Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom

Funded and conducted by Open Evidence, Universitat Oberta de Catalunya spin-off, in collaboration with BDI Schlesinger Group with researchers of various universities*



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A study in three waves in three countries

The study aims at assessing the effects of Covid-19 and lockdown in three consecutive waves:

- The first completed between April 24th and May 1st;
- The second completed between May 1st and 12nd;
- The third completed between May 9th and 20th.

For three consecutive weeks the same participants¹ have answered survey questions and took part to three randomised experiments².

In the first wave participants were asked questions on a set of questions that established the baseline on variables that would not change (i.e. age, gender, income, education, labour market position, occupation, housing conditions, having children of school age, health status). Across the three waves we measured their mental health using a validated scale³, exposition to shocks (loss of job, closure of activity, decreased earnings, tried to be tested for Covid-19; having to do home lessons to children, etc.), possible exposition to Covid-19 (situations that prevented or would prevent participant to respect social distancing).

In each wave participants took part to three different experiments. In the first wave 1 through a list experiment we recovered their agreement with the following two statements: a) government should not focus only in preventing contagion but also in avoiding a major economic crisis; and b) government should not only communicate citizens what to do to adhere to the safety measures, but also explain clearly how it is planning the way out.

In the second wave, using a priming experiment and information on exposition to shocks, we assessed the effects of the latter on cognitive performance and on individual and social preferences (risk aversion, time preferences, altruism, reciprocity, trust).

In the third wave, through another experiment, we elicited support for different policies (social distancing, contact tracing, serological testing). In addition, participants provided their view on how they see the future.

This longitudinal study provides a unique dataset that combines information on health, socio-economic status, psychological conditions, exposure to shocks as well as actual and future behaviours. Ethical approval was obtained on April 22nd, 2020 from the Universitat Oberta de Catalunya Ethics Committee.

¹ See Sample characteristics at the Methodological notes (p.25).

² See Questionnaires at the Methodological notes section (p. 26)

³ Adapted from DASS-21: Depression, 4 Anxiety and Stress Scale–21 Items (Lovibond & Lovibond, 1995); and SASRQ Stanford 5 Acute Stress Reaction Questionnaire (Cardeña, Koopman, Classen, Waelde, & Spiegel, 2000).



Wave 1

Key highlights

- In all three countries we found strong agreement with the two statements above. In all three countries
 a majority of respondents think that health is not more important than the economy (67% in Italy,
 60% in the UK, and 58% in Spain) and that governments should provide a clear plan for exiting the
 crisis (73% in the UK; 72% in Spain; and 65% in Italy). High level of agreement with these statements
 indicate both preoccupation with the economy and the desire to return to normality;
- Training an algorithm on the data about vulnerability factors, we can predict that the percentage of population whose mental health is at risk is: 46% in Spain, 41% in Italy, and 42% in the UK;
- The mental health risk is clearly associated with some vulnerability factors. Being unemployed, living
 with many persons in limited space, having children of school age at home, having suffered a shock
 because of lockdown (i.e. closure of activity, decreased earnings, etc.) increase depression, anxiety,
 and stress. On the other hand, having a relatively high income, owning one's home with no mortgage
 to pay, having a large living space, and having a sufficient financial buffer (can pay bills for six or more
 months even if having no/ or reduced earnings) decrease mental health risks
- As a term of comparison, we present descriptive graphs with regard to risk of Covid-19 along three dimensions: susceptibility, vulnerability, and behavioural change.

Dealing with the economy

In all three countries a large majority of participants agree with the statement that *"government should not focus only in preventing contagion but also in avoiding a major economic crisis"*. Support for this statement is higher in Italy. Social Desirability Bias is sizeable in Italy and the UK and is smaller in Spain, probably reflecting the degree of debate polarisation in the three countries.

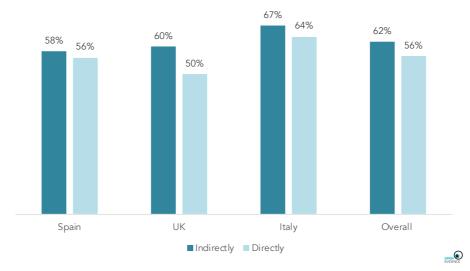


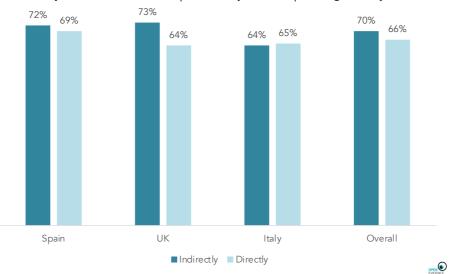
Figure 1. During the pandemic, the government should not focus only in preventing contagion but also in avoiding a major economic crisis



Communication to citizens

With regard to the statement that "the government should not only communicate citizens what to do to adhere to the safety measures, but also explain clearly how it is planning the way out", there is wide support and less Social Desirability Bias. The support is highest in the UK and high in Spain, just a bit less in Italy.

Figure 2. During the pandemic, the government should not only communicate citizens what to do to adhere to the safety measures, but also explain clearly how it is planning the way out



Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

Mental health status

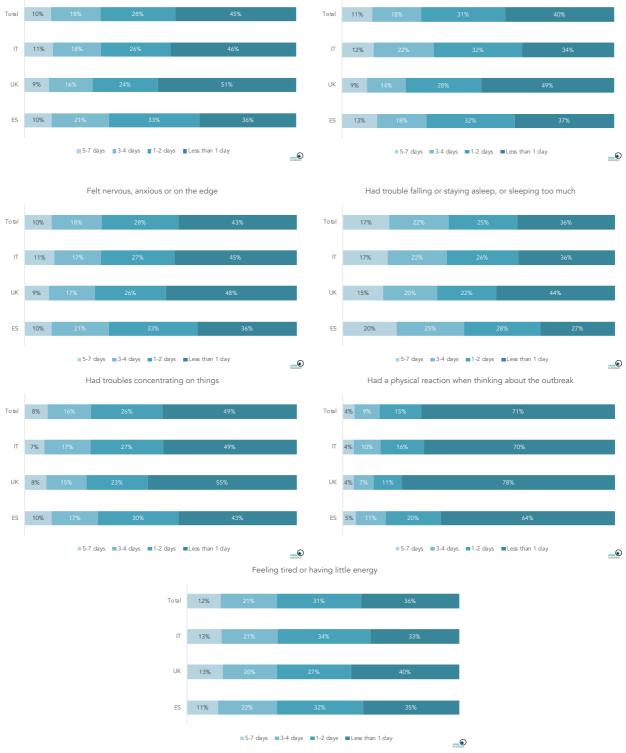
The figures below report the items of the scale used to measure mental health⁴. The results give a worrying picture as in all countries at least half of the population has been depressed for some time and only around 45% has never felt depressed (Spain 64% vs. 36%; UK 49% vs. 51%; Italy: 54% vs. 46%). The other 7 elements of the scale confirm this situation.

The majority of the respondents (60%) felt little interest or pleasure in doing things for more than one day (Spain 63%; UK 51%; Italy 66%), with 11% of respondents had this feeling between 5 and 7 days. Similarly, an average of 57% of the respondents in the three countries reported having felt nervous, anxious or on the edge more than one day, with 10% of respondents reporting these feelings almost every day. Moreover, the majority of respondents reported troubles in falling asleep or staying asleep or sleeping too much (Spain 73%; UK 56%; Italy 64%), as well as troubles in concentrating on things (Spain 57%; UK 45%; Italy 51%). Luckily there was only a minority of respondents, even though not irrelevant, that reported having a physical reaction when thinking about the outbreak (Spain 36%; UK 22%; Italy 20%). Lastly, almost 2/3 of the respondents (Spain 65%; UK 60%; Italy 66%) felt tired or with little energy more than one day, with 12% of them having these feelings almost every day.

⁴ Based on DASS-21: Depression, 4 Anxiety and Stress Scale–21 Items di Lovibond & Lovibond, 1995; e su SASRQ Stanford 5 Acute Stress Reaction Questionnaire; di Cardeña, Koopman, Classen, Waelde, & Spiegel, 2000



Figure 3. How often have you been bothered by the following over the past seven day? Felt down, depressed, or hopeless about the future Felt little interest or pleasure in doing things



Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020



Mental health at risk for more than 40%

Being unemployed, living with more person, having children of school age at home, experiencing a stressful event (i.e. losing job), and loss of earning are positively correlated with, and increase psychological stress and its impact on mental health. On the contrary, are negatively correlate with, and decrease stress level having a relatively higher household income, owning his/her own house without a mortgage to pay, having a relatively large living area, being able to pay bills for some time.

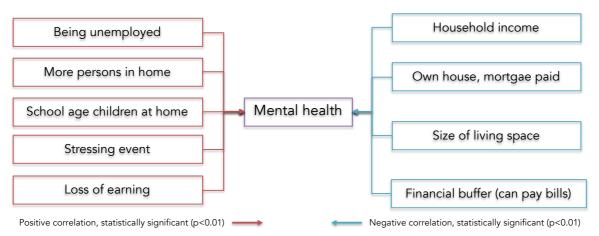


Figure 4. Mental health vulnerability factors

Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020 Training an algorithm (random forest) on the data gathered on vulnerability factors, we can make a prediction on the percentage of the population whose mental health is at risk. This is defined as including those who are above a psychological stress index calculated using the cited vulnerability factors. The values, thus, found are projected to the entire population stratifying ex post by gender, age, and region. As shown in the graph the percentage at risk is 41% in Italy, 46% in Spain, and 41% in the UK.

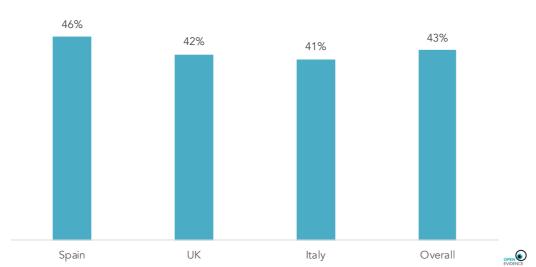
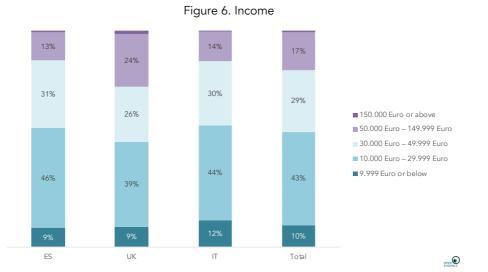


Figure 5. Stress predicted – high exposure



Mental health vulnerability factors



Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

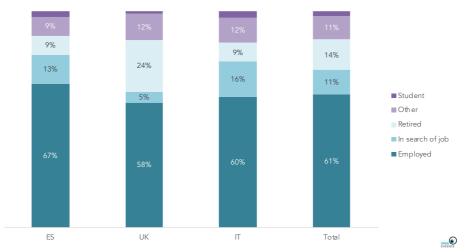


Figure 7. Occupational status

Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

Figure 8. Type pf dwelling occupied by the household

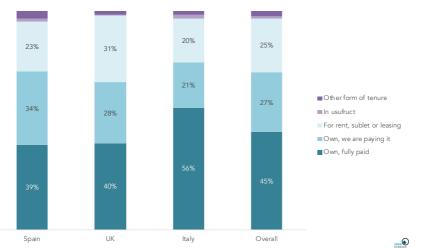
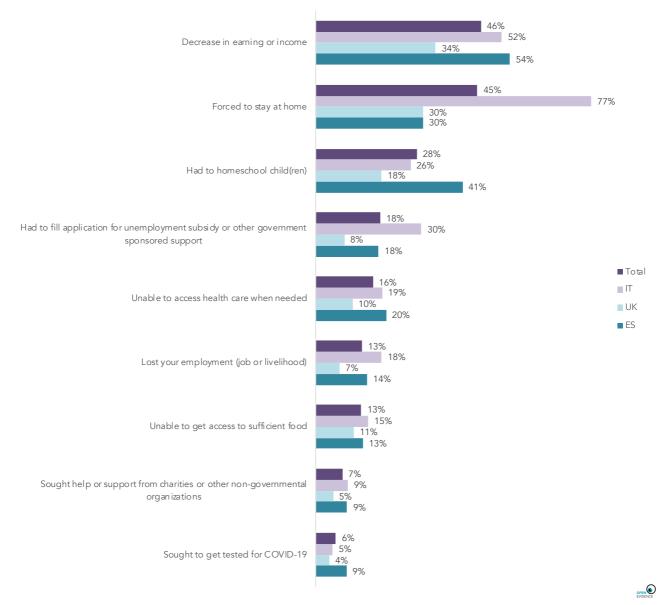




Figure 9. Stressful events





The three dimensions of exposure to COVID 19

Behavioural responses	Susceptibility	Vulnerability
• Behaviours after	• Various	• Potential
Covid-19	measures of	exposition to
outbreak (tried	health status	virus for
to be tested,	(long-standing	impossibility of
visit a doctor or	illness, long-	isolation (work,
medical centre,	term medical	caring for elderly
etc.)	treatment, etc.)	parents, etc.)

Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

Behavioural responses

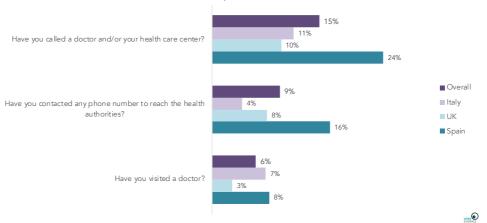
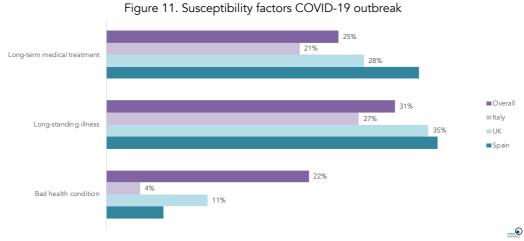


Figure 10. Behavioural response after COVID-19 outbreak

Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020



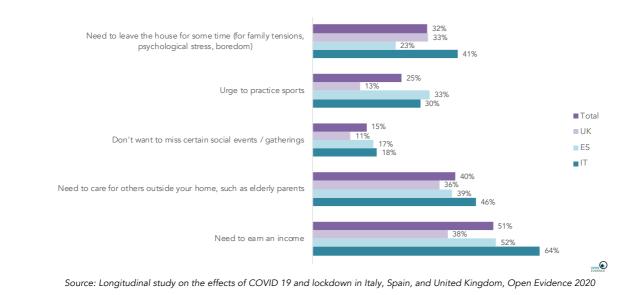
Susceptibility

Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

Vulnerability

Figure 12. How much would the following factors prevent you from fully isolating yourself?





Wave 2

Key highlights

- Notwithstanding the partial lifting of lockdown in Italy and Spain, mental health risk remains high. When we compare the responses of the individuals during the two consecutive weeks, we notice that all the indicators have increased: 67% of the individuals in Spain reported having felt down, depressed or hopeless about the future during (64% in the previous week). In UK this percentage increased from 49% to 53% and in Italy from 54% to 58%.
- Individuals' mental health remains at the same level of risk (is 41% in Italy, 46% in Spain, and 41% in the UK). In addition, the negative effects of lockdown on the work situation, on the general health status, and on stress reverberates also on our cognitive performance, decreasing individuals' cognitive capacity. This will have implications when there will be a full re-opening and return to normality, for our capacity to take rational decisions will be affected;
- Finally, we also found impact on some individual or social preferences, such as for instance an increased propensity to take risk and increased negative reciprocity. The former can be interpreted as a manifestation of a strong preoccupation of losing one's status, whereas the latter means that stress is hardening our attitudes we are more inclined to approve severe sanctions.

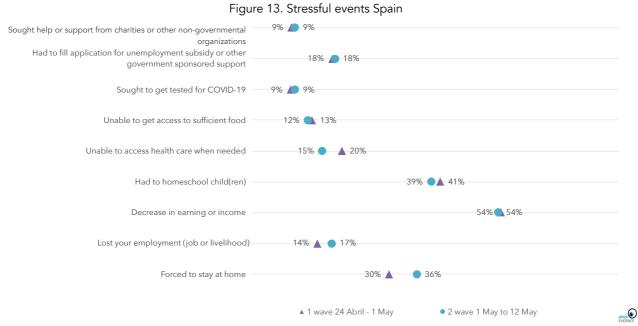
Lockdown continued producing negative consequences also during the week from May 2 to May 9

The results show some differences among the three countries, but certainly the prolonged lockdown experienced during the second week of results did not reduce the overall stressful events experienced by participants in the three countries.

In Spain, the stressful events reported by the participants remained to similar levels of Wave 1. In the country, during the ten days of fieldwork for the second wave, the lockdown was not relaxed. Therefore, from the health perspective, the results show that the same percentages of respondents sought to get tested for COVID-19 (9%), luckily less people were unable to access healthcare when needed (15% vs 20%), but more people were forced to stay home (36% vs 30%). Regarding livelihood and job-related matters, results show that the same percentages of respondents that sought help from charities or NGOs (9%), had to fill

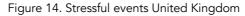


applications for unemployment subsidies (18%), as well as we did not see variations of decrease in earnings or income (54%). However, fewer people were unable to get access to sufficient food (12% vs 13%), but more people reported a loss of employment (17% vs 14%). Lastly, there was a decrease of people that had to homeschool children (39% vs 41%).



Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

In the UK, the figures are significantly lower than Spain and Italy also in Wave 2. Compared to the previous Wave, the results were very similar with only few variations. While the same percentage of respondents sought to get tested for COVID-19 (4%), fewer were unable to access healthcare when needed (9% vs 10%). Interestingly, less people reported a decrease in earning or income (32% vs 34%), that were unable to get access to sufficient food (8% vs 11%), but the results show an increase of 1 point of respondents reporting a loss of employment (8% vs 7%). Lastly, contrary to Spain, there was an increase of people that had to homeschool children (20% vs 18%).



Sought help or support from charities or other non-governmental	-5% 🗨 4%
organizations Had to fill application for unemployment subsidy or other government sponsored support	8% 🚺 7%
Sought to get tested for COVID-19	4% 🗨 4%
Unable to get access to sufficient food	8% • 11%
Unable to access health care when needed	9% 🚺 10%
Had to homeschool child(ren)	18% 🔎 20%
Decrease in earning or income	32% 🗨 🛦 34%
Lost your employment (job or livelihood)	7% 🌔 8%
Forced to stay at home	30% 🗨 30%
	▲ 1 wave 24 Abril - 1 May ● 2 wave 1 May to 12 May



In Italy, despite the government relaxed some of restrictions of the lockdown (mostly for people going to work) on 4th May, the results of the second Wave still reports a remarkable high level of people being forced to stay home (78% vs 77%), which is significantly higher compared to Spain and UK (36% and 30%). From the health perspective, we see a decrease of people unable to access healthcare when needed (17% vs 19%), as well as fewer respondent unable to get access to sufficient food (12% vs 15%). From a labour point of view, we see a decrease from the sensationally high number of people that fill in application for unemployment subsidy of the first Wave (27% vs 30%), but a slight increase of people reporting a loss of employment (20% vs 18%).

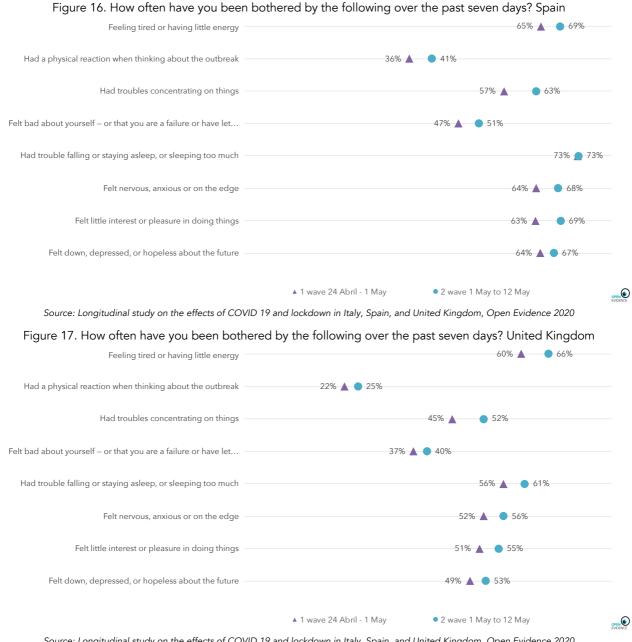
Fig	ure 15. Stressful events Italy		
Sought help or support from charities or other non-governmental organizations Had to fill application for unemployment subsidy or other government sponsored support	9% 🗨 9% 30% 🌑 🔺 27%		
Sought to get tested for COVID-19	-5% 🙍 -5%		
Unable to get access to sufficient food	12% 🌒 🛦 15%		
Unable to access health care when needed	17% 🗪 19%		
Had to homeschool child(ren)	26% 🔎 27%		
Decrease in earning or income		52% 🙍 52%	
Lost your employment (job or livelihood)	18% 🛕 20%		
Forced to stay at home			77% 📐 78%
	▲ 1 wave 24 Abril - 1 May	• 2 wave 1 May to 12 May	OPEN
Source: Longitudinal study on the effects of CO	VID 19 and lockdown in Italy. Spain, and U	Inited Kingdom, Open Evidence 20	



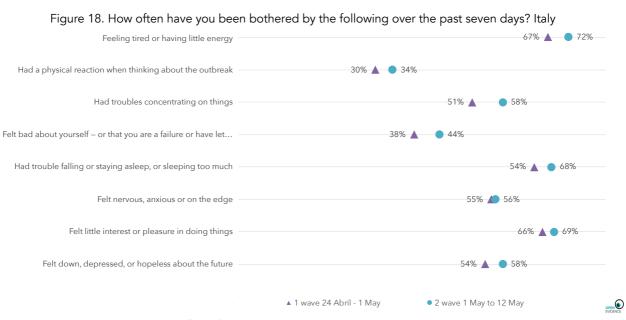
The mental health status of citizens kept being at risk also during the week from May 2 to May 9

The following figures report all the items related to the mental health status of the individuals who participate in both waves. We have not observed any improvements in the countries surveyed. On the contrary, the situation is slightly worse if we track the responses of the individuals.

In Spain we observe a stable increase of respondents that reported the symptoms below (between 3-4% for all the items recorded). Similarly, in the UK, the results show an increase for all the items, with an impressive increase of 6% of respondents that felt tired or with little energy, and 7% of those that had troubles on concentrating on things. Lastly, also in Italy the results show a steady increase for all the items, despite this country is the only one that relaxed the lockdown during the second Wave of the survey.







Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

Lockdown affects cognitive performances and preferences

As part of the second wave, participants were randomly allocated to four groups. To the participants of one group it was requested to recall and express situation of trauma, to another group situation of shocks, to the third group situation of joy, and to the control groups neutral situations. After performing this experimental task, participants answered a series of questions enabling us to measure their cognitive performance, attitudes to risk, time preferences, trust, altruism, negative and positive reciprocity (see table below)

Area	Questions	Scale
Cognitive capacity	 A bat and a ball cost \$1.10 in total. The bat costs \$1.00 more than the ball. How much does the ball cost? cents If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets? minutes In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake? days 	Number of correct answers from 0 to 3.
Riesk	How do you see yourself: are you a person who is generally willing to take risks, or do you try to avoid taking risks? Please use a scale from 0 to 10, where a 0 means you are "completely unwilling to take risks" and a 10 means you are "very willing to take risks". You can also use the values in-between to indicate where you fall on the scale.	From 0 to 10
Time discounting	In comparison to others, are you a person who is generally willing to give up something today in order to benefit from that in the future or are you not willing to do so? Please use a scale from 0 to 10, where a 0 means you are "completely unwilling to give up something today" and a 10 means you are very willing to give up something today". You can also use the values in between to indicate where you fall on the scale.	From 0 to 10
Trust	How well does the following statement describe you as a person? As long as I am not convinced otherwise, I assume that people have only the best intentions. Please use a scale from 0 to 10, where 0 means "does not describe me at all" and a 10 means "describes me perfectly". You can also use the values in-between to indicate where you fall on the scale.	From 0 to 10
Altruism 1	Imagine the following situation: you won 1,000 Euro in a lottery. Considering your current situation, how much would you donate to charity? (Values between 0 and 1000 are allowed).	From 0 to 1000

Table 1. Cognitive performance and preferences



Area	Questions	Scale
Altruism 2	How do you assess your willingness to share with others without expecting anything in return when it comes to charity? Please use a scale from 0 to 10, where 0 means you are "completely unwilling to share" and a 10 means you are "very willing to share". You can also use the values in between to indicate where you fall on the scale.	From 0 to 10
Positive reciprocity	Imagine the following situation: you are shopping in an unfamiliar city and realize you lost your way. You ask a stranger for directions. The stranger offers to take you with their car to your destination. The ride takes about 20 minutes and costs the stranger about 20 Euro in total. The stranger does not want money for it. You carry six bottles of wine with you. The cheapest bottle costs 5 Euro, the most expensive one 30 Euro. You decide to give one of the bottles to the stranger as a thank-you gift. Which bottle do you give? Respondents can choose from the following options: The bottle for 5, 10, 15, 20, 25, or 30 Euro	The bottle for 5 euros 10 euros 15 euros 20 euros 25 euros 30 euros
Negative reciprocity	How do you see yourself: Are you a person who is generally willing to punish unfair behavior even if this is costly? Please use a scale from 0 to 10, where 0 means you are "not willing at all to incur costs to punish unfair behavior" and a 10 means you are "very willing to incur costs to punish unfair behavior". You can also use the values in-between to indicate where you fall on the scale.	From 0 to 10

We detected a systematic negative effect of shocks on cognitive performance, as well as increasing propensity to risk and negative reciprocity (see figure below).

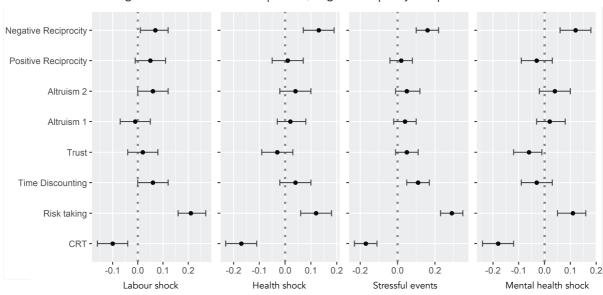


Figure 19. Lockdown consequences, cognitive capacity and preferences

Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

This will have implications when there will be a full re-opening and return to normality, for our capacity to take rational decisions will be affected. The increased propensity to risk can be interpreted as a manifestation of a strong preoccupation of losing one's status, whereas that of negative reciprocity means that stress is hardening our attitudes and we are more inclined to approve severe sanctions.



Wave 3

Key highlights

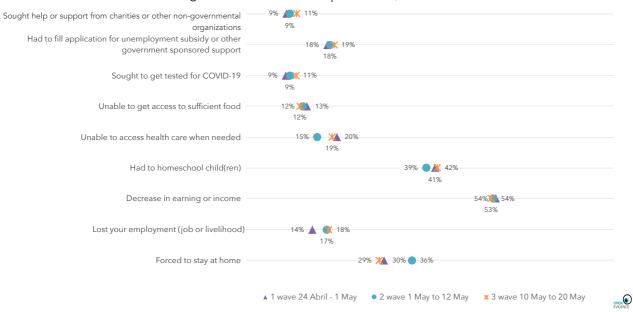
- Notwithstanding the partial lifting of lockdown in Italy, Spain and UK, mental health risk remains high.
 We notice, however, the following changes when comparing the results of wave 2 with those of wave 1: in all three countries, most of the items related to mental health show a slight decrease from the previous week, but they remain still higher compared to the first week. Only in Italy (first country lifting the lockdown) the individuals that felt depressed are similar to Wave one (54%). But in the other countries, the number are still higher (67% vs 64% in Spain; 54% vs 49% in the UK).
- We also found impact on some individual or social preferences, such as for instance an increased propensity to take risk and increased negative reciprocity. The former can be interpreted as a manifestation of a strong preoccupation of losing one's status, whereas the latter means that stress is hardening our attitudes we are more inclined to approve severe sanctions.
- We find a very worrying picture about our respondents' attitudes and expectations about the future.
 For instance: 91% of the overall sample consider somewhat likely and/or very likely an economic depression (92.3% in Spain; 90.3% in the United Kingdom; 90.5% in Italy)

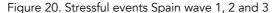
Although some improvements can be observed, lockdown continued producing negative consequences also during the week from May 10 to May 17

The third week of results should be considered in light of the partial lifting of lockdowns in the three countries. While most of the restrictions remains, many individuals were able to go back to work and, especially in Italy, they were finally allowed to leave the house simply for a walk. We can immediately notice the effect of the lifting of the lockdowns, as fewer respondents reported they were forced to stay home compared to the previous week (64% vs 78% in Italy; 29% vs 36% in Spain; 19% vs 30% in the UK).

In Spain, the results of the third wave show an interesting increase of some stressful events. For instance, an increase of participants that asked support to charities (+2%), an increase of people filling in unemployment applications (+1%), that lost employment (+1%), that had to homeschool their children (+3%), as well as people sought to get tested for Covid-19 (+2%). The percentage of individuals unable to access healthcare was similar to the first week (+4% from previous week). In conclusion, despite the important increase of people that were not forced to stay home, the other levels remained very high.







Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

In the UK, the figures offer a bit better picture of the situation compared to Spain, as almost all the values either remained stable or slightly decreased from the previous week. For instance, we can observe less respondents reported a decrease in earning (29% vs 32%) and loss of employment (6% vs 8%). In conclusion, the only real significant change was related to the freedom of leave the house, as a consequence of the lifting of the lockdown, as already reported.

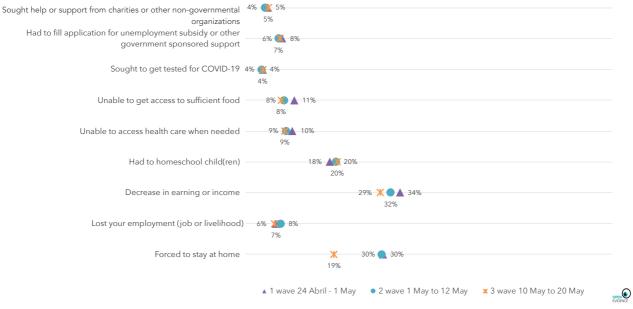


Figure 21. Stressful events United Kingdom wave 1, 2 and 3



In Italy, the results are not encouraging, since we notice a worrying increase of people seeking support from charities (+3%), with a decrease of their income (55% vs 52%) and unable to access healthcare when needed (21% vs 17%). Also in Italy the significant decreased number of people forced to stay home was not followed by an improvement of the stressful events, as more people in the third wave sought to get tested for Covid-19 (7% vs 5%). Lastly, as the schools remained closed, the numbers of individuals that had to homeschool their children increased by 1%.

Sought help or support from charities or other non-governmental organizations	9% * 1 2% 9%	
Had to fill application for unemployment subsidy or other government sponsored support		30%
Sought to get tested for COVID-19	5% 🗨 🗶 7% 5%	
Unable to get access to sufficient food	12% ** 15% 13%	
Unable to access health care when needed	17% A X 21%	
Had to homeschool child(ren)	26% 2 5% 27%	28%
Decrease in earning or income		52% 🛖 💥 55% 52%
Lost your employment (job or livelihood)	18% A () 20%	
Forced to stay at home		64% 💥 77% 🔊 78%
	▲ 1 wave 24 Abril - 1 May ●	2 wave 1 May to 12 May 🗙 3 wave 10 May to 20 May

Figure 22. Stressful events Italy wave 1, 2 and 3



The mental health status of citizens kept being at risk also during the week from May 10 to May 17

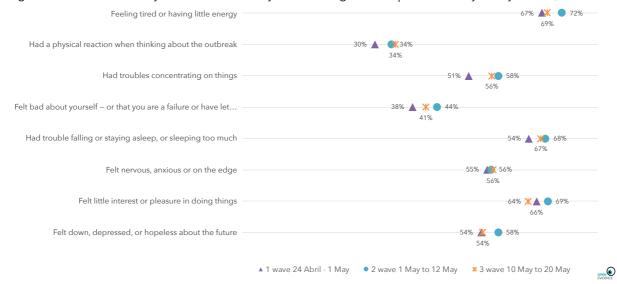
Despite the mental health status of citizens is still at risk, the partial lifting of the lockdown in the three countries slightly improved the worrying situation of the previous weeks. In Spain, UK and Italy, on average, fewer people reported the symptoms below, but compared to the first week of the survey the levels are still higher. For instance, less individuals felt little interest or pleasure in doing things (67% Spain, 53% UK, 64% Italy). However, the results are not encouraging because, compared to the first week, even more individuals felt down, depressed or hopeless about the future (+3% Spain, +5% UK, +0% Italy). In conclusion, in light of the results of the stressful events, the partial lifting of the lockdown had a very limited impact on the mental health of participants in the three countries, as there are still a very high number of individuals experiencing stressful events related to health of work conditions.



Figure 23. How often have you been bothered by the following over the past seven days? Spain wave 1, 2 and 3



Figure 25. How often have you been bothered by the following over the past seven days? Italy wave 1, 2 and 3



Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

Expectations about the future and behavioural change

As shown by the next figures, wave three we have the respondents view on the future that provide a frightening picture:

- 76% of the overall sample expect the return to our normal lives to take between 6 month and one year and/or more than one year (76% in Spain; 81% in the United Kingdom; 72% in Italy).
- 84% of the overall sample consider somewhat likely and/or very likely a new outbreak of Covid-19 (90% in Spain; 84% the United Kingdom; 76% in Italy);
- 91% of the overall sample consider somewhat likely and/or very likely an economic depression (92% in Spain; 90% in the United Kingdom; 91% in Italy);
- 56% of the overall sample consider likely (somewhat or very) a permanent restriction to our rights and freedom (65% in Spain; 50% in the United Kingdom; 54% in Italy);

Figure 26. What are your expectations on the recovery from the current pandemic: when do you think we will go back to our normal lives like before the outbreak?

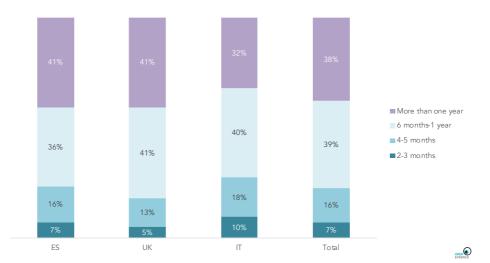
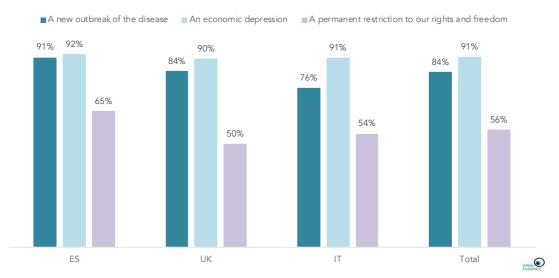




Figure 27. Among the following negative scenarios for the future, please indicate how likely you consider them? Somewhat Likely - Very Likely



Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

These data, unfortunately, confirm our hypotheses by excess and provide a grim picture of negative expectations and fear that may produce long run behavioural change in saving, consumption, economic activities, and lifestyles. Taking the sample as a whole, when asking to compare some behaviour in the four weeks prior to the survey to the same behaviour before the disease outbreak (i.e. during February 2020), 32% report having used their savings, 41% that they have decreased their consumption of cultural products, 47% that they have stayed less in contact with people relevant for their career /status (or their future possibility to get a job), and 23% that they have conducted an unhealthier life.

Fear and expectations: the corroding effect of uncertainty at the time of lockdown

Investing, buying a house, running or launching a business, require us to bet on the future. Are we willing to wager now as we are slowly being released from lockdown? The signs are not encouraging at all. In the UK 59% expect 2021 to be worse than 2020 (such as 63% of Spaniards and 46% of Italians). When asked when they think they will go back to their normal lives, only 10% of Britons see a break-through in the next three months, while 40% say it will take one year and 32% think it will take more than one year! Unsurprisingly 73% of the UK sample think that the government should reduce uncertainty and provide a clear plan for exiting the crisis instead of simply imposing restrictions (72% in Spain and 65% in Italy).

The second factor is emotions and, in particular, fear. In all three countries citizens appear entrenched by a sense of trepidation. According to the data, a full-blown economic depression is expected by 90% in the UK, 92% in Spain, and 90.5% in Italy. As much as 50% of Britons fear that there will be permanent restrictions to our rights and freedom (63% of Spaniards and 54.3% of Italians share this fear. A second disease outbreak is feared by 85% of respondents in the UK, 91% in Spain, and 76.1% in Italy. Fear is not a good adviser. On an individual level, fear is associated with stress and undermines our reasoning faculty, often leading us to make mistakes.

The third ingredient is us and our possible behavioural changes. Lockdown has marked us and, perhaps, has changed us. Yet, some more than others. We have remained shut in our homes to face our own demons and we eventually reinvent the wheel. While mainstream discourse had it that Covid-19 was making no social distinctions, our unequal society have made some pay a higher price than others. Women, in particular, have



paid more and have been overly exploited as they performed the overwhelming share of unpaid work. Moreover, there are the most vulnerable groups living in limited spaces and with less access to at least some minor form of distraction. The data also tells us that we have already started to alter some of our behaviour. During the month in which we studied them, 22% of households in Great Britain resorted to their savings more than in the past (37% in Italy and 36% in Spain). Compared to the past, more than one third of Britons (35%) overlooked contacts and relations that were important for their career, social status, and future job opportunities (51% in Italy and 58% in Spain). In all three countries 23% reported increased risky behaviour such as unprotected sex, less adherence to medical treatments, excessive drinking and eating. As a result, the future awaits us with new demands and new problems.

A thread links the answers provided to us by these samples of Britons, Spaniards, and Italians. The tangible shock produced by lockdown, through cognitive and emotional mechanisms, put at risk mental health, reduce our capacity to make rational decisions, and have created a daunting climate of pessimistic expectations and widespread fears. It is time to restart the social fabric. We must reduce uncertainty and prepare for the consequences of wrong choices. This is what the data tell us. Our governments must restore trust and hope. During this fragile transitional phase and until the economy begins to pick up, and regardless of necessary fiscal measures taken, leaders must be able to win our souls and minds to help us restart.



Methodological notes

Sample characteristics

The target population in each country population aged 18-75. To reach 1,000 participants per wave, the first wave gathered more than 3,000 individuals per country using a random sample extracted from international online panel. Ex ante quota (adjusted ex post) for gender, level of education, residential type (urban, sub-urban, rural) and geographic area were included. Fieldwork was conducted between April 24th and May 1st. The following table summarises the information for the first wave:

	Spain	United Kingdom	Italy
Sample	3524	3541	3545
Margin error (95%)	1.65	1.65	1.65
Starting day	24/04/2020	24/04/2020	24/04/2020
End day	01/05/2020	29/04/2020	01/05/2020
Duration (min)	11.1	10.7	10.0

Table 2. Sample characteristics wave 1

Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

Using the same sampling strategy approach, the second wave was conducted between May 1^{st} and 12^{nd} . The following table summarises the information for the second wave.

Table 3. Sample characteristics wave 2

	Spain	United Kingdom	Italy
Sample	1663	1599	1659
Margin error (95%)	2,4	2,45	2,41
Starting day	01/05/2020	01/05/2020	01/05/2020
End day	12/05/2020	12/05/2020	12/05/2020
Duration (min)	12.4	9.6	10.6

Source: Longitudinal study on the effects of COVID 19 and lockdown in Italy, Spain, and United Kingdom, Open Evidence 2020

Lastly, the third wave was completed between May 9th and 21st. The table below provides the sample characteristics of the third wave

Table 4. Sample characteristics wave 3

	Spain	United Kingdom	Italy
Sample	1023	1148	1039
Margin error (95%)	3,06	2,89	3,04
Starting day	09/05/2020	09/05/2020	09/05/2020
End day	21/05/2020	20/05/2020	20/05/2020
Duration (min)	10,5	10,5	9,7



Questionnaires

Wave 1

Control

Below you will find a list of statements on which some people agree and others disagree. Please tell us how many of them you agree with. We do not need to know WHICH ones you agree with, just HOW MANY.

- 1. Globalization has benefitted most of the population in the world
- 2. Immigration is a threat for our lifestyle
- 3. The health professionals are facing the largest risk in this pandemic
- 4. On important policy issues, the government should always follow the opinion of the experts

Treatment one

Below you will find a list of statements on which some people agree and others disagree. Please tell us how many of them you agree with. We do not need to know WHICH ones you agree with, just HOW MANY.

- 1. Globalization has benefitted most of the population in the world
- 2. Immigration is a threat for our lifestyle
- 3. The health professionals are facing the largest risk in this pandemic
- 4. On important policy issues, the government should always follow the opinion of the experts
- 5. During the pandemic, the government should not focus only in preventing contagion but also in avoiding a major economic crisis.

Treatment two

Below you will find a list of statements on which some people agree and others disagree. Please tell us how many of them you agree with. We do not need to know WHICH ones you agree with, just HOW MANY.

- 1. Globalization has benefitted most of the population in the world
- 2. Immigration is a threat for our lifestyle
- 3. The health professionals are facing the largest risk in this pandemic
- 4. On important policy issues, the government should always follow the opinion of the experts
- 5. During the pandemic, the government should not only communicate citizens what to do to adhere to the safety measures, but also explain clearly how it is planning the way out

Treatment three

Below you will find a list of statements on which some people agree and others disagree. Please tell us WHICH ones of them you agree with.

- 1. Globalization has benefitted most of the population in the world
- 2. Immigration is a threat for our lifestyle
- 3. The health professionals are facing the largest risk in this pandemic
- 4. On important policy issues, the government should always follow the opinion of the experts
- 5. During the pandemic, the government should not focus only in preventing contagion but also in avoiding a major economic crisis.
- 6. During the pandemic, the government should not only communicate citizens what to do to adhere to the safety measures, but also explain clearly how it is planning the way out



BASELINE SURVEY

- 1) How old are you?
 - __ years old
- 2) What is your sex?
 - a) Female
 - b) Male
 - c) Other
- 3) What is the highest level of education you have completed?
 - a) Primary school or less
 - b) High school
 - c) Some years of university (not completed)
 - d) University degree completed
 - e) Post-graduate (master, PhD, other)
- 4) What is your marital status?
 - a) Single (never married)
 - b) Married or in civil union
 - c) Divorced or Widowed
- 5) What is your household (yearly) income?
 - a) 9.999 Euro or below
 - b) 10.000 Euro 29.999 Euro
 - c) 30.000 Euro 49.999 Euro
 - d) 50.000 Euro 149.999 Euro
 - e) 150.000 Euro or above
- 6) Which of the following best describe the area of your primary residency?
 - a) Urban
 - b) Suburban
 - c) Rural
- 7) Which of the following situations best describes your current labor market status?
 - a) Employed
 - b) In search of job
 - c) Student
 - d) Retired

8)

- e) Other (no work/no search/no study, housekeeper, disabled non-working person)
- Which of the following occupations best describes your current prevalent activity?
- a) DIRECTORS: Directors, Executives, Directors of a company
- b) BUSINESSMEN, HOLDERS OF ACTIVITIES: Entrepreneurs, small companies or holders of activities
- c) INTELLECTUAL PROFESSIONALS, SCIENTISTS: Physicians, Chemists, Statisticians, Computer Scientists, Engineers, Architects, Biologists, Veterinarians, Pharmacists, Doctors, Dentists, Specialists in management, commercial and banking sciences, Lawyers, Solicitors, Notaries, Magistrates, University Professors (ordinary and associate), Specialists in economic, sociological, psychological, artistic, political, philosophical and literary sciences, Journalists
- d) TEACHERS: Upper and lower secondary school teachers
- e) TECHNICAL PROFESSIONALS: Physical and Chemical Technicians, Stock and Exchange Brokers, Commercial Agents, Representatives, Aircraft Pilots and Civil Aviation Technicians, Photographers, Nurses, Midwives, Dieticians, Hygienists, Paramedics, Insurance Agents, Experts, Designers, Computer Social Workers, Civil Construction Engineers, Web Operators, Programmers
- f) EMPLOYEES: Administrative employees, secretarial staff, accountants, employees in direct contact with the public, cashiers, counter employees



- g) TRADERS OR SERVICES: Wholesalers and managers of wholesale and retail sales, Office workers and similar, Hotel service providers and similar, Waiters, Gunsmiths, Sports, recreational and cultural service providers, Hairdressers, Beauticians, Traffic Police, State Police, Firemen, Private security guards
- h) ARTISTS: Artisans, Plumbers, Electricians, Tilers, Installers, Mechanics, Appliance Repairers, Goldsmiths, Decorators, Tailors, Bakers, Carpenters, Butchers, Fruit and Vegetable Makers
- i) SPECIALIZED WORKERS: Specialized workers
- j) FARMERS: Farmers and agricultural workers, Breeders, Fishermen
- k) MACHINE WORKERS AND DRIVERS: Industrial plant operators, founders, assembly line workers, general workers, drivers, carpenters
- I) UNSKILLED PROFESSIONS: Bailiffs, Doormen, Warehouse Keepers, Delivery Workers, Street Vendors, Litter Bins, Street Sweepers, Launderers, Garages, Farmers, Craftsmen and similar workers
- m) ARMED FORCES: Military of all orders and ranks
- 9) What is the type of dwelling occupied by your household?
 - a) Own, fully paid
 - b) Own, we are paying it
 - c) For rent, sublet or leasing
 - d) In usufruct
 - e) Other form of tenure (untitled possession, de facto occupant, collective property, etc.)
- 10) What is the useful living area of your home? (It is understood by useful living area, that included within the exteriors of the house, including the common spaces).

____ squared meters (m^2).

- 11) How many people usually live in your household?
 - a) Adult men (age 18 and above) [] persons
 - b) Adult women (age 18 and above) [] persons
 - c) Boy children (age 3 17) [] persons
 - d) Girl children (age 3 17) [] persons
 - e) Babies (boy) (age under 3) [] persons
 - f) Babies (girl) (age under 3) [] persons
- 12) Are there other persons not living in your household because they are currently working away from home?
 - a) Yes [] persons
 - b) No
- 13) How many children are of school age in your household?
 - a) [] children 3-11 y.o.
 - b) [] children 12-18 y.o.
- 14) What behavior(s) have you adopted in response to COVID-19 outbreak? In case it applies, please select more than one item.
 - a) Hand washing
 - b) Limiting exiting home.
 - c) Cover coughs/sneezes
 - d) Cleaning surfaces daily
 - e) Staying home when sick
 - f) Working from home
 - g) Nothing
 - h) Wearing face mask
 - i) Changing / cancelling travel plans
 - j) Making family / communication plans
 - k) Stocking up home supplies and medicine
- 15) How much would the following factors prevent you from fully isolating yourself?



- a. Need to earn an income
 - a) Very Unlikely
 - b) Somewhat Unlikely
 - c) Somewhat Likely
 - d) Very Likely
- b. Need to care for others outside your home, such as elderly parents
 - a) Very Unlikely
 - b) Somewhat Unlikely
 - c) Somewhat Likely
 - d) Very Likely
- c. Don't want to miss certain social events / gatherings
 - a) Very Unlikely
 - b) Somewhat Unlikely
 - c) Somewhat Likely
 - d) Very Likely
- d. Urge to practice sports
 - a) Very Unlikely
 - b) Somewhat Unlikely
 - c) Somewhat Likely
 - d) Very Likely
- e. Need to leave the house for some time (for family tensions, psychological stress, boredom)
 - a) Very Unlikely
 - b) Somewhat Unlikely
 - c) Somewhat Likely
 - d) Very Likely
- 15) If you lose your job, for how long do you believe you could pay your bills?
 - a) 1 month or less
 - b) 2 -3 months
 - c) 4 -5 months
 - d) 6 months or more
- 16) Over the past week, have any of the following events happened to you?
 - a. Forced to stay at home (in shelter)
 - a) Yes
 - b) No
 - b. Lost your employment (job or livelihood)
 - a) Yes
 - b) No
 - c. Decrease in earning or income
 - a) Yes
 - b) No
 - d. Had to homeschool child(ren)
 - a) Yes
 - b) No
 - e. Unable to access health care when needed
 - a) Yes
 - b) No
 - f. Unable to get access to sufficient food
 - a) Yes



- b) No
- g. Sought to get tested for COVID-19
 - a) Yes
 - b) No
- h. Had to fill application for unemployment subsidy or other government sponsored support
 - a) Yes
 - b) No
- i. Sought help or support from charities or other non-governmental organizations
 - a) Yes
 - b) No
- 17) How is your health in general?
 - a) Very good
 - b) Good
 - c) Neither good nor bad
 - d) Bad
 - e) Very bad
- 18) Do you have any long-standing illness or health problem?
 - a) Yes
 - b) No
- 19) Are you undergoing a long-term medical treatment?
 - a) Yes
 - b) No
- 20) Do you have or have you ever had any of the following health problems?
 - a) Diabetes
 - b) An allergy
 - c) Asthma
 - d) Hypertension (high blood pressure)
 - e) Long-standing troubles with your muscles, bones and joints (rheumatism, arthritis)
 - f) Cancer
 - g) Cataract
 - h) Migraine or frequent headaches
 - i) Chronic bronchitis, emphysema
 - j) Osteoporosis
 - k) Stroke, cerebral hemorrhage
 - I) Peptic ulcer (gastric or duodenal ulcer)
 - m) Chronic anxiety or depression
- 21) Is someone close to you, currently experiencing long-term illness or disability?
 - a) Yes
 - b) No
- 22) Are you taking care of such a person?
 - a) Yes
 - b) No
- 23) As result of COVID-19 outbreak?
 - a. Have you visited a doctor?
 - a) Yes
 - b) No
 - b. Have you called a doctor and/or your health care center?
 - a) Yes



b) No

- c. Have you contacted any phone number to reach the health authorities?
 - a) Yes
 - b) No
- 24) How many times did you visit a doctor during the last 12 months, before the COVID-19 outbreak?
 - a) A few times
 - b) Once
 - c) Never
- 25) How often have you been bothered by the following over the past seven days?
 - a) Felt down, depressed, or hopeless about the future
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - b) Felt little interest or pleasure in doing things
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - c) Felt nervous, anxious or on the edge
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - d) Had trouble falling or staying asleep, or sleeping too much
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - e) Felt bad about yourself or that you are a failure or have let yourself or your family down
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - f) Had troubles concentrating on things
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - g) Had a physical reaction when thinking about the outbreak
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - h) Feeling tired or having little energy
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days



- iv) Rarely or none of the time (less than 1 day)
- 26) How has your wage/earnings been affected after the COVID-19 outbreak?
 - a) No change, full pay
 - b) Reduced pay
 - c) My contract was terminated
 - d) My business has closed temporarily or definitely
 - e) Not paid by the company, government is subsidizing pay
 - f) Not paid by company, employee takes unpaid leave
 - g) Not paid, spending my savings/helped by acquaintances.
- 27) Has your employer taken any actions at the plants/offices as a result of the COVID-19 outbreak?
 - a) Yes, closed plants/offices
 - b) No, but monitoring closely
 - c) No, they do not intend to close any facilities
- 28) Which of the following arrangements has your employer taken, or is taking, in response to the COVID-19 outbreak? In case it applies, please select more than one item.
 - a) Disseminated protective gear (i.e., hand sanitizer, masks, gloves) for employees to use at their discretion
 - b) Arranged for temperatures to be checked at the workplace
 - c) Arranged special flexible working hours (i.e., reduced operating hours)
 - d) Requested self-quarantine for employees who have traveled within the last 14 days
 - e) Required self-quarantine for employees who have traveled within the last 14 days
 - f) Cancelled all international travel
 - g) Cancelled all domestic travel
 - h) Cancelled only non-essential travel to countries where there are confirmed cases of the coronavirus
 - i) Implemented a shift schedule to rotate staff and minimize the number of people at the worksite
 - j) Addressed employee's psychological stress
 - k) Conducted internal survey, interview or focus groups to understand what employees are thinking and feeling
 - I) Captured informal information to better understand employee's state of mind
 - m) Enhanced cleaning and sanitizing efforts across facilities
 - n) Allowing employees to use their paid time off in whatever manner is most convenient to them
 - o) Providing employees with a "work from home" playbook of best practices we know to be effective
 - p) Distributed a series of checklists and FAQ's regarding our company's approach to health and wealth
 - q) Established a private hotline for employees to alert the company to their potential infection in order to encourage self-disclosure



Wave 2

We would like you to carefully answer the following question.

Trauma Treatment

We are interested in understanding the everyday experiences that may make you fearful or anxious. This could be anything, for example having been affected by COVID-19 directly (i.e. being hospitalized) or indirectly (i.e. relatives friends hospitalized or passed away), being victim of violence, etc. Can you describe one event in the past year that caused you fear or anxiety? Please use the space below to write your answer.

Shock Treatment

We are interested in understanding your everyday experiences in feeling stressed and worrisome. A lot of people are currently reporting negative emotions or stress because of the possible economic losses associated with the virus or the worsening of the economic situation. It can be anything, for example losing the job due to the negative consequences of COVID-19, having household income abruptly reduced because of the lockdown etc. Can you describe what causes you stress and worry when thinking about the current situation or the future? Please use the space below to write your answer.

Neutral Treatment

We are interested in understanding your general daily experiences. This could be anything. Could you please describe one event in the past year? Please use the space below to write your answer.

Joy Treatment

We are interested in understanding your daily experiences that make you happy or joyous. This could be anything, for example the birth of a child, marriage of a relative, or success in your studies or in your work. Could you please describe one event in the past year that caused you happiness? Please use the space below to write your answer.



Measures

- 2) If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets? ______ minutes
- 3) In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake? _____ days
- 4) How do you see yourself: are you a person who is generally willing to take risks, or do you try to avoid taking risks? Please use a scale from 0 to 10, where a 0 means you are "completely unwilling to take risks" and a 10 means you are "very willing to take risks". You can also use the values in-between to indicate where you fall on the scale.

Slider from 0 to 10

5) In comparison to others, are you a person who is generally willing to give up something today in order to benefit from that in the future or are you not willing to do so? Please use a scale from 0 to 10, where a 0 means you are "completely unwilling to give up something today" and a 10 means you are very willing to give up something today". You can also use the values in between to indicate where you fall on the scale.

Slider from 0 to 10

6) How well does the following statement describe you as a person? As long as I am not convinced otherwise, I assume that people have only the best intentions. Please use a scale from 0 to 10, where 0 means "does not describe me at all" and a 10 means "describes me perfectly". You can also use the values in-between to indicate where you fall on the scale.

Slider from 0 to 10

7) Imagine the following situation: you won 1,000 Euro in a lottery. Considering your current situation, how much would you donate to charity? (Values between 0 and 1000 are allowed).

Allow for numeric response between 0 and 1000

8) How do you assess your willingness to share with others without expecting anything in return when it comes to charity? Please use a scale from 0 to 10, where 0 means you are "completely unwilling to share" and a 10 means you are "very willing to share". You can also use the values in between to indicate where you fall on the scale.

Slider from 0 to 10

- 9) Imagine the following situation: you are shopping in an unfamiliar city and realize you lost your way. You ask a stranger for directions. The stranger offers to take you with their car to your destination. The ride takes about 20 minutes and costs the stranger about 20 Euro in total. The stranger does not want money for it. You carry six bottles of wine with you. The cheapest bottle costs 5 Euro, the most expensive one 30 Euro. You decide to give one of the bottles to the stranger as a thank-you gift. Which bottle do you give? Respondents can choose from the following options: The bottle for 5, 10, 15, 20, 25, or 30 Euro
 - a. The bottle for 5 euros
 - b. The bottle for 10 euros
 - c. The bottle for 15 euros
 - d. The bottle for 20 euros
 - e. The bottle for 25 euros
 - f. The bottle for 30 euros



10) How do you see yourself: Are you a person who is generally willing to punish unfair behavior even if this is costly? Please use a scale from 0 to 10, where 0 means you are "not willing at all to incur costs to punish unfair behavior" and a 10 means you are "very willing to incur costs to punish unfair behavior". You can also use the values in-between to indicate where you fall on the scale.

Slider from 0 to 10.

BASELINE QUESTIONS FROM WAVE 1

- 11) How much would the following factors prevent you from fully isolating yourself?
 - a. Need to earn an income
 - a) Very Unlikely
 - b) Somewhat Unlikely
 - c) Somewhat Likely
 - d) Very Likely
 - b. Need to care for others outside your home, such as elderly parents
 - a) Very Unlikely
 - b) Somewhat Unlikely
 - c) Somewhat Likely
 - d) Very Likely
 - c. Don't want to miss certain social events / gatherings
 - a) Very Unlikely
 - b) Somewhat Unlikely
 - c) Somewhat Likely
 - d) Very Likely
 - d. Urge to practice sports
 - a) Very Unlikely
 - b) Somewhat Unlikely
 - c) Somewhat Likely
 - d) Very Likely
 - e. Need to leave the house for some time (for family tensions, psychological stress, boredom)
 - a) Very Unlikely
 - b) Somewhat Unlikely
 - c) Somewhat Likely
 - d) Very Likely

12) Over the past week, have any of the following events happened to you?

- a. Forced to stay at home (in shelter)
 - a) Yes
 - b) No
- b. Lost your employment (job or livelihood)
 - a) Yes
 - b) No
- c. Decrease in earning or income
 - a) Yes
 - b) No
- d. Had to homeschool child(ren)
 - a) Yes
 - b) No
- e. Unable to access health care when needed
 - a) Yes
 - b) No



- f. Unable to get access to sufficient food
 - a) Yes
 - b) No
- g. Sought to get tested for COVID-19
 - a) Yes
 - b) No
- h. Had to fill application for unemployment subsidy or other government sponsored support
 - a) Yes
 - b) No
- i. Sought help or support from charities or other non-governmental organizations
 - a) Yes
 - b) No
- 11) How often have you been bothered by the following over the past seven days?
 - a) Felt down, depressed, or hopeless about the future
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - b) Felt little interest or pleasure in doing things
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - c) Felt nervous, anxious or on the edge
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - d) Had trouble falling or staying asleep, or sleeping too much
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - e) Felt bad about yourself or that you are a failure or have let yourself or your family down
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - f) Had troubles concentrating on things
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - g) Had a physical reaction when thinking about the outbreak
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)



- h) Feeling tired or having little energy
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
- 12) How has your wage/earnings been affected after the COVID-19 outbreak?
 - a) No change, full pay
 - b) Reduced pay
 - c) My contract was terminated
 - d) My business has closed temporarily or definitely
 - e) Not paid by the company, government is subsidizing pay
 - f) Not paid by company, employee takes unpaid leave
 - g) Not paid, spending my savings/helped by acquaintances.
- 13) What are your expectations for the year to come: will 2021 be better, worse or the same, when it comes to the economic situation (in our country)?
 - a) Better
 - b) Worse
 - c) The same
 - d) Don't know
- 14) What are your expectations for the year to come: will 2021 be better, worse or the same, when it comes to your personal job situation?
 - a) Better
 - b) Worse
 - c) The same
 - d) Don't know
- 15) What are your expectations on the recovery from the current pandemic: when do you think we will go back to our normal lives like before the outbreak?
 - a) 2-3 months
 - b) 4-5 months
 - c) 6 months-1 year
 - d) more than one year
- 16) Among the following negative scenarios for the future, please indicate how likely you consider them?
 - a) A new outbreak of the disease
 - i) Very Unlikely
 - ii) Somewhat Unlikely
 - iii) Somewhat Likely
 - iv) Very Likely
 - b) An economic depression
 - i) Very Unlikely
 - ii) Somewhat Unlikely
 - iii) Somewhat Likely
 - iv) Very Likely
 - c) A permanent restriction to our rights and freedom
 - i) Very Unlikely
 - ii) Somewhat Unlikely
 - iii) Somewhat Likely
 - iv) Very Likely



- 17) If you compare your behavior during the last four weeks with that of the four weeks of February of this year, do you think that **during the last four weeks you have withdrawn from your savings** ...
 - a. Definitely more money in the past month than February
 - b. Probably more money in the past month than February
 - c. Exactly the same amount of money in the past month as in February
 - d. Probably less money in the past month than February
 - e. Definitely less money in the past month than February
- 18) If you compare your behavior during the last four weeks with that of the four weeks of February of this year, do you think that **during the last four weeks you have purchased or consumed cultural products (e.g. books or e-books, online visit to a museum, theatre, opera or concert)** ...
 - a. Definitely more in the past month than February
 - b. Probably more in the past month than February
 - c. Exactly the same number in the past month as in February
 - d. Probably less in the past month than February
 - e. Definitely less in the past month than February
- 19) If you compare your behavior during the last four weeks with that of the four weeks of February of this year, do you think that **during the last four weeks you have stayed in contact with people relevant for your carrier, status or your future possibility to get a job** ...
 - a. Definitely more times in the past month than February
 - b. Probably more times in the past month than February
 - c. Exactly the same number of times in the past month as in February
 - d. Probably less times in the past month than February
 - e. Definitely less times in the past month than February
- 20) If you compare your behavior during the last four weeks with that of the four weeks of February of this year, do you think that **during the last four weeks you have adhered to an unhealthy lifestyle (e.g. consumption of unhealthy food, tobacco, alcohol, drugs, unprotected sex, lack of adherence to medication)** ...
 - a. Definitely more in the past month than February
 - b. Probably more in the past month than February
 - c. Exactly the same in the past month as in February
 - d. Probably less in the past month than February
 - e. Definitely less in the past month than February



Wave 3

"Before moving to the questions, we ask you to read the following statement. Consider that the following statement has been elaborated based on different information, e.g. sources from official government, scientific or other media sources in different countries. We made sure that we do not misreport the original source or add interpretations."

You have been kind enough to join us so far in the two previous waves and we ask you not to miss the opportunity to express your opinion on the possible measures to address the COVID-19 pandemic that we present in this closing questionnaire. We greatly value your contributions. They will help us to convey your concerns and those of thousands of citizens to the authorities responsible for managing this difficult situation. The analysis of your valuable opinions, together with those of 3000 other participants from different European countries, will enable us to pass on the results and recommendations to the relevant European organizations, so that they can improve their actions on citizens who, like you, are affected by this new situation.

[High sigma] "A famous epidemiologist and statistician claimed that the data currently collected on COVID-19 pandemic are unreliable, especially those concerning infections and deaths because of limited testing. For instance, we may be missing the right number of infections by an order of magnitude of three or 300.

While an international organization reports a fatality rate of 3.4% (i.e., number of deaths divided by the number of infected persons) frightening the public, the expert affirms that this may be meaningless due to the unreliability of the data used to calculate this rate.

[Low sigma] "A prediction published in a widely read US newspaper put between 160 and 214 million the number of people that could be infected with COVID-19 in the United States in course of months or even a year.

Between 2.4 million and 21 million could be possibly hospitalized with a serious risk to the national health system. The supply of ventilators may be short of the critical cases by an order of ten (i.e. every ten patients there may be one ventilator). As a result, up to 1.7 million people could die."

[High alpha] "According to information reported by newspapers, one avenue to cope with the spread of the COVID-19 is to use technology to track outbreaks of infection by matching information about people and their movements. Scientists from prestigious universities have already been working on these algorithms that use GPS and Bluetooth trails.

The initiative has raised concern about privacy, since it is not clear how the tracking technology access the information about the user location, and also because the tracked information could be available to health and government authorities without user consent".

[Low alpha] "According to information reported by newspapers, one avenue to cope with the spread of the COVID-19 is to use technology to track outbreaks of infection by matching information about people and their movements. Scientists from prestigious universities have already been working on these algorithms that use GPS and Bluetooth trails.

This solution raised hopes that people exposed to the virus can be alerted and seek treatment, thus, lowering the risk of exposures in public spaces such as public transport. In addition, this solution may enable real-time information for optimizing interventions".

[High mu] "The COVID-19 pandemic is posing governments with the dilemma of whether they should prioritize public health over the economy. For example, religious authorities point out that if the population is not protected with measures such as quarantine, we will attend a genocide.

This view is echoed by the majority of scientists and prominent doctors, who agree that restrictions such as quarantines are for the common good, despite their economic consequences. So, there is consensus that it is more important to protect health than the economy."

[Low mu] "During the COVID-19 crisis some distinguished personalities have affirmed that the economic consequences cannot be underestimated.



For example, a well-recognized economist wrote recently in a widely circulated newspaper that the strategies adopted to cope separately with the health and economic crisis are contradictory and may lead to long term disaster.

While isolation and social distancing aims at saving lives, they lead to a halt of the economic system, so that the unemployment rate may skyrocket, and households see their savings and current earnings severely affected. Similar opinions are shared across the political spectrum."

We will now ask you some questions about different policies in response to COVID-19 (that have been already adopted or may be adopted in the future). Please focus your attention on their description, as well as on the arguments and motivations behind them.

Policy Q "This policy requires restriction of activities and mobility for people who are not ill but who may be exposed to infectious agents or to the disease. This with the purpose of early detecting and monitoring the disease, as well as reducing at minimum social contact to slow down the contagion. According to this policy, people may be allowed to leave their house but only when it is absolutely necessary: for example, for medical treatments, purchasing groceries or another emergency."

The policy was justified with the following argument [show only one, according to experimental condition]

- a. Experts were consulted and argue that this policy is a good measure to stop the spread of the disease based on studies and data taken from previous epidemics and pandemics. According to the estimates, contagion in the community would be significantly reduced, if the majority of the households comply with the policy.
- b. The government has consulted with the citizens on this policy and participants argue that, although the economic cost will be extraordinary, after deliberation they agree on implementing such a policy because in this moment health is more important than the economy.
- c. The government has listened to different arguments, from both scientific sources and the civil society (e.g. citizens, NGOs, industry associations and trade unions). It has been recognized that experts have a reasonable estimation of the negative consequences of putting the health system under critical stress, but they underestimate the economic consequences. At the opposite, representatives of the civil society have claimed that the economic cost will be disproportionate. The government has decided, weighting these opposing arguments, for the time being to adopt this policy as a temporary measure.
- We now ask you to think about the policy and answer honestly reporting your level of agreement with the following statement. Answer on a scale from 1 to 7, where 1 stands for "I don't agree at all" and 7 to "I completely agree". You can also use the values in between to indicate where you fall on the scale. I would support this policy if proposed to be implemented in my country

Slider from 1 to 7

2) We now ask you to think at the justification for the adoption of the policy and answer honestly reporting your level of agreement with the following statement. Answer on a scale from 1 to 7, where 1 stands for "I don't agree at all" and 7 to "I completely agree". You can also use the values in between to indicate where you fall on the scale. I think that this is a solid argument to convince me to adopt such a policy

Slider from 1 to 7

3) We now ask you to think at the opportunity to use this justification as a communication strategy to persuade citizen to support the policy. Answer honestly reporting your level of agreement with the following statement. Answer on a scale from 1 to 7, where 1 stands for "I don't agree at all" and 7 to "I completely agree". You can also use the values



in between to indicate where you fall on the scale. I would like this message to be part of the communication strategy of the government

Slider from 1 to 7

We now ask you questions about different policies in response to COVID-19 (that have been already adopted or may be adopted in the future). Please focus your attention on their description, as well as on the arguments and motivations behind them.

Policy T: "This policy is based on enabling an App that helps track if the user had contact with an infected person. All users must scan a QR code with the use of some standard application. People that appear to be at risk are then advised to stay at home. There are three possible results from the app: if the person gets green, that means he/she is healthy; yellow means the person should do a 7-day quarantine; red means a 14-day quarantine. All the data is available to the government."

The policy was justified with the following argument [show only one, according to experimental condition]

- a. Experts were consulted and argued that the contact tracing through an app is a good measure to control the spread of the disease, based on the positive outcomes of this measure in other countries. According to the experts, the implementation of this measure would significantly reduce the contagion, if the majority of the population adopt the App and use it regularly.
- b. The government has consulted with the citizens on this policy and participants argue that, although the threat in terms of freedom and personal rights will be large, after deliberation they agree on implementing such a policy because in this moment health is more important than freedom.
- c. The government has listened to different arguments, from both scientific sources and the civil society (e.g. citizens, NGOs, industry associations, and trade unions). It has been recognized that tech experts have a reasonable estimation of the accuracy of the app, but they underestimate the privacy issue. On the other hand, civil society is focused on raising the risk of privacy violations and threat to citizens' rights. The government has decided, weighting these opposing arguments, for the time being to adopt the technological solution as a temporary measure.



4) We now ask you to think at the policy and answer honestly reporting your level of agreement with the following statement. Answer on a scale from 1 to 7, where 1 stands for "I don't agree at all" and 7 to "I completely agree". You can also use the values in between to indicate where you fall on the scale. I would support this policy if proposed to be implemented in my country

Slider from 1 to 7

5) We now ask you to think about the justification for the adoption of the policy and answer honestly reporting your level of agreement with the following statement. Answer on a scale from 1 to 7, where 1 stands for "I don't agree at all" and 7 to "I completely agree". You can also use the values in between to indicate where you fall on the scale. I think that this is a solid argument to convince me to adopt such a policy

Slider from 1 to 7

6) We now ask you to think at the opportunity to use this justification as a communication strategy to persuade citizen to support the policy. Answer honestly reporting your level of agreement with the following statement. Answer on a scale from 1 to 7, where 1 stands for "I don't agree at all" and 7 to "I completely agree". You can also use the values in between to indicate where you fall on the scale. I would like this message to be part of the communication strategy of the government

Slider from 1 to 7

We now ask you questions about different policies in response to COVID-19 (that have been already adopted or may be adopted in the future). Please, focus your attention on their description, as well as on the arguments and motivations behind them.

Policy D: "The aim of this measure is to identify people who have already been infected with COVID-19. In particular, it aims to ease quarantine measures for those who have already recovered from the virus, so that they can return to work and their normal activities. This measure is based on a large-scale testing method. The test is not 100% accurate and does not guarantee immunity".

The policy was justified with the following argument [show only one, according to experimental condition]

- a. Experts were consulted and argued that the use these tests is a good measure to cope with the new phase of the pandemic, based on the results of laboratory experiments. According to the estimates, the number of people already infected is much larger than official numbers and these people may be already immune. According to the experts, the implementation of this measure would significantly reduce the negative consequences on the economy, if the majority of the population get tested and followed the prescription to return to work if cleared.
- b. The government has consulted with the citizens this policy and participants argue that although this could be extremely risky since these tests are not a proof of immunity, after deliberation they agree on implementing such a policy because in this moment putting the economy first is a necessary step ahead.
- c. The government has listened to different arguments, from both scientific source and the civil society (e.g. citizens, NGOs, industry associations and trade unions). It has been recognized that experts have a reasonable confidence on the accuracy of the test, but they underestimate the risk of experimenting a reopening. On the other hand, civil society has claimed that this policy is directly exposing a large chunk of the population to incredible risk. The government has decided weighting these opposing arguments that the temporary measure will be the experimental adoption of the reopening of the economy conditional on having been tested and based on its result.
- 7) We now ask you to think at the policy and answer honestly reporting your level of agreement with the following statement. Answer on a scale from 1 to 7, where 1 stands for "I don't agree at all" and 7 to "I completely agree". You can also use the values in between to indicate where you fall on the scale. I would support this policy if proposed to be implemented in my country



Slider from 1 to 7

8) We now ask you to think at the justification for the adoption of the policy and answer honestly reporting your level of agreement with the following statement. Answer on a scale from 1 to 7, where 1 stands for "I don't agree at all" and 7 to "I completely agree". You can also use the values in between to indicate where you fall on the scale. I think that this is a solid argument to convince me to adopt such a policy

Slider from 1 to 7

9) We now ask you to think at the opportunity to use this justification as a communication strategy to persuade citizen to support the policy. Answer honestly reporting your level of agreement with the following statement. Answer on a scale from 1 to 7, where 1 stands for "I don't agree at all" and 7 to "I completely agree". You can also use the values in between to indicate where you fall on the scale. I would like this message to be part of the communication strategy of the government

Slider from 1 to 7

BASELINE QUESTIONS FROM WAVE 1

- 10) How much would the following factors prevent you from fully isolating yourself?
 - a. Need to earn an income
 - i. Very Unlikely
 - ii. Somewhat Unlikely
 - iii. Somewhat Likely
 - iv. Very Likely
 - b. Need to care for others outside your home, such as elderly parents
 - i. Very Unlikely
 - ii. Somewhat Unlikely
 - iii. Somewhat Likely
 - iv. Very Likely
 - c. Don't want to miss certain social events / gatherings
 - i. Very Unlikely
 - ii. Somewhat Unlikely
 - iii. Somewhat Likely
 - iv. Very Likely
 - d. Urge to practice sports
 - i. Very Unlikely
 - ii. Somewhat Unlikely
 - iii. Somewhat Likely
 - iv. Very Likely
 - e. Need to leave the house for some time (for family tensions, psychological stress, boredom)
 - i. Very Unlikely
 - ii. Somewhat Unlikely
 - iii. Somewhat Likely
 - iv. Very Likely
- 11) Over the past week, have any of the following events happened to you?
 - a. Forced to stay at home (in shelter)
 - i) Yes
 - ii) No
 - b. Lost your employment (job or livelihood)



- i) Yes
- ii) No
- c. Decrease in earning or income
 - i) Yes
 - ii) No
- d. Had to homeschool child(ren)
 - i) Yes
 - ii) No
- e. Unable to access health care when needed
 - i) Yes
 - ii) No
- f. Unable to get access to sufficient food
 - i) Yes
 - ii) No
- g. Sought to get tested for COVID-19
 - i) Yes
 - ii) No
- h. Had to fill application for unemployment subsidy or other government sponsored support
 - i) Yes
 - ii) No
- i. Sought help or support from charities or other non-governmental organizations
 - i) Yes
 - ii) No
- 12) How often have you been bothered by the following over the past seven days?
 - a) Felt down, depressed, or hopeless about the future
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - b) Felt little interest or pleasure in doing things
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - c) Felt nervous, anxious or on the edge
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 - d) Had trouble falling or staying asleep, or sleeping too much
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 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
 - e) Felt bad about yourself or that you are a failure or have let yourself or your family down
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days



- iv) Rarely or none of the time (less than 1 day)
- f) Had troubles concentrating on things
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
- g) Had a physical reaction when thinking about the outbreak
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
 - iv) Rarely or none of the time (less than 1 day)
- h) Feeling tired or having little energy
 - i) Most or all the time (5-7 days)
 - ii) Occasionally or a moderate amount of time (3-4 days)
 - iii) Some or a little of the time (1-2) days
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- 13) How has your wage/earnings been affected after the COVID-19 outbreak?
 - a) No change, full pay
 - b) Reduced pay
 - c) My contract was terminated
 - d) My business has closed temporarily or definitely
 - e) Not paid by the company, government is subsidizing pay
 - f) Not paid by company, employee takes unpaid leave
 - g) Not paid, spending my savings/helped by acquaintances.
- 14) What are your expectations for the year to come: will 2021 be better, worse or the same, when it comes to the economic situation (in our country)?
 - a) Better
 - b) Worse
 - c) The same
 - d) Don't know
- 15) What are your expectations for the year to come: will 2021 be better, worse or the same, when it comes to your personal job situation?
 - a) Better
 - b) Worse
 - c) The same
 - d) Don't know
- 16) What are your expectations on the recovery from the current pandemic: when do you think we will go back to our normal lives like before the outbreak?
 - a) 2-3 months
 - b) 4-5 months
 - c) 6 months-1 year
 - d) more than one year
- 17) Among the following negative scenarios for the future, please indicate how likely you consider them?
 - f. A new outbreak of the disease
 - Very Unlikely
 - Somewhat Unlikely



- Somewhat Likely
- Very Likely
- g. An economic depression
 - Very Unlikely
 - Somewhat Unlikely
 - Somewhat Likely
 - Very Likely
- h. A permanent restriction to our rights and freedom
 - Very Unlikely
 - Somewhat Unlikely
 - Somewhat Likely
 - Very Likely
- 2) If you compare your behavior during the last four weeks with that of the four weeks of February of this year, do you think that **during the last four weeks you have withdrawn from your savings** ...
 - a. Definitely more money in the past month than February
 - b. Probably more money in the past month than February
 - c. Exactly the same amount of money in the past month as in February
 - d. Probably less money in the past month than February
 - e. Definitely less money in the past month than February
- 3) If you compare your behavior during the last four weeks with that of the four weeks of February of this year, do you think that **during the last four weeks you have purchased or consumed cultural products (e.g. books or e-books, online visit to a museum, theatre, opera or concert)** ...
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 - e. Definitely less in the past month than February
- 4) If you compare your behavior during the last four weeks with that of the four weeks of February of this year, do you think that **during the last four weeks you have stayed in contact with people relevant for your carrier, status or your future possibility to get a job** ...
 - a. Definitely more times in the past month than February
 - b. Probably more times in the past month than February
 - c. Exactly the same number of times in the past month as in February
 - d. Probably less times in the past month than February
 - e. Definitely less times in the past month than February



- 5) If you compare your behavior during the last four weeks with that of the four weeks of February of this year, do you think that **during the last four weeks you have adhered to an unhealthy lifestyle (e.g. consumption of unhealthy food, tobacco, alcohol, drugs, unprotected sex, lack of adherence to medication)** ...
 - a. Definitely more in the past month than February
 - b. Probably more in the past month than February
 - c. Exactly the same in the past month as in February
 - d. Probably less in the past month than February
 - e. Definitely less in the past month than February