REPORT 28

Vaccination: preferences become clear!

The Motivation Barometer

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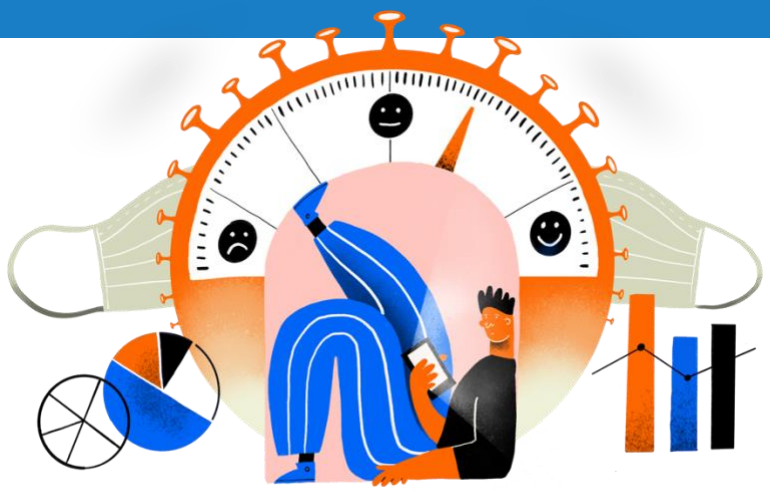


The month March was extremely turbulent in terms of corona measures. The Consultation Committee of the 5th of March held out the prospect of more outdoor activities and the opening of catering and cultural activities from the beginning of May. Due to the rapid increase in the number of infections and hospitalizations, on March 17, the Consultation Committee already withdrew the announced relaxations. Moreover, new restrictive measures were introduced with as one of the most remarkable, the closure of schools in the week before the Easter holidays. The vaccination program was also not without any problems. We saw images of empty vaccination centers due to administrative and computer problems and there was concern and confusion about the side effects of the AstraZeneca vaccine. On March 8, several countries suspended administration of this vaccine, but Belgium maintained its use until the European Medicines Agency issued a favorable opinion on March 11. What impact have these events had on Belgians' motivation and willingness to be vaccinated?

Take home message

- The percentage of respondents who want to be vaccinated remains high and does not appear to have decreased due to the controversy surrounding the AstraZeneca vaccine.
- Regardless of the age or education level of respondents, the percentage of people who do not want to get vaccinated at all is the lowest since December.
- There are substantial differences in vaccination willingness between the Dutch-speaking and French-speaking parts of the country. These differences became even more pronounced in March and can be attributed to differences in the population's confidence in the government's corona policy.
- A stable minority adheres to vaccine conspiracy theories.
- Participants who have experienced a corona infection have a lower intention to get vaccinated.
- Individuals who choose to be vaccinated out of conviction are more likely to be inclined to adhere to the measures after vaccination.

Recommendations

- Efforts remain necessary to remove doubt regarding vaccination.
- Targeted messages are needed for people who have experienced infection to emphasize the importance of vaccination for them as well.
- Emphasis should also be placed on the message that vaccination does not exempt you from following the corona measures.
- The 15-minute waiting period after vaccination is a unique opportunity to inform citizens in a targeted way about the expected behavior using motivational videos. After all, messages to encourage behavior change work best when they are given in a relevant context and when people have time to process them.

Overview

1. Description of the sample
2. Vaccination intentions
3. Respecting the measures
4. Motivations
5. Conspiracy Theories
6. The confidence
7. Vaccination Passport

1. Description of the sample.

In this report, we discuss the results of 4 consecutive waves of data collection: December (2 to 25, report #18), January (8 to 22, report #20), February (2 to 20, report #23) and March (1 to 10, 11 to 20, and 21 to 30). The questionnaire was distributed in the Dutch-speaking and French-speaking parts of the country. The proportion of each language group in each wave is shown in Table 1. The number of participants per month and per language are sufficiently large to allow reliable estimates (margin of error of about 3% for the smallest number).

Table 1: *Number of participants by language group and by month* [1]

	December	January	February	March 1-10	March 11-20	March 21-30
Dutch-speaking	10339	15679	5099	3851	2926	7418
French-speaking	3119	964	7445	1629	2837	9139

Table 2. *Characteristics of the sample by language group and by month*

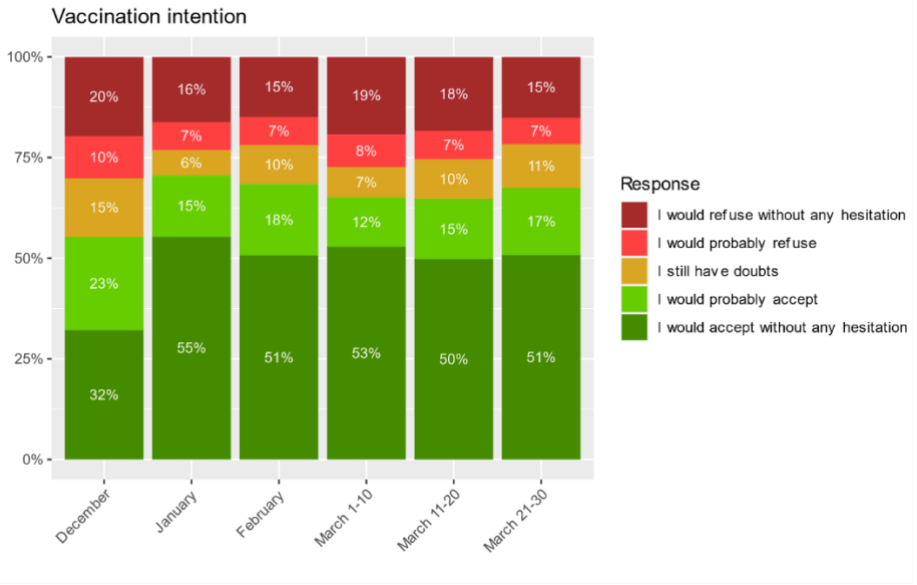
Date	N	Mean age	Language		Gender		Education level		
			Dutch-speakers	French-speakers	Male	Female	At most secondary	Bachelor	Master
December	13458	50.03	77%	23%	41%	59%	32%	37%	32%
January	16643	46.52	94%	6%	28%	72%	37%	39%	24%
February	12544	50.86	41%	59%	37%	63%	33%	37%	30%
March 1-30	27800	47.10	51%	49%	35%	65%	34%	37%	29%
March 1-10	5480	42.61	70%	30%	34%	66%	33%	38%	29%
March 11-20	5763	48.58	50%	49%	29%	71%	35%	38%	27%
March 21-30	16557	48.07	45%	55%	38%	63%	34%	36%	30%

2. Vaccination willingness

Figure 1 shows that the willingness to be vaccinated increased significantly between December and January (in January, 55% "probably" or "definitely" intended to be vaccinated, while in January the percentage increased to 70%). In February, this remained at the same level (69%). In March, three consecutive surveys were conducted, following events related to the AstraZeneca vaccine. The results show a slight

[1] Analyses were weighted by region, age, gender, and education level of participants to maximize agreement with the Belgian population.

Figure 1. Vaccination intention according to the month of data collection.

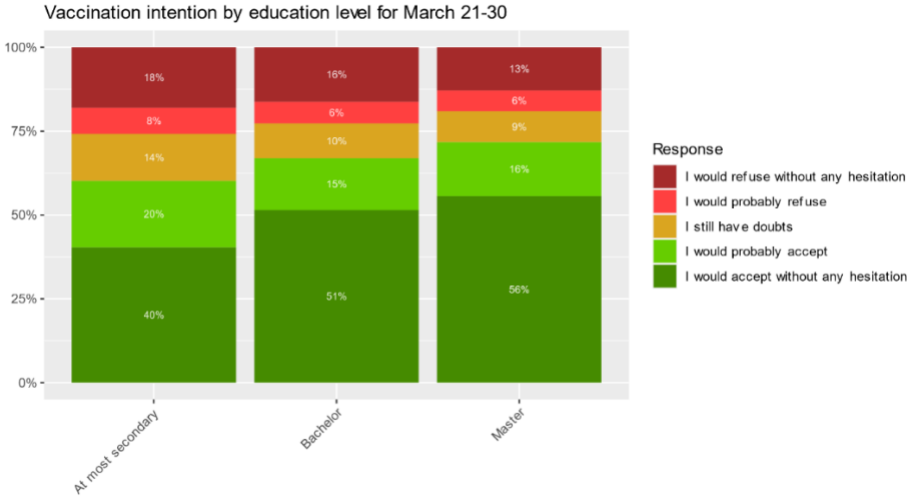


decrease in the first and second 10-day periods (65%), followed by an increase in the last 10-day period (68%). This suggests that the negative effects of the 'AstraZeneca uncertainty' have been broadly neutralized (even though there are differences in terms of education, age and language affiliation; see below). In addition, the percentage of people who would immediately refuse the vaccine returned to its level in February (15%).

According to the level of education

Vaccination intentions during the last ten days of March differ as a function of education level (i.e., no degree/secondary degree, Bachelor and Master). Figure 2 shows that vaccination intentions increase with the level of education (60%, 66% and 72%, respectively). Therefore, it is important to target messages specifically to the category of the population with the lowest level of education. Of this group, 26% would definitely or probably refuse the vaccine, 14% were reluctant.

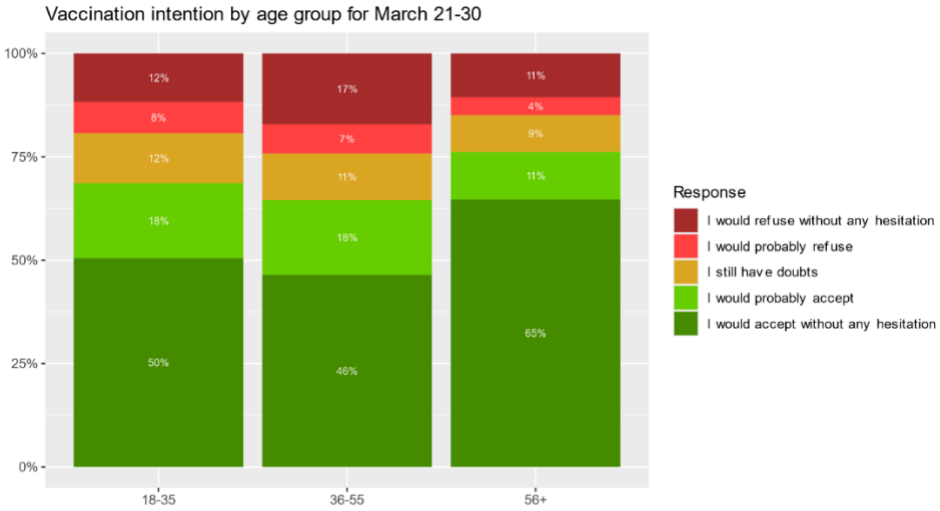
Figure 2. Vaccination intention according to education level (period March 21-30).



According to age

We divided the age groups into 3 categories (18-35, 36-55, 56+). Overall, and consistent with the February results, the oldest age group is most likely to be vaccinated (77% probably or certain), followed by the youngest age group (68%). As shown in Figure 3, the 36-55 age group is the least enthusiastic (64%).

Figure 3. Vaccination intention according to age group (period March 21-30).



According to the language

We examined vaccination intentions according to the language group. Although the December numbers were lower in the French-speaking part of the country (49%) than in the Flemish part (59%), there was a strong increase in January (70%) and February (69%), with more or less similar levels on both sides of the language border. In March, there was a decrease, but only on the French-speaking side. In the last wave (Figure 4), 72% of Dutch speakers and 63% of French speakers indicated that they are (very) strongly willing to be vaccinated. Thus, the difference is almost 10%.

Figure 4. Vaccination intention by language (period March 21-30).

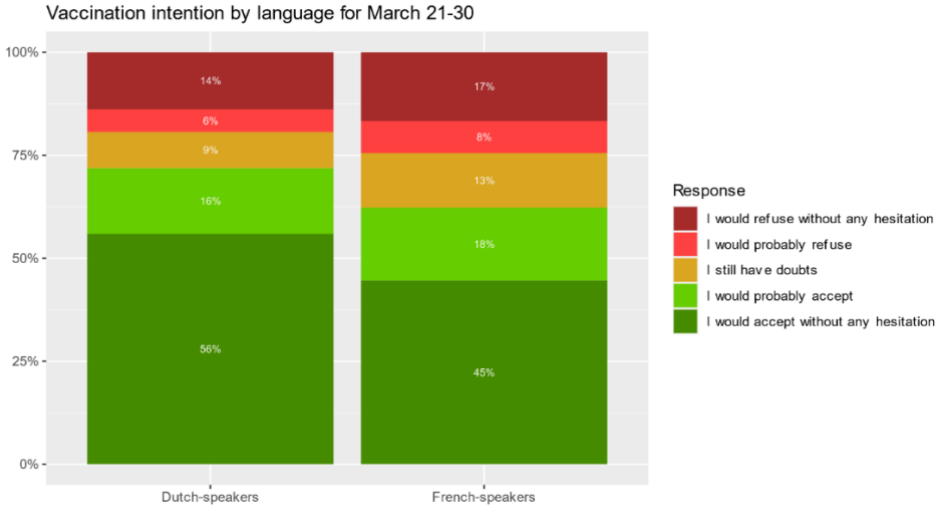
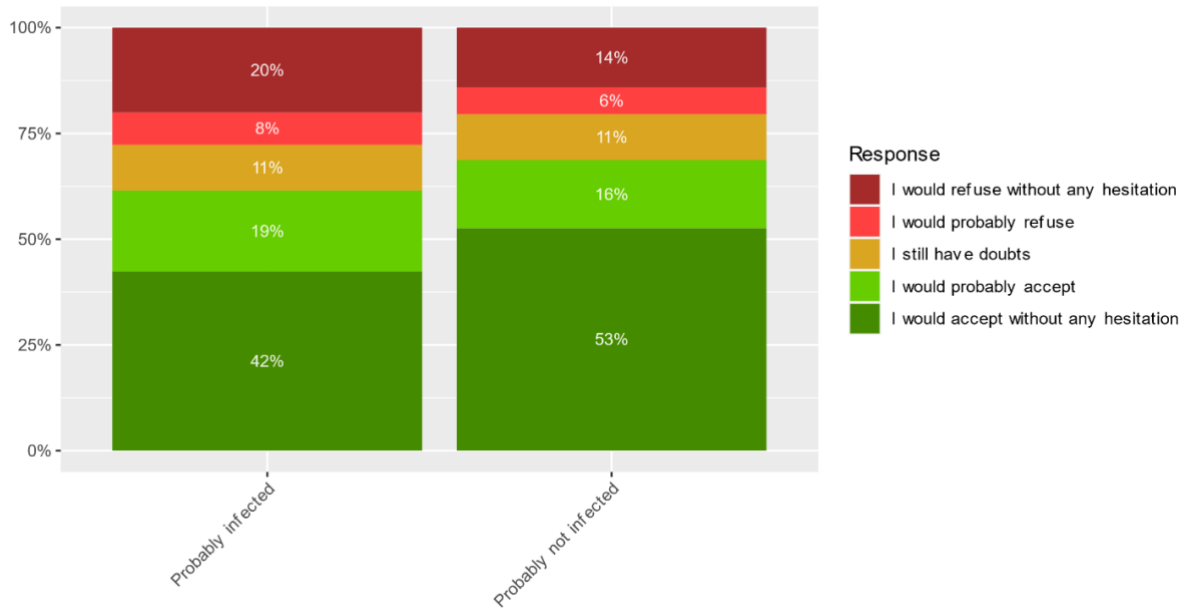


Figure 5. Vaccination intentions according to known or suspected prior infection with COVID-19



According to previous infection

An important question is whether the perception of immunity in oneself has an impact on vaccination intention and compliance with corona measures. After all, it is not clear at this stage to what extent individual immunity can also prevent transmission of the virus. Two factors are important for the perception of immunity: a) vaccination (after two doses of the vaccines currently being administered); and b) being previously infected.

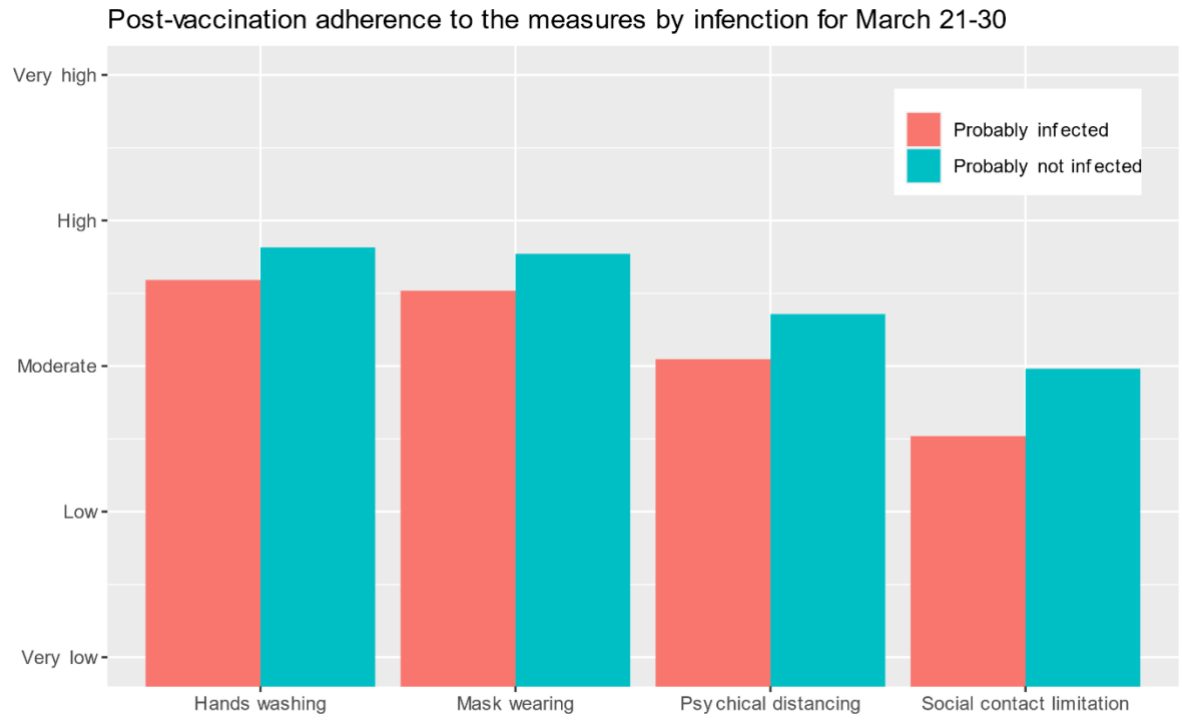
The percentage of people vaccinated is still too low at this stage to estimate the effect of vaccination. Moreover, the current population being vaccinated is not representative, as it consists mainly of the elderly, vulnerable persons or medical personnel. We will only be able to thoroughly consider this important issue once a sufficient number of people in a larger number of age groups have been vaccinated.

However, we were able to analyze the data according to whether or not they had experienced an infection. Already 15.8% of our sample reported to have been previously infected. This percentage includes people with and without a positive COVID-19 test (in the latter case their own conviction applied). The aim was to assess the extent to which they would be less likely to follow corona measures and to get vaccinated. The results showed that a (perceived) infection was associated with a lower vaccination willingness (61% vs. 69% for the non-infected individuals, see Figure 5).

3. Respecting the measures

We also found that (perceived) contamination reduces adherence to all measures (see Figure 6). These results are stable over time. This demonstrates that targeted campaigns should emphasize the importance of continued compliance with corona measures by those who (believe) they have already been infected.

Figure 6. Intention to comply with corona measures after vaccination based on an established or suspected prior infection with COVID-19



4. Motivation

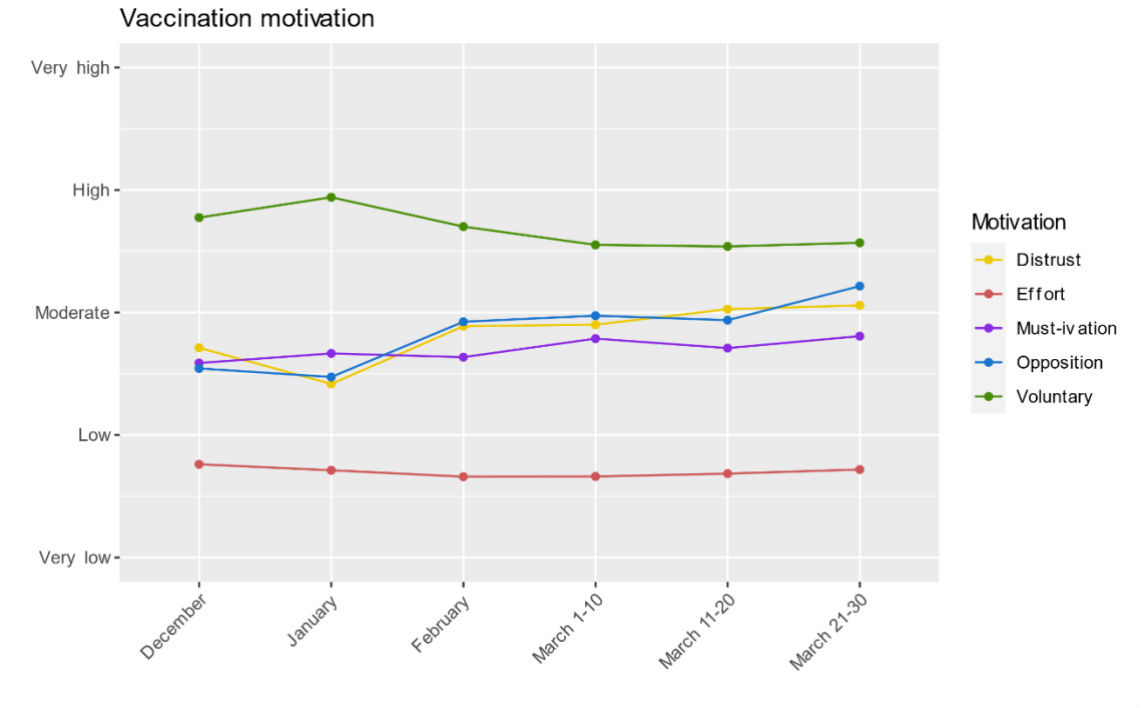
Different types of motivations and motivational determinants of whether or not to be vaccinated were examined (see #report20):

- **Voluntary motivation:** expresses the degree to which one is fully convinced of the benefit and necessity of vaccination, for example because it offers protection for oneself, one's family, or the population.
- **'Must'-ivation or controlled motivation:** expresses the degree to which one feels obligated to be vaccinated, for example, because others expect it or to avoid criticism.
- **Effort** expresses the degree to which getting vaccinated requires a lot of effort.
- **Distrust** expresses the degree to which people distrust the effectiveness of the vaccine or the person recommending the vaccination.

- **Resistance (opposition)** expresses the degree of resistance to a government that is perceived as intrusive and reacts excessively.

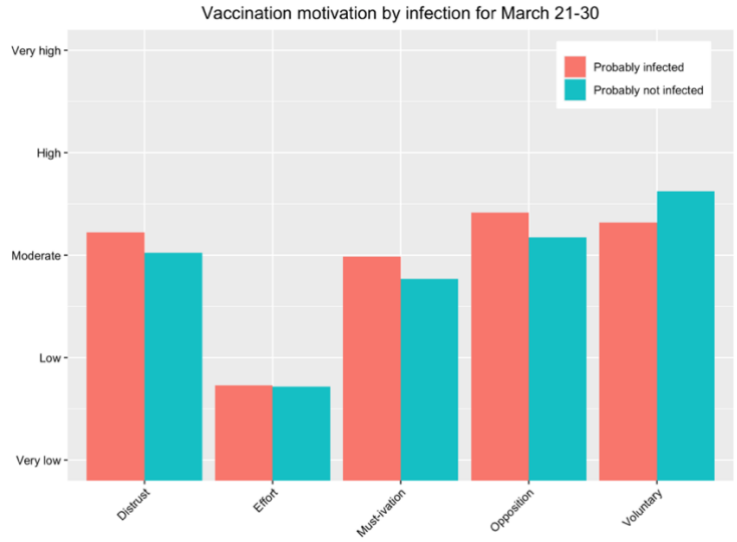
Voluntary motivation is most strongly associated with vaccination willingness. Figure 7 shows that this motivation remains highest and has remained stable throughout the three measurements taken in March (green line). The same is true for the other types of motivation. Despite the logistical difficulties associated with the administration of the vaccine during the week of March 1, and the uncertainties associated with the side effects of the AstraZeneca vaccine, the perception of effort (yellow line) remains very low. In contrast, resistance has steadily increased since December (blue line).

Figure 7. Motivation for (non)vaccination according to the month of data collection



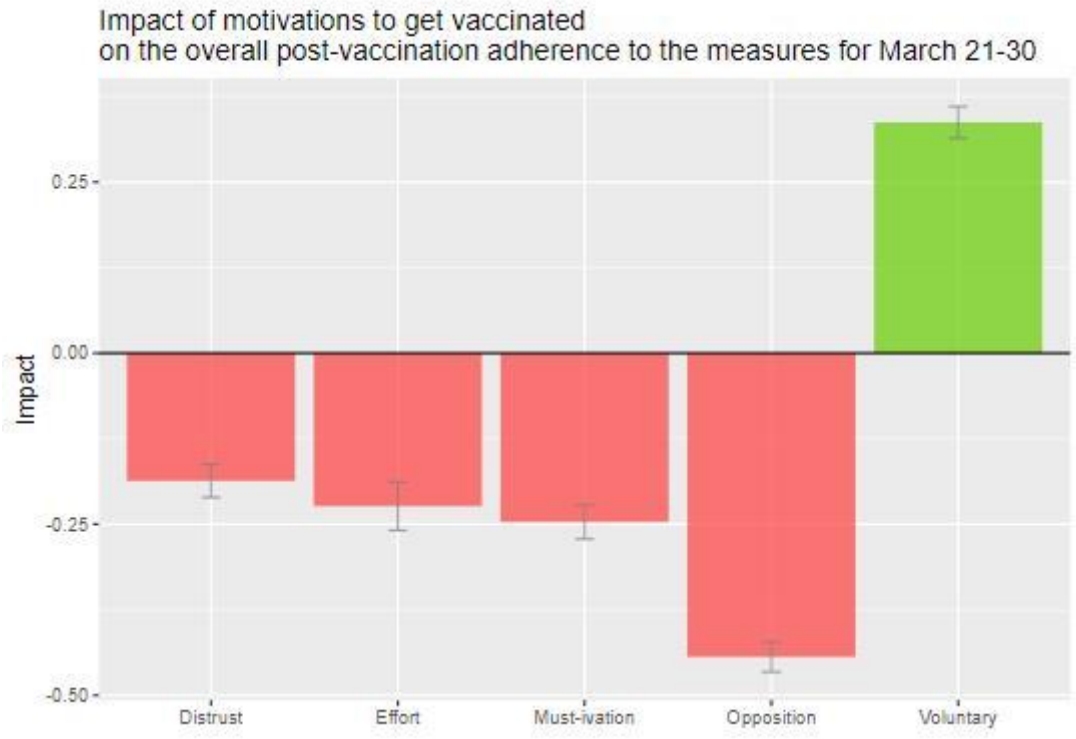
People who had been previously infected reported lower levels of voluntary motivation and higher levels of controlled motivation ('must'-ivation), distrust, and resistance (Figure 8).

Figure 8. Motivation types according to prior known or suspected COVID-19 infection (period March 21-30)



Motivation to get vaccinated predicts the degree to which one intends to continue following the measures after vaccination. Only voluntary motivation positively predicts this intention, while each of the other motivational factors - and resistance in particular - are negative predictors. Thus, voluntary motivation predicts not only whether one wants to be vaccinated, but also how one will behave after vaccination. Stimulating voluntary motivation is thus a key factor in inducing sustainable behavior.

Figure 9. Relationship between vaccination types and intention to follow post-vaccination measures



5. Conspiracy theories

The Motivation Barometer examined several aspects related to belief in conspiracy theories regarding vaccination. One interesting indicator concerns the perception of conspiracy between pharmaceutical companies and the government to sell vaccines whose efficacy is uncertain (this item was used only in March). This statement is particularly expressed in the documentary "This is not a conspiracy", which was widely viewed in the southern part of the country in February. In early March, about 25% of respondents said they agreed with this statement, 12% was unsure, and 63% disagreed (in contrast to 42% of French people who agreed with this statement in a 2019 survey[2]).

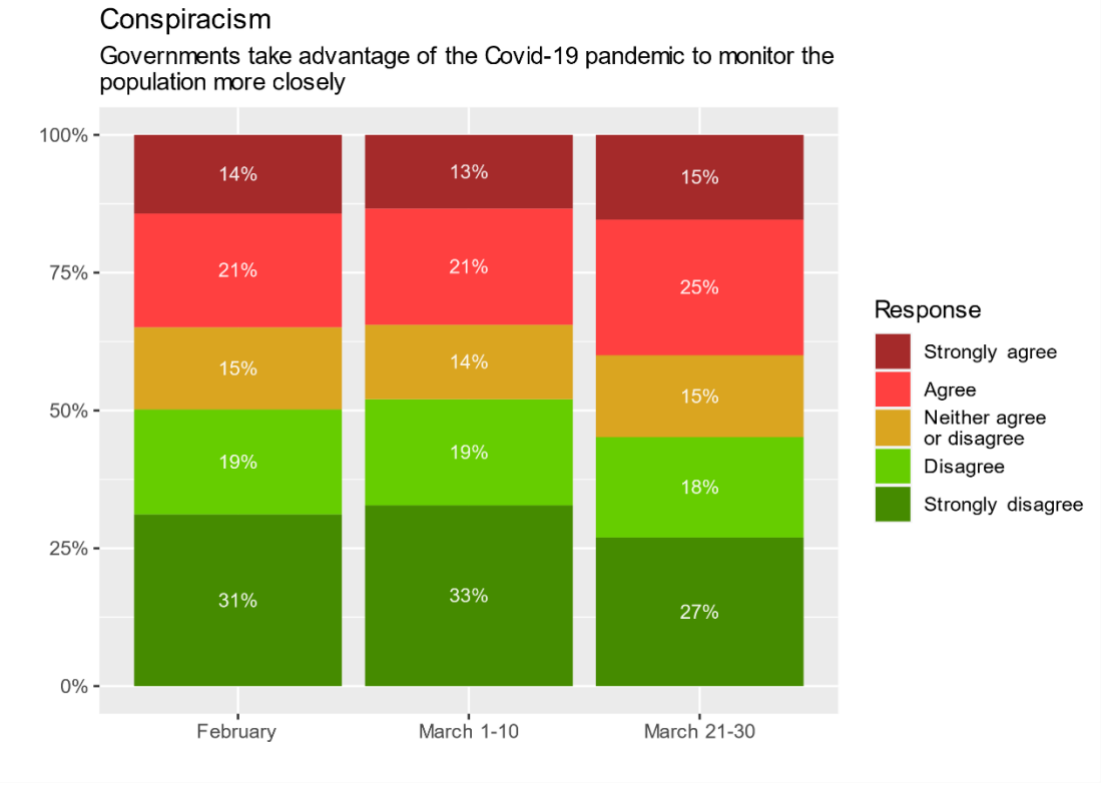
At the end of the month, the percentage of agreeing opinions was the same (25%), while the percentage of undecided opinions had increased (18%) and the percentage of disagreeing opinions had decreased (57%). People who rejected conspiracy theories seemed to have become undecided. Is this a possible AstraZeneca effect? Indeed, one could find an argument pro conspiracy in the idea that the trouble related to this vaccine had to do with conflicts of interest between political authorities and society. Of course, it is difficult to confirm this interpretation based on these data alone.

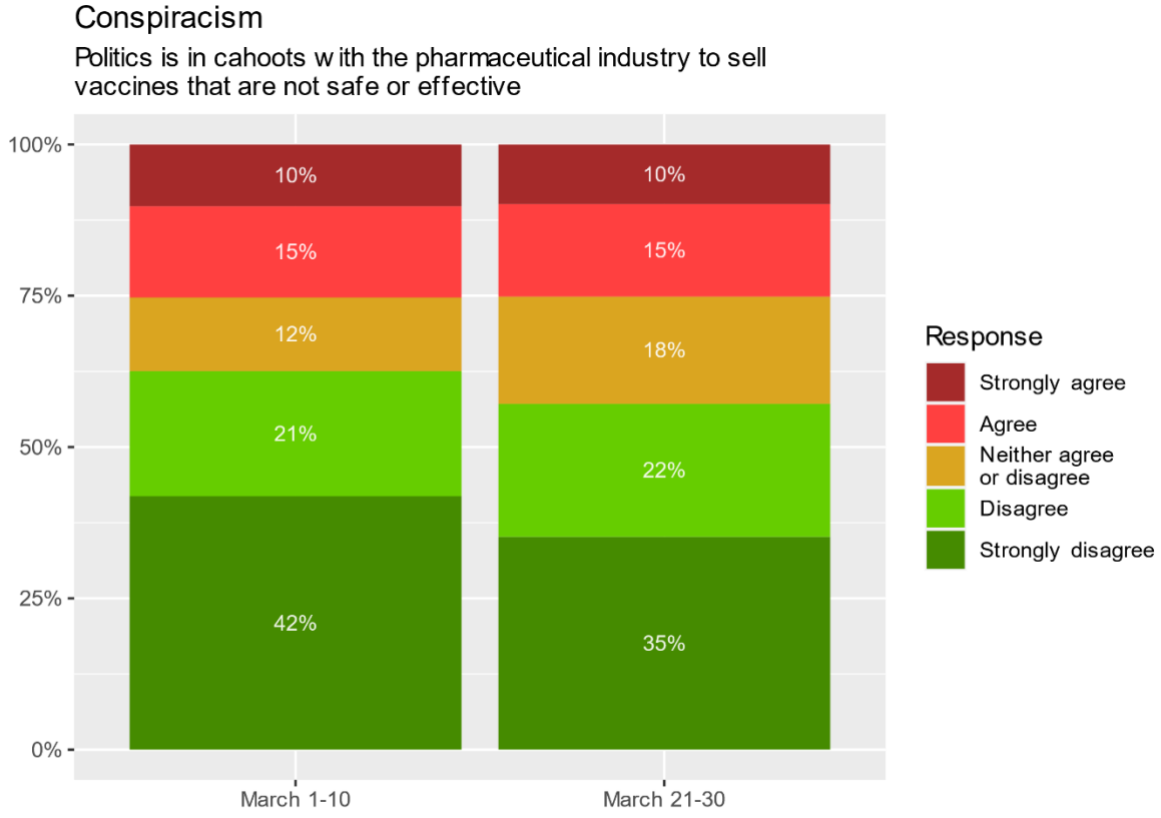
As for suspicion of conspiracies related to China's actions (“the coronavirus as a weapon to create panic or an economic crisis”), there was no notable evolution between February and March. In general, it seems that since February, the support for these conspiracy theories has remained in the minority and stable (below 8%).

Another common conspiracy theory is that the government is taking advantage of the pandemic to keep an eye on the population. This theory has the most supporters compared to the other theories we evaluated. In February (35% agree, 50% disagree, 15% undecided) and early March (34.5% agree, 52% disagree, 13.5% undecided) the persons who agreed with this theory remained stable. However, at the end of March, the number of persons agreeing increased (40% agree, 45% disagree, 15% undecided). This can be explained by the revelations (see Le Soir of March 10) about a Smals-project to "profile" Belgians.

[2] https://www.ifop.com/wp-content/uploads/2019/02/115960-Présentation-version-publiée.pdf

Figure 10. Degree of agreement with the various proposed conspiracy theories (period March 21-30)

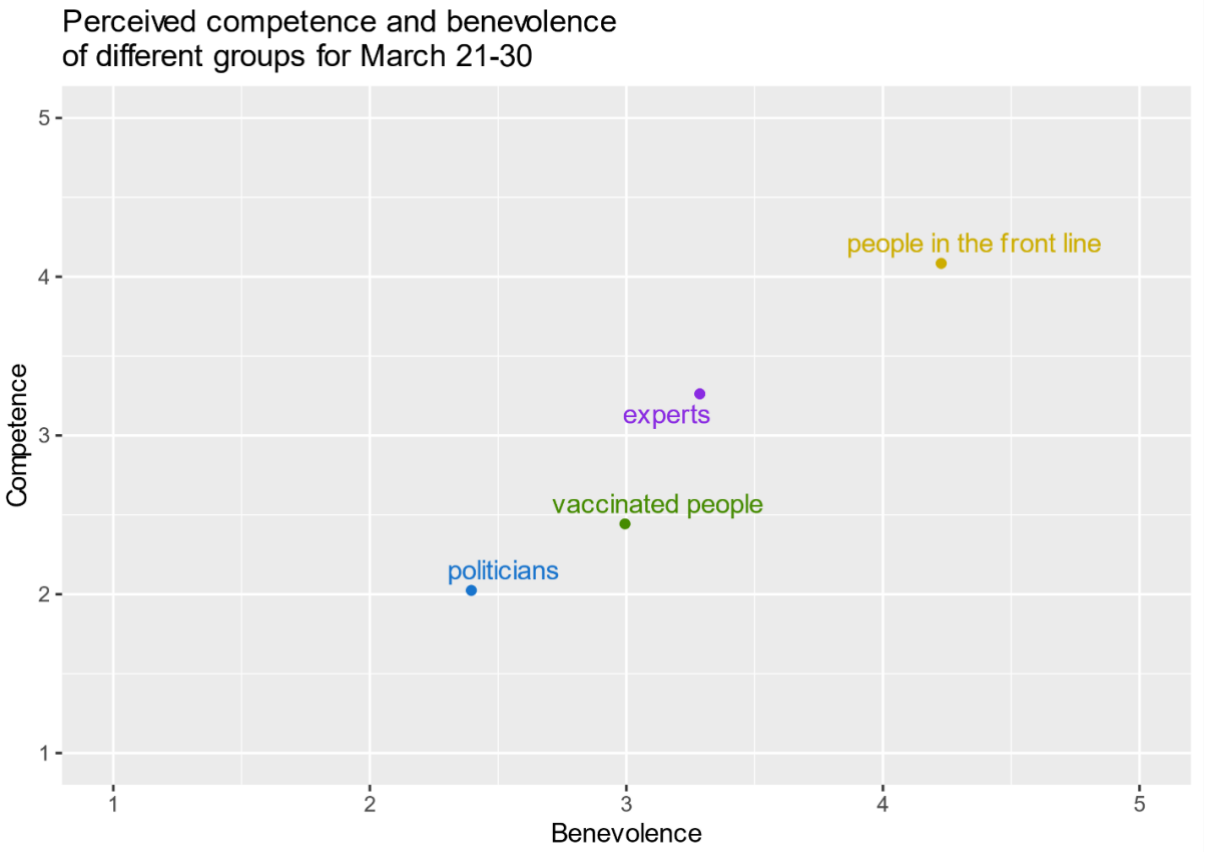




6. The role of trust

A key issue is the level of confidence in the benevolence and competence of actors to control the pandemic. As shown in Figure 11, frontline workers (general practitioners, pharmacists, nurses, etc.) enjoy high levels of trust among respondents. This is less true for experts or people who have already been vaccinated. Politicians received the lowest scores.

Figure 11. Perceptions of the competence and benevolence of various crisis actors (period March 21-30)



One hypothesis to explain the different response behavior of Dutch and French speakers (see above) has to do with the differences in the perception of the authorities and the trust that is placed in the policy. Indeed, there are striking differences (Figures 12 and 13) between the two language communities in the way they perceive the authorities in general and, more specifically, in the degree of confidence in the benevolence and competence of the authorities to contain the pandemic.

Figure 12. Perceptions of government by language group (March 21-30).

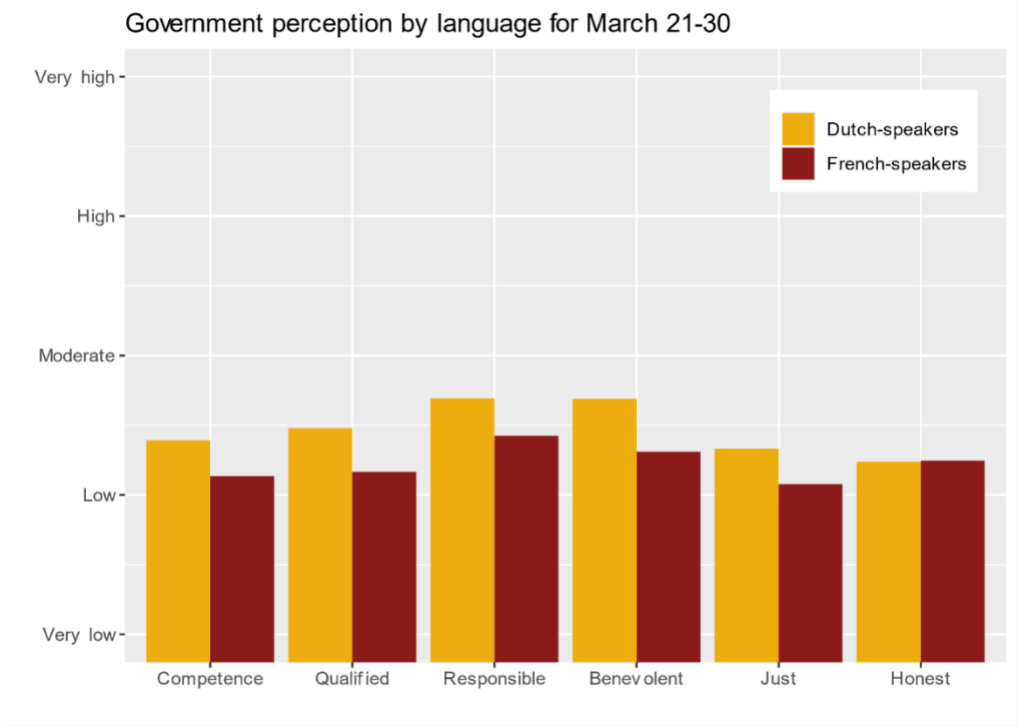
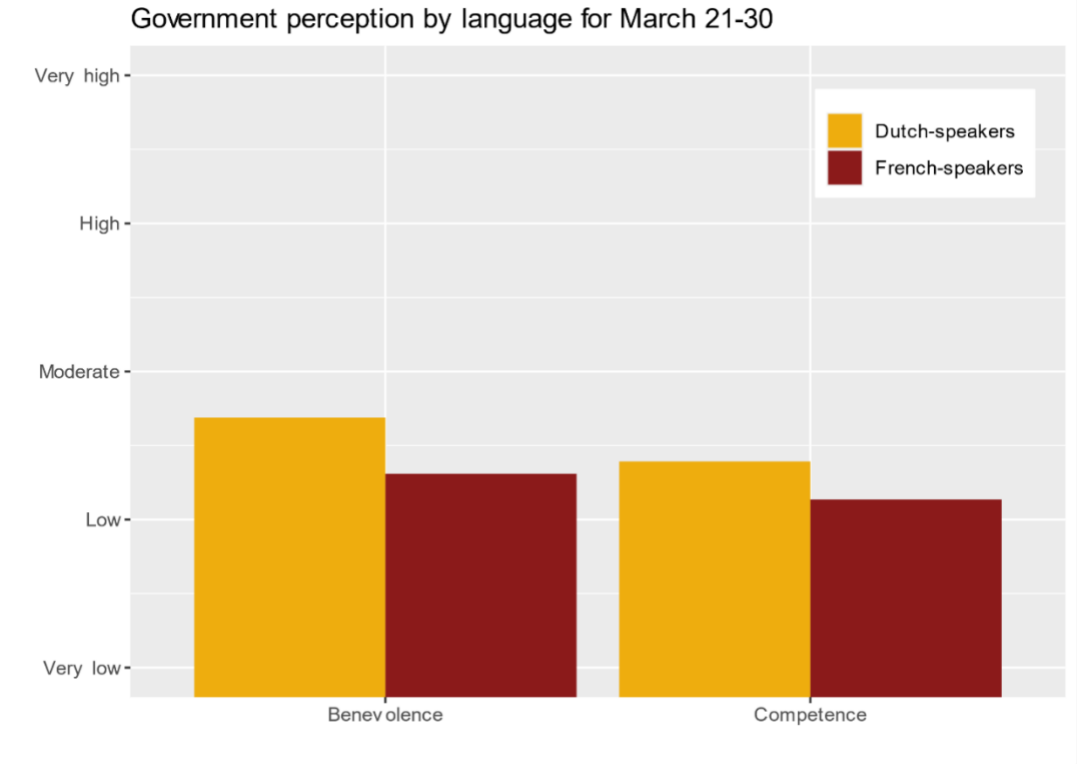


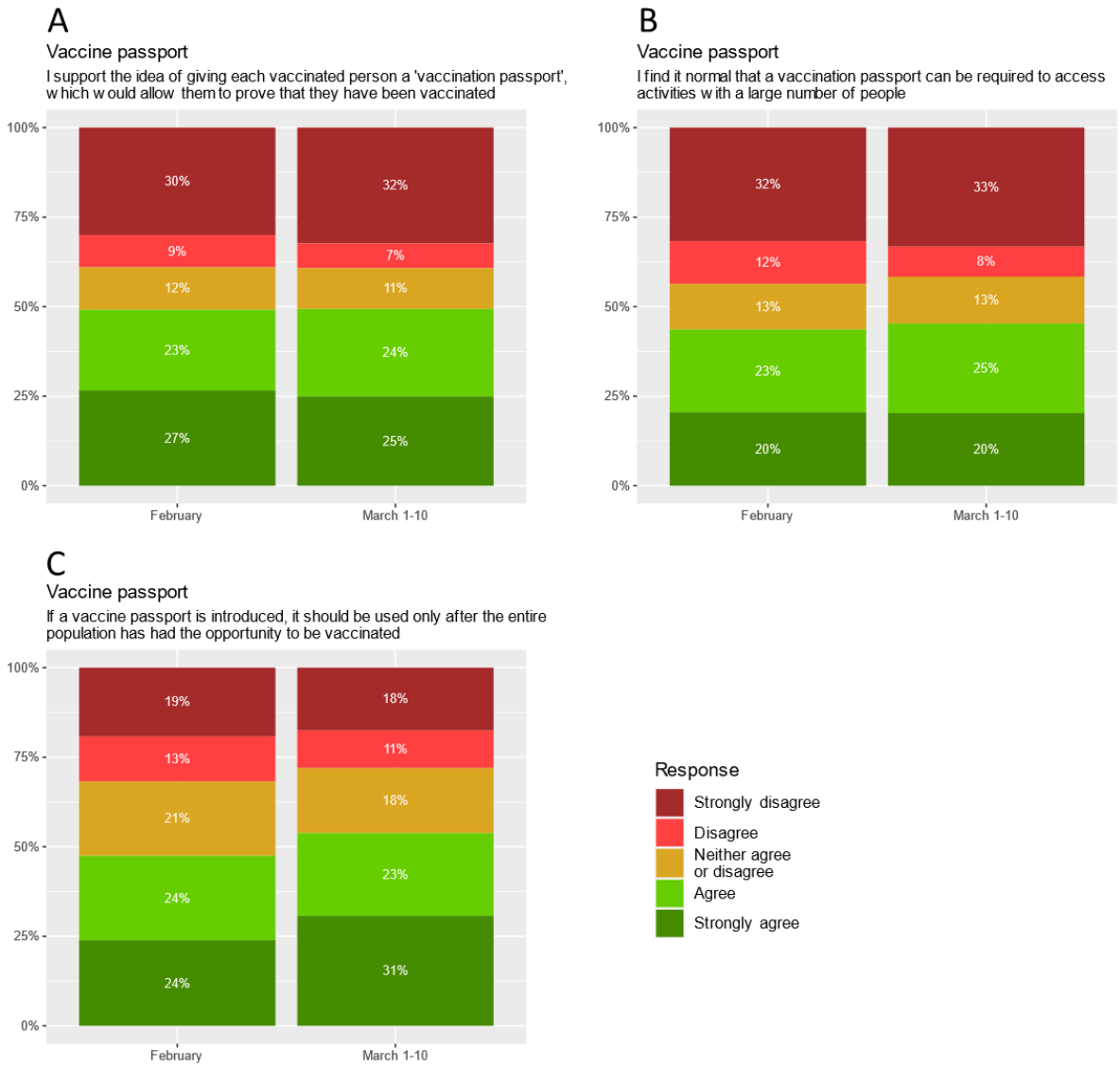
Figure 13. Perceptions of politicians' ability and benevolence by language group (period March 21-30)



7. Vaccination passport

We also asked participants (in February and early March) their views on a vaccination passport that would allow access to certain activities. This possibility is currently being discussed, which could lead to divisions in society. This could hamper the solidarity needed for a successful vaccination campaign. In absolute terms (Figure 14a), we see that attitudes towards this passport are indeed highly polarized, with a small majority in favor and a large minority against.

Figure 14. Attitude toward the vaccine passport by month of data collection



Regarding attitudes toward using the passport to access certain activities, we see similar results (Figure 14b).

It is obvious that the use of such a passport will be seen as particularly unfair by those who have not yet had the opportunity to be vaccinated. We therefore asked our participants to what extent they would consider it legitimate to use such a passport only when the entire population has had the opportunity to be vaccinated. Not surprisingly, there is a slightly higher level of agreement with this possibility, even increasing in March (Figure 14c). On the other hand, there is little change in the responses to the other questions.

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