### REPORT 37:

# There is still support for health measures, not for the pandemic management.

#### The motivation barometer

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Reference: Motivation Barometer (December 8, 2021). There is still support for the measures but no longer for the management of the pandemic. Ghent, Leuven, Louvain-la-Neuve, Brussels, Belgium.



During a relatively carefree summer, we were able to enjoy freedom again: the vaccination campaign went smoothly, the Covid Safe Ticket was introduced - the name alone gave hope - and even the masks disappeared from the streets. An increase in infections in the fall was still to be expected, but it was more like a "mini wave". No one seemed very concerned, except for a few experts. The fourth wave is a real cold shower: hospitals are overloaded again, nursing and teaching staff are at their wits' end, and despair is setting in in the catering and cultural sectors. The reluctance of the three CODECOs that have taken place since mid-November to tighten the measures, and the changing, often complex and inconsistent nature of the measures, have led to growing frustration and distrust of the overall strategy, not only among the unvaccinated but also among the vaccinated. The promise of the kingdom of freedom turned out to be a bitter illusion. With 7/10 of the vaccinated having little or no confidence in the competence of politicians, confidence in the management of the pandemic has declined more than ever. At the same time, nearly 8 out of 10 vaccinees renew their confidence in GEMS, the government's advisory body.

The increase in hospitalization rates during this 4th wave has further increased the perception of risk and therefore the motivation to make an effort, although this increase has stabilized over the past weekend. Messages about the peak in numbers can likely explain this stabilization. Unvaccinated people feel virtually invulnerable: they rate the risk of infection, serious infection, and hospitalization lower than do vaccinated people. More surprisingly, unvaccinated people feel that unvaccinated people have less risk of infection and will suffer fewer symptoms than vaccinated people. The good news is that people are more compliant now than they were a few weeks ago, with 60% of both vaccinated and unvaccinated people intending to limit contact to 5 in the next week. Among vaccinated individuals who have not yet received a third dose, a significant majority (nearly 70%) say they are ready to complete their vaccination program. Once again, it appears that it is mainly those who, out of conviction, opted for the first two injections, who are ready to take a booster shot.

In short, the results of this report clearly show that the measures are still supported by the vaccinated, but that this is no longer the case for the policy. The close succession of CODECOs that have each time decided too little and too late clearly shows that work needs to be done on a decision schedule that allows the government to make decisions more quickly and consistently. The COVID barometer, long advocated, can serve this function. Without a clear short- and long-term decision plan, uncertainty about the future will weigh increasingly heavily and further threaten the credibility of political staff. We describe the psychological benefits of such a barometer (already advocated by our team more than a year ago) and the contours of an implementation. The results of Report #37 are based on three measurement moments, each of which concerns the day after the CODECO decisions in mid-November, late November, and early December, and on a large (total N = 18659) and partly longitudinal (N = 1259) sample.



#### This report answers the following five questions:

- 1. To what extent is the population still motivated and what role does risk perception play in this?
- 2. How much trust does the population still have in politicians and experts? And where does the distrust in the strategy come from?
- 3. How well do people comply with health measures and do they intend to restrict close contact?
- 4. How many people are willing to accept a third injection and do differences in motivation play a role in this?
- 5. What are the advantages of a barometer and what are the points of attention when interpreting and implementing it?



#### Important messages to remember

#### Motivation:

- 69% of those vaccinated are somewhat or strongly motivated to follow the measures.
- 45% of vaccinees are somewhat or strongly suspicious of the overall management strategy adopted.
- The upward trend in risk perception has stabilized since the beginning of December
- Unvaccinated people consider themselves less likely to be severely infected and hospitalized than vaccinated people.

#### Confidence:

- 73% of those vaccinated have little or no confidence in the competence of the government.
- 78% of vaccinees have some or a lot of confidence in the competence of GEMS.
- Risk perception and trust in government and GEMS predict current motivation to comply.
- A combination of factors explains the distrust of (un)vaccinated people towards politicians.

#### • Behavior:

- The population is again sticking to the measures more scrupulously than in September.
- The behavioural gap between vaccinated and unvaccinated individuals remains, although it has narrowed over time and is very small in terms of close contacts.
- 6/10 of both vaccinated and unvaccinated individuals expect to have less than 5 close contacts in the next week.

#### A reminder

- 7/10 vaccinated people are (very) willing to accept a booster shot; 15% are hesitant and 15% are opposed.
- Older people and those with comorbidities are more likely to
- Motivation for the first injection predicts intention to accept the booster injection: voluntary motivation is a positive predictor, whereas distrust and pressure are a negative predictor.



Description of four samples: data from the three measurement points were collected the day after the CODECO in mid-November (N = 5673), from the CODECO in late November (N = 7734), and from the CODECO in early December (N = 3993); a fourth, longitudinal sample (N = 1259) is used to assess changes.

#### Vaccinated people

- N = 14541
- Average age = 49.27 years (49.9% female, 63% Dutch-speaking, 26.5% with a master's degree)
- Employment status: 52.6% full-time, 12.2% part-time, 4.5% unemployed, 4.3% students and 23.9% retired.
- 19.4% were previously infected.

#### Unvaccinated people who have already been infected.

- N = 1257
- Average age = 43.86 years (54.3% female, 58.1% Dutch-speaking, 26.5% with a master's degree)
- Employment status: 63.9% full-time, 15% part-time, 6.2% unemployed, 3.7% students and 7.5% retired.
- 34.52% of the total non-vaccinated.

#### Unvaccinated persons who have not been infected.

- N = 2384
- Average age = 46.26 years (57.6% female, 59.2% male/francophone, 21.6% male)
- Employment status: 58.1% full-time, 15.5% part-time, 8% unemployed, 2.2% students and 13% retired.
- 65.48% of the total non-vaccinated.



### Question 1: How motivated is the population still and what role does risk perception play in this?

- Figure 1 shows the average change in voluntary motivation and demotivation as a function of vaccination status. A crucial indicator of demotivation, namely distrust of the overall management of the crisis, is presented separately. Figure 2 expresses the results after each CODECO in percentages<sup>1</sup>. Figure 3 shows the evolution of various indicators of risk perception <sup>2</sup>, while Figure 4 shows the estimated risk of (severe) infection for (un)vaccinated persons.
  - Vaccination status: There is still a marked difference between vaccinated and unvaccinated individuals: vaccinated individuals remain more convinced of the importance of general health measures and show fewer signs of demotivation. However, the gap in motivation between vaccinated and unvaccinated individuals has been stabilizing for several months (Figure 1). This gap may be attributed to the increasingly selective nature of the unvaccinated. Indeed, a large number of unvaccinated individuals had to wait for their vaccine in the spring. They then disappeared from the unvaccinated group after vaccination.
  - o Changes over time: The announcement of a limited set of stricter measures (e.g., mandatory masking) after the mid-November CODECO led to increased de-motivation and discouragement among vaccinated individuals (Figure 1). In particular, confidence in the overall approach to the pandemic declined at this time: 5/10 vaccinated and 8/10 unvaccinated individuals reported little or no confidence in the overall management. This distrust partially faded by the end of November, but also appeared high after the last CODECO in early December: 45% of vaccinated individuals had little or no confidence in the overall management strategy (Figure 2). Voluntary motivation of vaccinees, which had decreased after the mid-November CODECO, also recovered somewhat after the late November CODECO. In percentage terms (see Figure 2), 45% of the vaccinated were still strongly and 24% were still somewhat voluntarily motivated to follow the general measures after the end-November CODECO, whereas this percentage was much lower for the non-vaccinated (12% and 18% respectively) <sup>3</sup>. At a comparable point in time in the second wave (i.e., 22 October 2020 with a similar number of hospitalizations), similar

<sup>&</sup>lt;sup>3</sup> The samples collected are not representative of the socio-demographic distribution of the population. Nevertheless, since December 2020, Dutch and French speaking participants have been recruited and the results presented are weighted for age, region, education level and gender to (partially) correct for the non-representative nature of the samples.



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<sup>&</sup>lt;sup>1</sup> In examining differences between vaccinated and unvaccinated individuals, the role of other relevant sociodemographic characteristics, such as age, gender, and education, was controlled for.

<sup>&</sup>lt;sup>2</sup> Note that this is not the same group of people followed over time. Differences over time may therefore reflect not only intra-individual differences, but also differences in the composition of the sample.

- figures were observed, with 23 and 49% of Flemings<sup>3</sup> being strongly or somewhat motivated.
- Explanation: Part of the reason for the increase in voluntary motivation of those vaccinated is the increasing perception of risk (Figure 3). Although the perceived risk of infection has been increasing for some time, we found for the first time in late November that the population's risk of serious infection also increased slightly. This latter awareness of risk is the strongest driver of motivated action. The fact that the estimated risk of hospitalization increased only slowly is most likely due to the belief in vaccines and the fact that they effectively protect against hospitalization. In the second wave, when hospitalizations were as high as they are today, the estimated risk of serious infection was much higher (see Figure 3). Furthermore, it appears that all indicators of risk perception stabilize or even decrease slightly after the last CODECO. The announcement that we have reached the peak of the 4th wave probably has something to do with this.
- o Risk perception by vaccination status: Figure 3 already shows that unvaccinated persons perceive the risk of (severe) infection as lower for themselves and for the population in general. Figure 4 provides a more detailed and surprising picture of the difference in risk perception between vaccinated and unvaccinated individuals. Vaccinated persons perceived the risk of infection and the risk of serious infection and therefore hospitalization of unvaccinated persons to be higher than for themselves. The estimation of unvaccinated persons shows exactly the opposite: they estimate not only the probability of infection, but even the probability of severe infection as lower for themselves than for vaccinated persons. This is striking, because unvaccinated people indicate that they follow the measures less well (see question 3). Perhaps they are basing their opinions primarily on the absolute numbers of vaccinated and unvaccinated people who end up in intensive care, rather than thinking in terms of the relative numbers and risks of each of these groups? The point is that the risk assessment of the unvaccinated seems disconnected from reality, as if they imagine they are invulnerable to (serious) infection.

Figure 1. Evolution of voluntary motivation and amotivation in vaccinated and unvaccinated individuals during the COVID-19 crisis in Belgium.



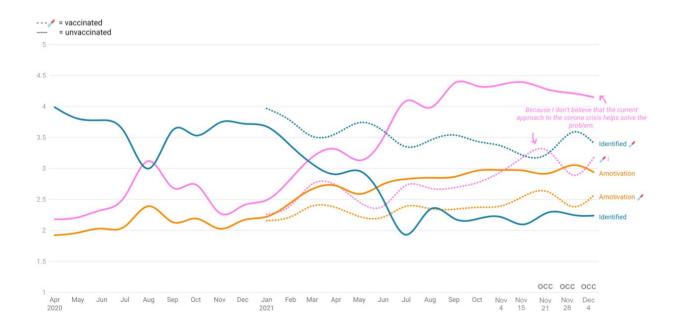
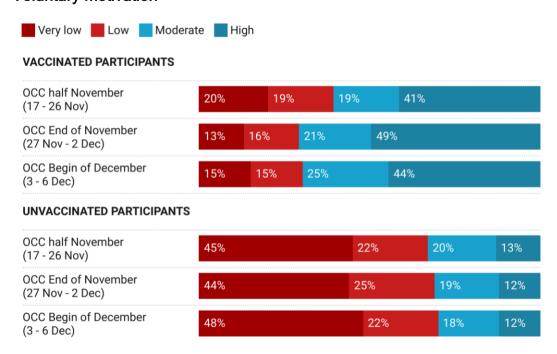


Figure 2. Percentages of voluntary motivation (top) and distrust of the overall strategy (bottom) among vaccinated and unvaccinated individuals after CODECO in mid-November, late November, and early December.

#### Voluntary motivation



#### Distrust of the overall strategy



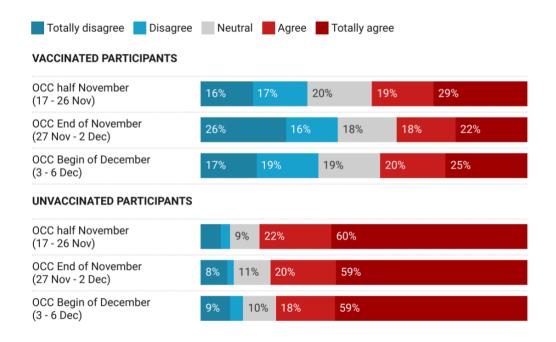
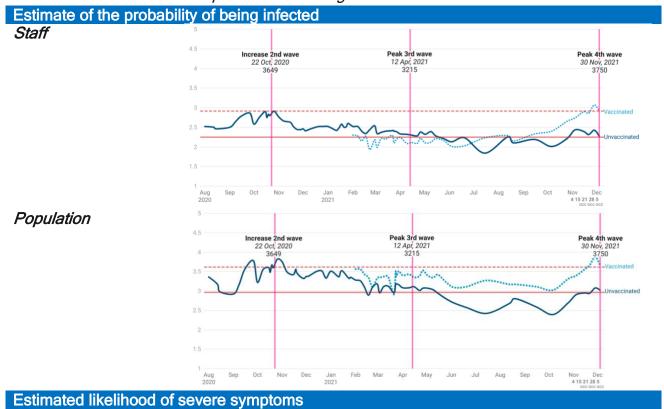


Figure 3.

Changes in indicators of risk perception in vaccinated and unvaccinated individuals as a function of the number of hospitalizations throughout the crisis.





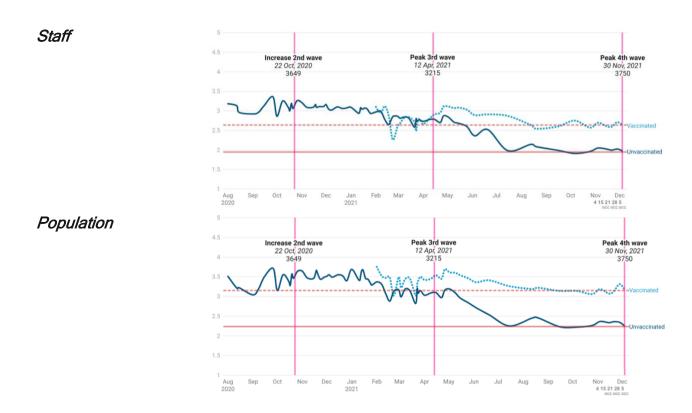
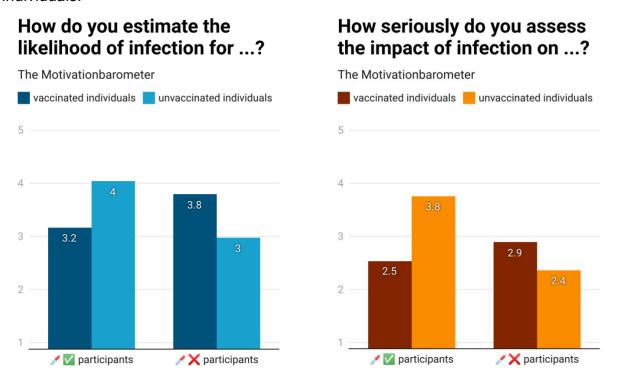


Figure 4.

Risk perception according to (un)vaccinated participants versus (un)vaccinated individuals.





Conclusion: The announcement of a limited package of stricter measures after the mid-November CODECO was a surprise to many, if not a cold shower. Distrust of the overall political management reached a peak. However, as in the other waves, the increasing numbers of hospitalizations were another motivating alarm signal. After the CODECO at the end of November, the voluntary motivation of those vaccinated seemed to have recovered somewhat due to the awareness of the risks. However, unlike the other waves, this risk perception increased only slightly and leveled off in early December, probably because vaccines are seen as a protective strategy against ICU admission and the announcement had been made that we would reach peak numbers. Risk perception among the unvaccinated remains lower, with the unvaccinated surprisingly attributing to themselves a lower risk of serious infection than the vaccinated.

# Question 2: How much confidence does the population still have in politicians and experts? And where does the distrust in the strategy come from?

Confidence in politicians has declined over the past two months. Figure 5 shows the evolution of confidence in the people who make decisions about the pandemic at the government level and in the GEMS, the government advisory body. In this regard, various reasons for distrust of the policy were surveyed: they are expressed, on average and as a percentage, in Figures 6a and 6b respectively.

- Confidence in the government: Figure 5 shows that confidence in the government gradually declined as the fourth wave developed, among both vaccinated and non-vaccinated individuals. After the last CODECO in early December, 73% of vaccinees reported little or no confidence in the competence of the government and 72% reported varying degrees of doubt about the benevolence of political staff. These figures contrast with those of the GEMS: 78% of vaccinees said they had confidence in the competence and 64% believed in the good intentions of the GEMS (Figure 5).
- Source of mistrust: Several sources of mistrust peaked after the mid-November CODECO. For example, a large majority of unvaccinated people (more than 90%) say they have lost confidence in the management of the pandemic because the vaccines and measures are less safe than advertised. 70% also believe that the virus should be left alone to develop immunity. A large majority of non-vaccinees also believe that ICU capacity should be increased and that more staff should be recruited. These factors account for some of the distrust among vaccinees, although they are less pronounced. In contrast to non-vaccinees, vaccinees thought that the government could have



- administered the booster vaccine earlier (52%) and taken stronger measures (50%) (see Figure 6b).
- Unique Role: An integrated model was used to investigate which factors correlate with population motivation. Risk of serious infection and confidence in GEMS are the strongest predictors of voluntary motivation to comply with the measures, while confidence in government plays a rather limited role. Voluntary motivation, in turn, is related to clearer adherence to measures (see Figure 7).

Conclusion: The motivation and behavior of the population is influenced by different channels: on the one hand, there is the perception of the risk of (serious) infection and on the other hand, there is the trust in the government and the GEMS. These influences have evolved differently in recent weeks: while risk perception has increased slightly and then stabilized, confidence in the government has not evolved as favorably. The decline in confidence in policy is reflected in a decline in both confidence in the competence and in the good intentions of the government. The fact that voluntary motivation has risen slightly since mid-November is therefore not attributable to policy but is due to the increase in hospitalization figures and the associated perception of risk, as well as the growing confidence in GEMS.



Figure 5.

Changes in percent confidence in the competence and good intentions of the government and GEMS among vaccinated and unvaccinated individuals.

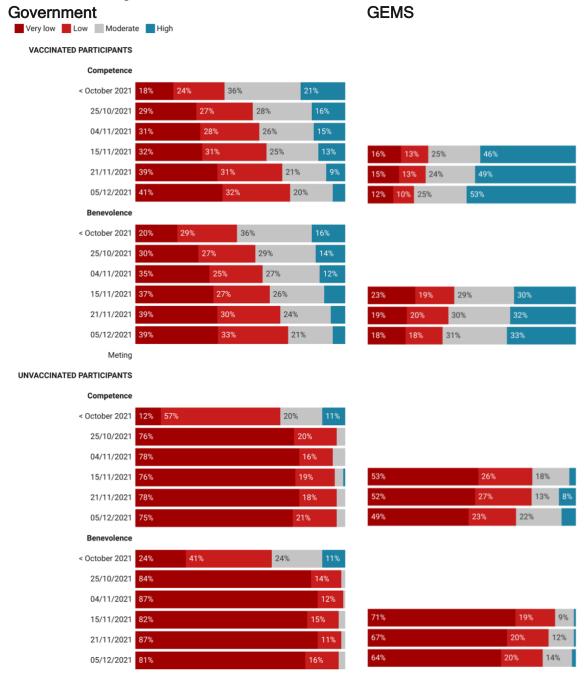




Figure 6a.

Changes in the extent to which various sources of distrust of the overall strategy play a role among vaccinated (top) and unvaccinated (bottom) individuals.

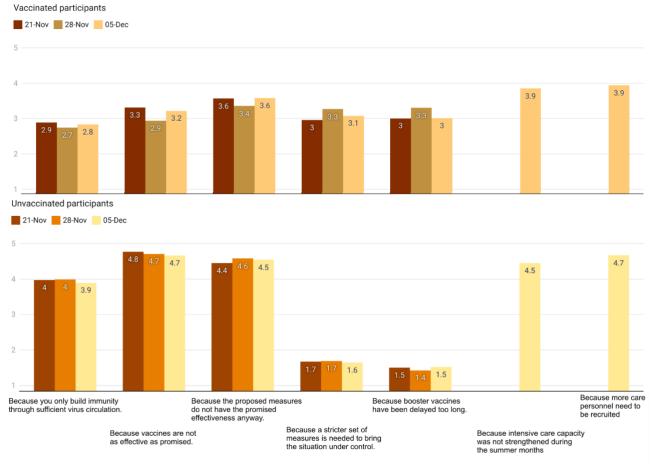




Figure 6b.

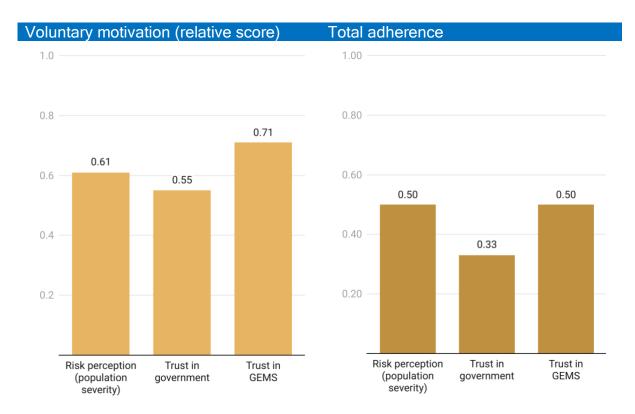
Changes in the extent to which different sources of distrust of the overall strategy play a role for vaccinated and unvaccinated individuals (% by response category).





Figure 7.

Correlations between trust in policymakers, trust in Gems experts, and risk perception as predictors of voluntary motivation and adherence.



### Question 3: To what extent does the population comply with covid measures, and do they intend to restrict close contact?

The increase in risk perception and voluntary motivation since mid-November is also reflected in compliance (Figures 8a and 8b) and limitation of close contact (Figure 8c). In general, vaccinated individuals are more compliant than unvaccinated individuals, and this appears to be particularly the case for the mask. These differences are much smaller for close contact restriction. Vaccinated individuals report slightly less close contact in the past week and plan to reduce close contact slightly more than unvaccinated individuals, but these differences are very small. For example, 62% of vaccinated individuals and 60% of unvaccinated individuals indicate that they will have 5 or fewer close contacts in the next week, the number recommended by GEMS. Overall, it is noteworthy that the behavioral gap between the two groups has narrowed, and that non-vaccinated individuals have also improved their tracking of measures in recent weeks.

Conclusion: The population is again more compliant than in September. The behavioral gap between vaccinated and unvaccinated individuals remains, although it has narrowed over



time and is very small for close contacts. 6/10 of both vaccinated and unvaccinated individuals plan to have fewer than 5 close contacts in the coming week.

#### Figure 8a.

Measure (self-reported) in which covid measures in general and mask wearing in particular are tracked by vaccinated (dotted line) and unvaccinated (solid line) individuals since February 2021.



Figure 8b

Percentage of vaccinated (above) and unvaccinated (below) people who report following the measures.

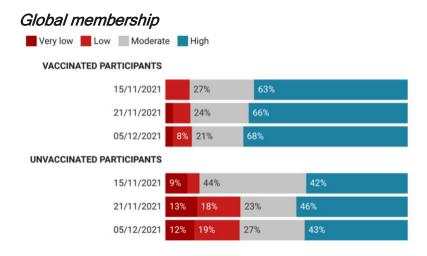
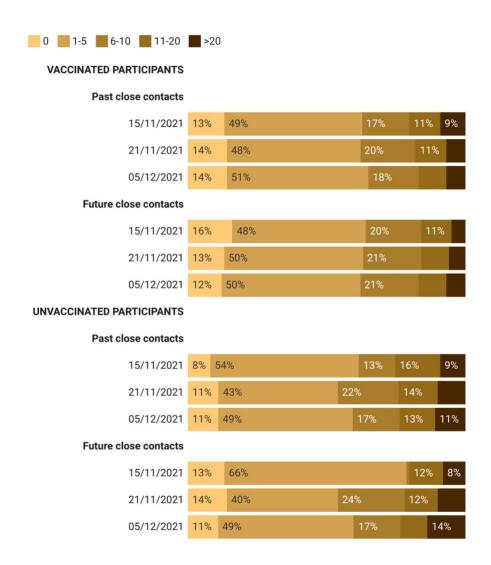


Figure 8c.

Percentage of vaccinated (above) and unvaccinated (below) individuals indicating the number of close contacts in the past week and in the future.





# Question 4: How many people are willing to accept a third dose and what role do differences in motivation play in this?

Half of those vaccinated indicate that the booster dose could have been given earlier. What percentage would be willing to accept a third injection if given the opportunity? Figure 9 shows that at the end of November, 49% would definitely accept a third dose and 18% would very likely accept it. Older people, people with comorbidities, women, more educated people, and people who have not been infected in the past are more likely to accept a third injection. Figure 10 shows the correlation between vaccinees' initial motivation to receive the COVID-19 vaccine and their willingness to accept a third dose. Voluntary motivation associated with the vaccine has a strong positive correlation with willingness to receive a third shot, whereas distrust of the vaccine, external pressure to get vaccinated, and the idea that getting the COVID-19 vaccine is a significant effort have a negative correlation.

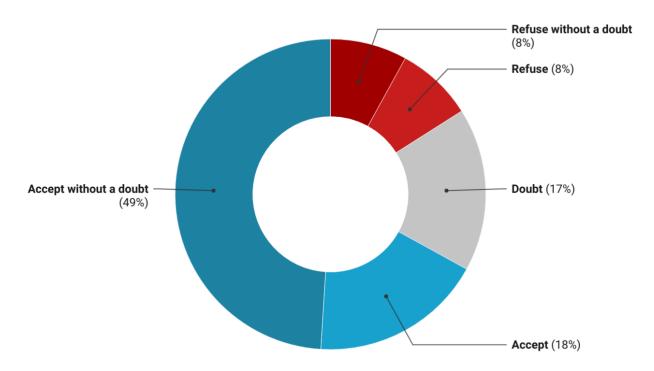


Conclusion: A majority of those vaccinated (almost 70%) were willing to accept a third injection. This result is encouraging because in the past, it has been found that some people wanted more time to make their decision. If people are given the opportunity to make this choice at their own pace, it provides greater assurance that they will be willing to accept booster doses in the future.

Figure 9. Weighted percentages of acceptance of the third injection among vaccinated participants (over all measurement times).

### If you were invited to a third dose, how would you respond to the invitation?

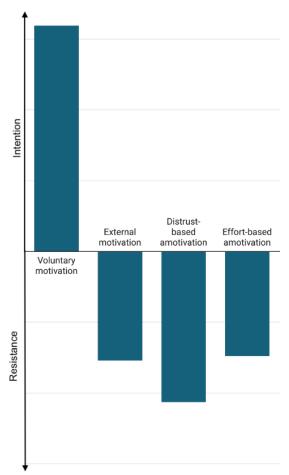
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Percentages are weighted for age, gender, education level and region



Figure 10. Associations between motivation for the first and second injection and willingness to receive the booster dose.



## Question 5: What are the psychological benefits of a COVID barometer and what are the problems with its interpretation and implementation?

The COVID barometer is essentially a system in which a code (e.g., a color, a traffic light system) reflects a different level of risk and through which various health measures come into action depending on the risk level. This allows for a very clear representation of the transition between risk levels and the corresponding measures. This approach has several important psychological advantages, which are represented schematically in Table 1. We distinguish between benefits during an ascending and descending pandemic curve.



Table 1
Psychological benefits of a covid barometer

	Ascending curve	Descending curve
1) Risk perception - What?	Realistic and common risk perception    Cacophony" of warnings	Realistic and common perception of risks  Premature optimism
- Benefits?	Encourages clear and proportionate policies	Ensures a prudent decrease
2) Predictability - What?	Clear division into phases  ⇔Unpredictable interventions	Clear division into phases⇔Unpredictable interventions
- Benefits?	Reduces uncertainty and avoids ad hoc, seesawing policies.	Limited impact of influence groups
3) Controllability - What? - Benefits?	Goal-oriented Unclear objectives  Increases auditability and encourages voluntary accountability	Goal-oriented⇔No goals  Promotes perseverance and collective efficiency
4) Social link	<ul> <li>A clear and uncluttered visual scheme shared with the population has a unifying effect, allows people to reflect on the epidemiological evolution and its consequences, and stimulates them to take responsibility.</li> <li>The system frames the messages of policymakers and minimizes the temptation to send individual messages that are not consistent with the scheme.</li> </ul>	

1. A COVID barometer promotes a realistic perception of risk. It thus ensures that the efforts to be made are in line with or proportional to the level of risk of the epidemic. Disproportionate measures create a "compulsory" type of motivation: compliance becomes a burdensome task that is difficult to sustain. Citizens are willing to follow stricter measures provided they perceive them as necessary in a given situation. In the case of an ascending curve of COVID figures, this common perception of risk avoids a kind of "cacophony" of warnings but ensures a clear perception of risk that leads to rapid and effective action. In the case of a downward curve of COVID figures, a barometer avoids premature optimism, but allows for a cautious reduction of health measures.



- 2. A barometer provides clarity and increases predictability. New measures are adopted in stages, avoiding ad hoc or stop-and-go policies. As COVID numbers decline, predictability reduces the ability of lobbying groups to influence the nature and timing of decisions. In addition, by increasing predictability, we can avoid uncertainty, which is one of the main sources of stress and loss of well-being.
- 3. A COVID barometer can act as a motivational lever because of its goal-oriented nature. This feature reinforces the feeling of controllability, as the "if-then" predictions clearly show how we can influence the curve by our behavior and by taking appropriate actions. Indeed, the lack of controllability over the future is another major source of stress and reduced well-being. Being goal-oriented also stimulates the sense of responsibility of citizens, as they have a common scheme that allows them to think together and take the initiative, individually or collectively, to adapt their behavior according to the actual level of risk. As a result, their voluntary motivation is strengthened, and they are more willing to persevere in the downward phase. In the end, the threshold values of the barometer offer perspectives to the population.
- 4. A barometer has a role as a social link. Working together towards a collective goal stimulates a sense of collective efficiency and confidence to get through a difficult period. Different social groups can be mobilized around this collective goal. A barometer allows a common understanding of the situation, which has a unifying effect. The entire population is then on the same page when it comes to assessing the current level of risk. It also stimulates the adoption of measures by others by promoting the emergence of a social norm. In this way, health behaviors also become "contagious" among citizens.

#### Points of attention during the implementation

To improve this barometer, the following psychological concerns should be addressed:

- The critical thresholds must be low enough. With a descending curve, low enough thresholds ensure that the measures are not relaxed too quickly. In an upward curve, the flashing lights can be triggered more quickly, thus preventing the situation from getting out of hand. These thresholds can be justified by presenting graphs showing how the situation would evolve if we did not respect the specific measures for the given phase. This preventive approach is the essence of a barometer: it predicts how the situation will evolve in the future, in addition to being a representation of the current or past situation.
- Psychologically relevant parameters should be selected to determine threshold values. For example, hospital admissions have the psychological advantage of having the strongest impact on people's perception of risk and the strongest correlation with voluntary motivation. Their disadvantage is that they are at the end of the "COVID chain" and therefore the threshold values must be very low to preventively induce the desired behavior. It is therefore advisable to supplement the



number of hospitalizations with previous risk parameters (e.g., R-value or positivity rate) and graphical representations of expected developments under certain conditions.

- It is important to avoid the yo-yo effect: moving too quickly from one level of risk to another is confusing and unpredictable for citizens (e.g., if in a few days the situation changes from yellow to orange and back again; think of the ambiguity caused by rapidly changing color codes when traveling abroad). It is therefore important to allow for a safety period or safety margin: the set parameters must at least be reached for a sufficiently long period before the transition to another phase. It is recommended, especially when moving to a lower risk level, to build in sufficient certainty that the risk level is well under control: giving hope and then withdrawing it again induces a form of frustration that stimulates aggressiveness, despair, and/or demotivation.
- The barometer should be communicated in a clear and consistent manner, with sufficient frequency to introduce the concept into people's daily lives. Keep the communication short, fun, and interesting. One can think of a COVID newsletter (e.g., once a week for a maximum of 10 minutes) in which different colors are highlighted on the map of Belgium (as for example for the election results). A COVID bulletin can also be used for a brief and didactic (visual) indication of epidemiological forecasts (as with weather maps) and to explain the logic of exponential curves, for example. Other virological facts can also make it interesting. It would be useful to also devote space to "social models", i.e., stimulating clips where people show how they deal creatively and "safely" with the restrictions imposed by COVID. Video clips and other information materials can also be provided in different languages that can be easily distributed via social media and through communication channels for hard-to-reach groups.



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