

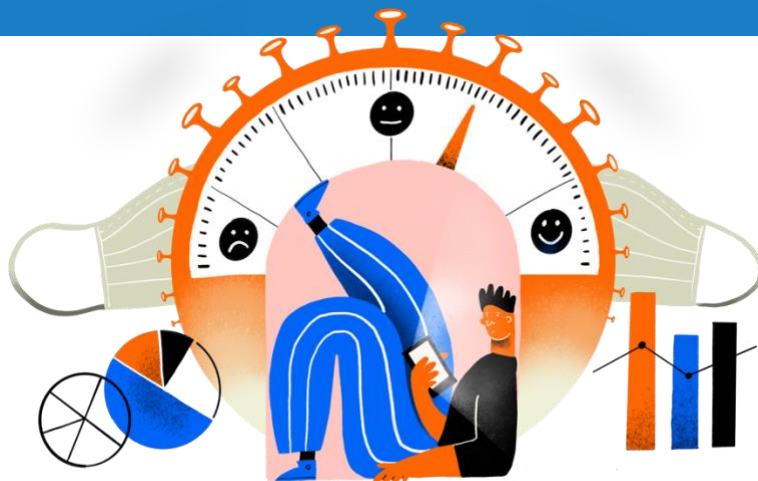
# REPORT 13

## What do people think are meaningful alternatives to the current bubble concept?

### The Motivation Barometer

Authors (in alphabetical order): Sofie Morbée, Omer Van den Bergh, Maarten Vansteenkiste, Joachim Waterschoot

Reference: Motivation Barometer (September 17, 2020). What do people think are meaningful alternatives to the current bubble concept? The psychological effects of flex bubbles and a social carte blanche compared. Ghent, Belgium.



*In the middle of summer vacation, infection rates unexpectedly appeared to rise again. Our habit of meeting family, friends, and neighbors during the summer came under pressure with the reintroduction of a smaller bubble. Today, that bubble formula is becoming less efficient. Some citizens vilify the bubble concept; others still believe in its effectiveness in controlling the spread of the virus. Virologists and biostatisticians indicate that in Antwerp the number of infections actually decreased just because people from Antwerp adhered to the prescribed social restrictions. But to what extent do people still adhere to this social restriction today? And what is an alternative? In the latest wave of the Motivation Barometer, in which 5867 people participated, respondents were presented with three different 'social formulas'. For each formula, they were asked whether it would increase or decrease their relatedness, autonomy, worry and confusion. This yielded a varied and interesting pattern of results: participants prefer a 'flexible bubble' with a maximum of fixed close contacts to a 'carte blanche' formula, which would mean they could have an unlimited number of close contacts. In the current report, the expert group 'psychology and corona' compiles the most important empirical findings and formulates policy recommendations.*

### Take home message

- The satisfaction of psychological needs for relatedness and autonomy is under pressure, particularly among young adults.
- In reality, the bubble of 5 is only adhered to by 1/5th of the respondents.
- Participants prefer a 'flexible bubble' with a variety of fixed close contacts with an upper limit (i.e., 10) to a social 'carte blanche' formula, where each person does his/her thing with regard to the social life. Moreover, 66% reported that they would stick to this 'flexible bubble'.
- A social carte blanche increases autonomy, but also worries; these worries are less prevalent in 'flexible bubbles'.
- 'Flexible bubbles' with a greater variety of fixed contacts (i.e., from zero to ten) are associated with more psychological benefits (more autonomy, less worry, less confusion) than 'flexible bubbles' in which the number of fixed contacts (i.e., 5) can be switched after a time.
- We formulate concrete policy recommendations on what measures the government can introduce and how it can do so. Collecting psychological indicators (motivation, mental health) in a barometer is indispensable for making informed policy choices.

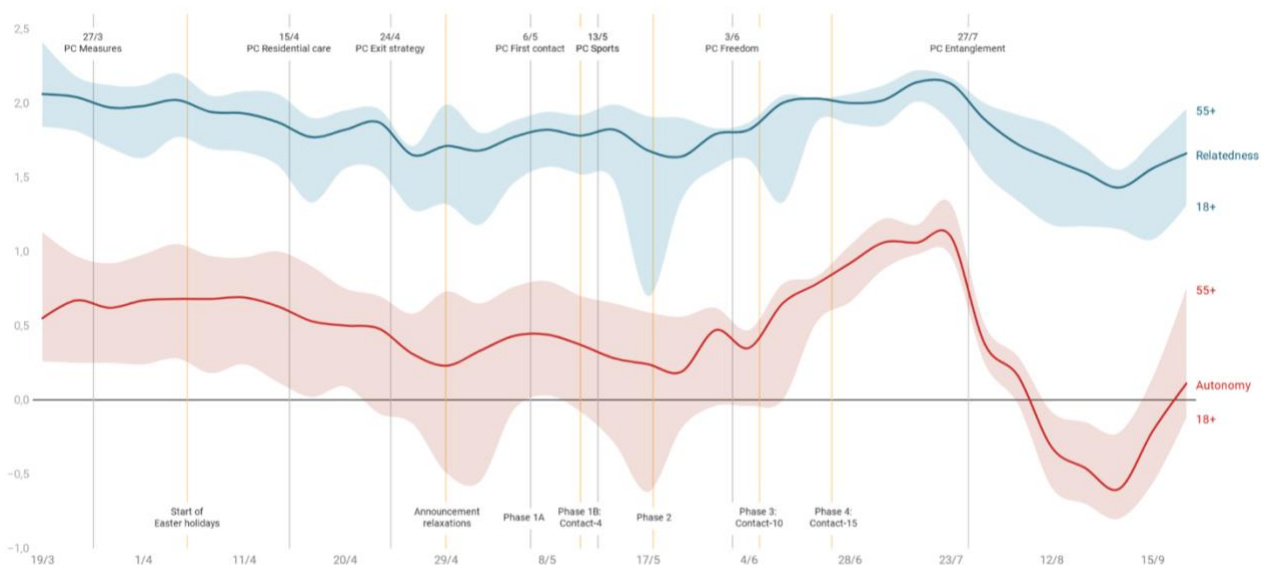
## Basic psychological needs

In this corona crisis, the number of infections, tests, hospitalizations, etc. are monitored from day to day. But these physical health indicators follow directly from people's behavior and their motivation to adhere to corona measures. Adhering to the measures takes a lot of effort from the population and weighs on mental well-being. It is therefore best for policy makers to introduce measures that guarantee both the physical and mental health of the population. In the Motivation Barometer of Ghent University, numerous psychological parameters have already been mapped out since the first week of the lockdown. So far 73 182 people (average age = 49.06, 62% women) took part in these surveys.

People's motivation and mental well-being is greatly determined by the degree to which their basic psychological needs are satisfied or not. Just as we need to eat and drink enough to be physically healthy, these basic psychological needs act as crucial vitamins for our motivation and psychological well-being. Their satisfaction promotes our resilience and provides motivational oxygen to sustain actions. In the case of frustration of these basic needs, we feel exhausted, become gloomy or anxious, our sleep quality suffers, and we become demotivated.

Figure 1 shows the evolution in the satisfaction of two basic needs: the need for autonomy and for relational relatedness. When the need for autonomy is satisfied, we experience choice in our actions, thinking and feeling and we can be ourselves. When we experience a deficit, we feel short-changed and pressured. Satisfaction of relatedness comes from warm and close relationship with others. In the case of frustration, we feel lonely and isolated. Three issues deserve attention:

Figure 1. Evolution of basic psychological needs during the corona crisis.



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1. Throughout the corona crisis, the need for autonomy came under more pressure than the need for relatedness. During the month of August, we actually felt a real deficit in absolute terms in terms of our need for autonomy (the centerline reflects the tipping point toward frustration).
2. Since the introduction of the stricter measures in late July, a steep decline in need satisfaction has been evident, which continued in August. Since early September, this downward trend has reversed.
3. Different generations suffer from this crisis to different degrees. Young adults (18-35 year olds) score systematically lower on relatedness and autonomy throughout the crisis. The measures are - relatively speaking - a stronger infringement on the lifestyle of young adults than of older generations who have fewer social contacts.

**Finding 1:** The satisfaction of psychological needs for belonging and autonomy is under pressure, particularly among young adults.

## Alternatives to the bubble of 5

How do participants adhere to the "bubble of 5" rule? 41.6% say they follow it strictly, 39.5% follow it fairly, and 18.8% do not follow it. However, not all individuals who indicate they follow the measure closely do so. This is evident from questions about the reciprocity of their social contacts. About half (43.7%) of the participants who say they follow the social measure faithfully maintain reciprocal social contacts. In other words, citizens do not necessarily choose each other in their bubble of 5, allowing larger social networks to interact. In practice, this means that only 18% of the population adheres to the "bubble of 5" rule. A majority of individuals who claim to faithfully follow the 'bubble of 5' rule finds this quite (very) difficult (44.2%).

**Observation 2:** The current bubble of 5 is followed by only 1/5th of the respondents.

These figures confirm that the imposed bubble formula is not being properly applied. But what do people themselves prefer to limit their contacts? In the most recent survey, participants were presented with three options, two flexible bubbles with some choice and a social carte blanche formula (see Table 1).

Table 1. *Overview of three social formulas*

Name	Description	Number of contacts	Nature contacts	Information
<b>Flexible Bubble 1:</b>  choose your own bubble size but stick to a maximum of 10	In this proposal, people can choose their own bubble size. They can choose to have close contacts with more or less people, as long as these people are the same and with an upper limit of 10 people. To inform and help people make a choice, a graph will be used to show the expected effect on the number of infections if everyone limits themselves to 5 people or chooses to see 10 people (the upper limit).	Max. 10	Fixed	Effect on contagion curve as a function of number of fixed, close contacts
<b>Flexible Bubble 2:</b>  the bubble is limited to 5, but you may change at 14 days	In this proposal, the bubble size of five people is maintained, but you may change the chosen people every 14 days. To inform people and help them make a choice, a chart will be used to show what the expected effect on the number of infections would be if everyone changed bubbles every 14 days or chose a fixed bubble over time.	Max. 5	Variable	Effect on contagion curve in function fixed versus varying close contacts
<b>Carte blanche:</b>  away with the bubble concept	In this proposal, the bubble concept will be removed and everyone will be free to choose how many people they will interact with on a weekly basis. In order to inform people and help them make a choice, a graph will be used to show what the expected effect on the number of infections will be the more close contacts one has.	Unlimited	Variable	Effect on contagion curve as a function of number of close contacts

In each of the three formulas there is choice, but the nature and degree of choice differs. In options 1 and 2 the choice is circumscribed, whereas in option 3 the population has unlimited choice: they are given carte blanche and can therefore return to normal life. In Option 1, the population has choice as to the number of close contacts (these can be up to ten). In Option 2, this is limited to five close contacts, but these five close contacts can be revised after 14 days, thus allowing you to choose five other close contacts. Such a change in the number of close contacts is not possible in Option 1. Once your bubble is filled with ten close contacts, these remain your permanent close contacts.

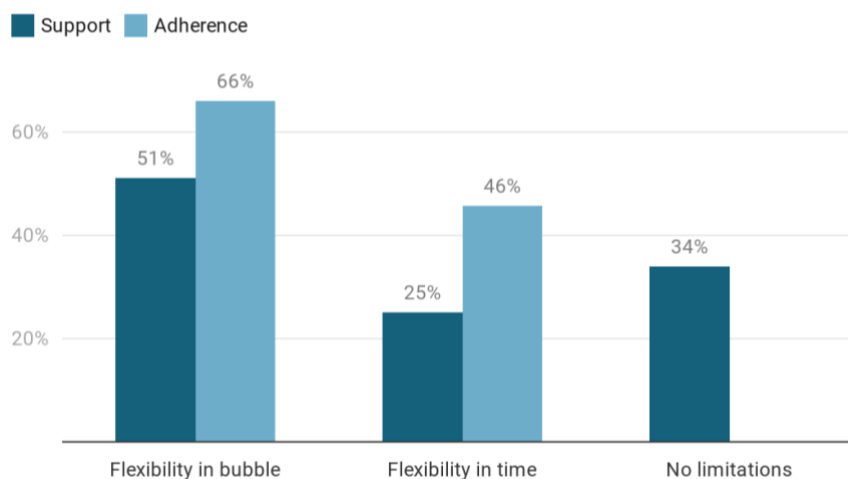
## Psychological effects of bubble alternatives

For each of the three social formulas, participants answered a series of questions. They indicated

- Whether they thought the formula was a good idea.
- To what extent they meet their needs for autonomy and relatedness.
- To what extent they would be concerned about their health and situation.
- Whether the new formula would complicate social life.

Participants prefer the flexible bubble with a variety of fixed, close contacts up to a maximum of 10 (option 1) to the flexible bubble with a more limited, but varying number of fixed contacts over time (option 2). At the same time - and this is interesting - option 1 is preferred to the carte blanche formula (option 3), as shown in Figure 2. Apparently, participants prefer a limitation of their social choices to complete social freedom. Moreover, 66% indicated that they would adhere to option 1. This higher percentage can be explained by the fact that the population is increasingly convinced of the effectiveness of this social measure. The expectation that restricting social contacts will keep the infection rate under control has risen sharply in recent weeks, a hopeful result! (see Figure 3).

Figure 2. Preference and willingness to adhere to social formulas.



**Finding 3:** Participants prefer a flexible bubble with a variety of fixed close contacts with an upper limit (i.e., 10) to a social "carte blanche" formula, where each person does his/her social thing. 66% say they would adhere to this flex bubble.

The different options each come with psychological advantages and disadvantages. The carte blanche formula, understandably, is associated with more autonomy, but not with improved relatedness. The flexible bubble of option 1 (self-selected number of fixed contacts with a maximum of 10) is accompanied by as much relatedness as the carte blanche formula (see Figure 4). Indeed, our relatedness depends not so much on the number of contacts but on their closeness and warmth. At the same time, the carte blanche option creates more worry than the flexible bubble; the situation can get out of hand if we go back to our old, social lifestyle. In turn, people find the flexible bubble with variety in our regular contacts (option 2) too complicated, and they would experience less autonomy and more worries than with the other flex bubble. Thus, the respondents correctly estimated the importance of the fixedness of close contacts. Indeed, firmness plays a more important role in containing the spread of the virus than the number of contacts.

Figure 3. Evolution in effectiveness of specific measures.

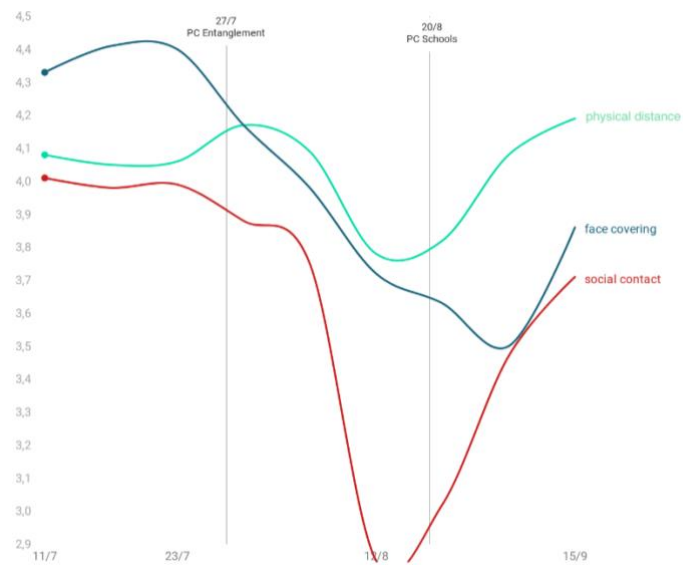
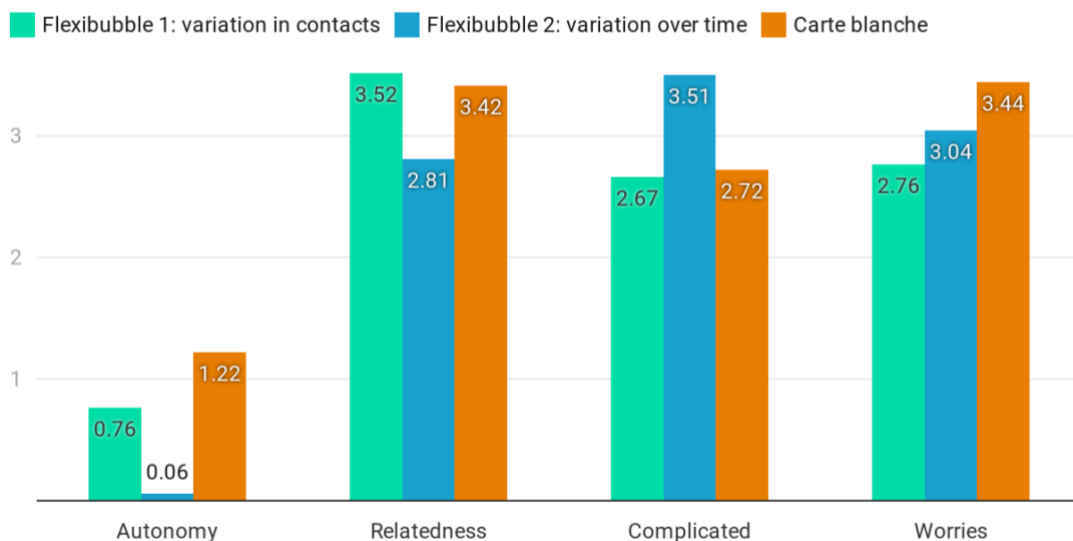


Figure 4. Estimated psychological advantages and disadvantages of three social formulas.



The appreciation of these different formulas depends in part on the age of the participants. For example, young adults (ages 18-35) do feel that a social carte blanche would enhance their relatedness, while this is not true for middle adults (ages 36-54) and older adults (55+). Older adults also do not suspect that a social carte blanche is necessary to increase their autonomy, while this is true for the other two age groups. Individuals who place more

importance on autonomy and relatedness also feel that the social carte blanche formula provides them with more opportunities for psychological need satisfaction.

**Finding 4:** A social carte blanche increases autonomy, but it also increases worries; these worries are less prevalent in flexible bubbles. Flexible bubbles with a greater variety of fixed contacts (i.e., from zero to ten) are associated with more psychological benefits (greater autonomy, less worry, less confusion) than flexible bubbles in which the number of fixed contacts (i.e., 5) can be switched after a time

## What's next? Recommendations for policy

What do these results mean for policy? We formulate the following recommendations. A broader set of recommendations can be found in report #5 of the expert group 'psychology & corona'.

1. At the national level, reduce coercive measures that are perceived as nonsensical. This undermines the need for autonomy and motivation. For example, wearing a face mask when walking in the woods feels mandatory, of which the logic and therefore the necessity is lacking. Make it compulsory to always have a face mask with you, but rely on the judgment and sense of responsibility of the population to know when wearing it is necessary. In crowded places (public transport, store, shopping street), a face mask requirement can apply, although in those circumstances it will not be felt as mandatory but as necessary.
2. Communicate that when the bubble concept was refreshed, the population was consulted. Communicating these findings makes it clear that the opinion of the population is taken seriously. This increases support for the measures.



3. Make clear by means of accessible infographics what the predicted effect of the flexible bubble is on the evolution in the number of infections/hospitalizations and what personal risk someone runs if they meet a larger number of people. This means that curves are shown of the estimated number of infections/hospitalizations if one limits oneself to five or ten contacts, or expands the bubble to 15 contacts. Getting citizens to think can help them make an informed choice, especially if they understand the consequences for themselves and for others.
4. After two weeks, clarify whether the actual curve of infections/hospitalizations and the predicted curve are parallel. If the number of infections/hospitalizations rises more sharply, then people can take initiative to reduce their contacts. If both are parallel, communicate positively about the efforts made by the population. Repeat this every 14 days.
5. Determine a priori thresholds at which there will be a switch to either easing or tightening social contacts. In this way you create predictability and the population knows what goal it is aiming for.
6. Bring this coverage in a corona bulletin on VRT rather than communicating the numbers daily. The cognitive space to process more corona news among the population has become very limited. Therefore, communicate less but with greater psychological impact. In this messaging, share positive examples of citizens who comply with social measures and testify how they do so.
7. If the current bubble formula cannot be filled in more flexibly, give a meaningful explanation of why the current measure is being maintained. Also offer the population a perspective on when it might be possible to switch to a flexible bubble.

## CONTACT INFORMATION

- **Principal Investigator:**  
Prof. Dr. Maarten Vansteenkiste (Maarten.Vansteenkiste@ugent.be)
- **Co-investigator:**  
Prof. Dr. Omer Van den Bergh (omer.vandenbergh@kuleuven.be)
- **Conservation and dissemination questionnaire:**  
Dra. Sofie Morbee (Sofie.Morbee@ugent.be)
- **Data and Analytics:**  
Drs. Joachim Waterschoot (Joachim.Waterschoot@ugent.be)

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