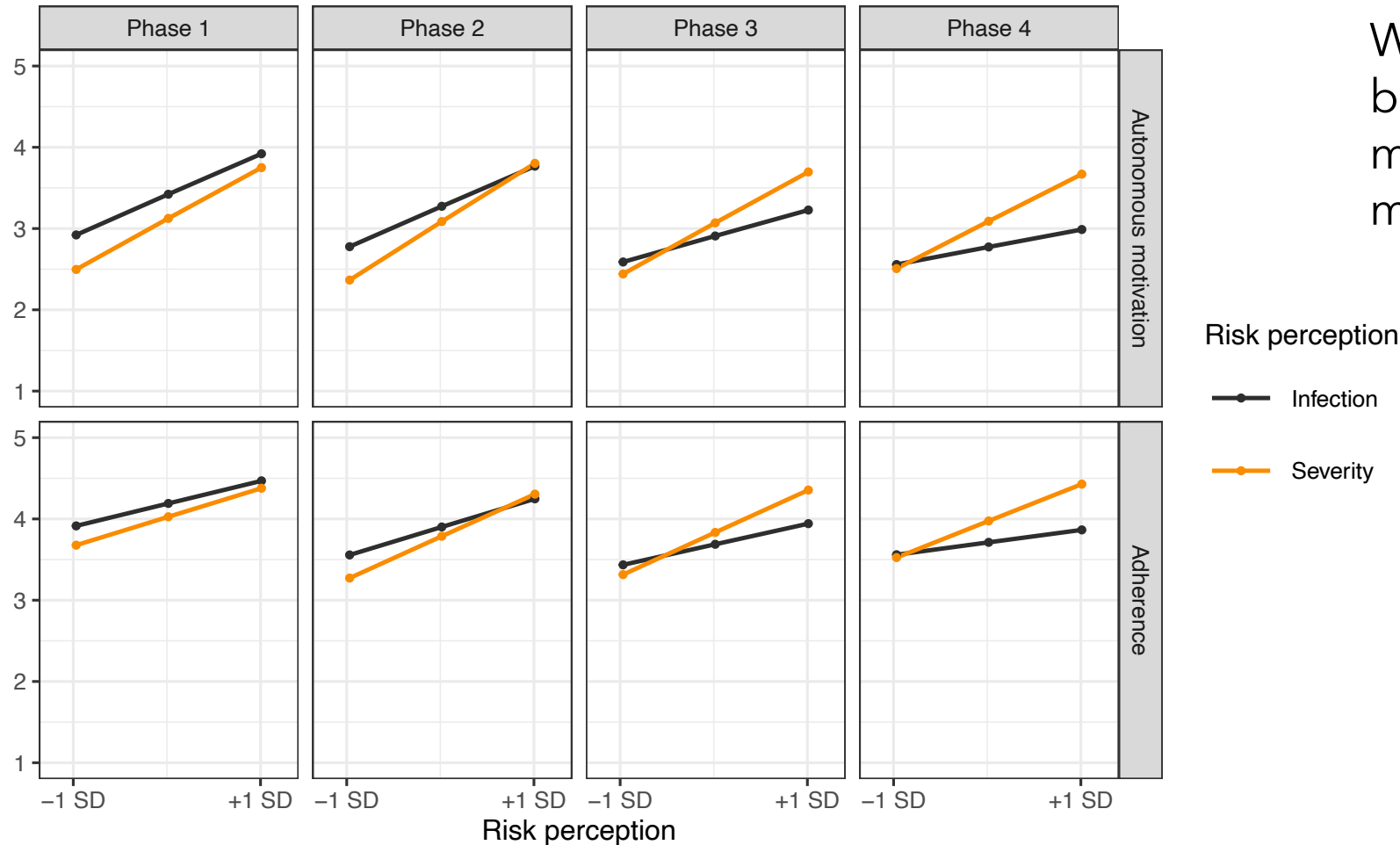
Weights are based on age, gender, education and region
Source: Motivationbarometer • Created with Datawrapper

Study 2

- How both types of risk perception predict autonomous motivation and adherence to sanitary behaviors?

Prediction of autonomous motivation and adherence from two dimensions of risk perception

With time, **severity** being the best predictor of autonomous motivation and adherence to measures



Phase 1: March-May 21
Phase 2: July-Aug 21
Phase 3: Sept-Nov 21
Phase 4: Dec 21 - March 22

Policy implications (1)

- Avoid **fear/threat** messages
 - more concerns => less autonomous motivation => less sanitary behaviors
- Inform **risks** people are exposed to in different circumstances
 - Concrete **visuals**: people can get a concrete picture of contagiousness of Omicron variant

Policy implications (2)

- Anticipate **where** and **when** a risk might arise => identify **effective solutions** to avert risk in particular situations
 - Inside (a1) vs. outside (a2)
 - Many people (b1) vs. few people (b2)
 - Low ventilation (c1) vs. high ventilation (c2)
 - If a1, b1, c1 => risk +++

Policy implications (3)

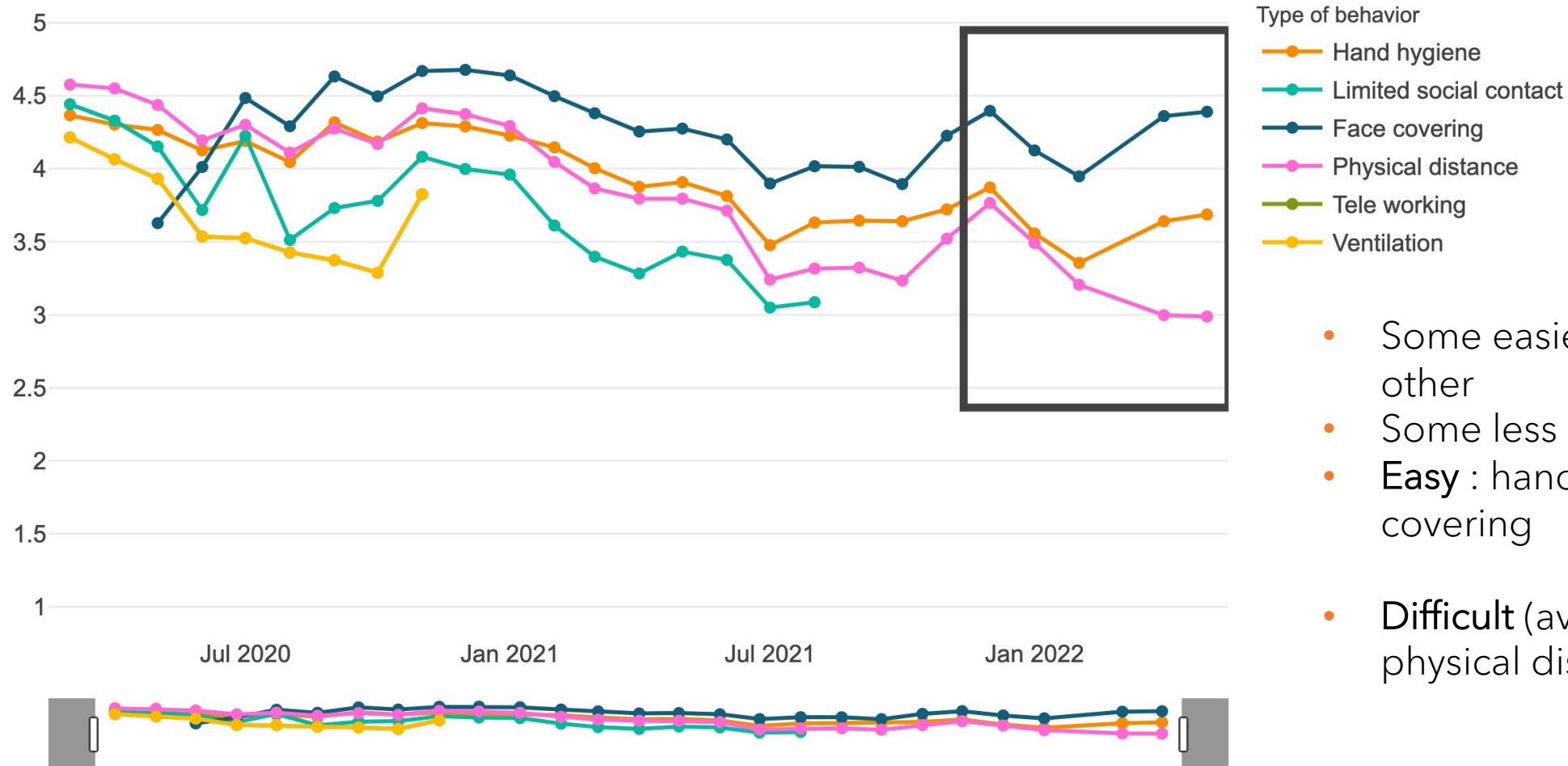
- If-then scenarios
 - People need to understand **why** measures still needed
 - Project **future** consequences for people to keep valuing the measures **today**
 - Examples used:
 - Simulating **different models** of evolution infections depending on **measures taken**
 - If you want **normal Christmas**, then **relaxing measures** implemented **later**

Policy implications (4)

- Insist on **severity** infection for vulnerable populations (elderly, comorbidity,)
- Communicate why increased virus circulation has disadvantages for:
 - Physical health (e.g., projections of burden in health care)
 - Mental health (e.g., school closures)

Two categories of sanitary behaviors

Behavioral adherence



- Some easier to follow than other
- Some less needed today
- **Easy** : handwashing, face covering
- **Difficult** (avoidant behaviors): physical distance

Thank you!