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# **The Mannheim Corona Study: Life in Germany in a State of Emergency**

Report for March 20 to May 24, 2020

English translation of the original report (in German)

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## The Mannheim Corona Study

We are all affected by the corona pandemic and the measures taken by the federal government to decelerate the spread of the virus. At the University of Mannheim, we have developed a survey instrument over the past eight years which we can use to quickly examine the social implications of the pandemic in Germany.

To the best of our knowledge, our study is the only one in Germany which can assess how the corona crisis is affecting people's lives in Germany on a daily basis. That is why we consider it as our social duty to contribute to a better understanding of how the corona crisis is affecting the population and to inform the public as well as decision-makers in politics and business about current developments.

The Mannheim Corona Study started on Friday, March 20. The study is carried out daily and reports on life in Germany during the corona crisis. We examine social and economic aspects (such as childcare, employment situations, and disposable income), the influence of political measures on social interactions, anxiety as well as public acceptance of the measures taken to contain the pandemic. Between 430 und 567 (on average 498) respondents take part in the study every day.

The content of this report will be updated every working day and made available on our website. In addition, in-depth analyses will be conducted on key issues and will also be published as focus reports on our website.

Information on the methodology of the Mannheim Corona Study can be found at the end of this report. You can also find further information on our website:

<https://www.uni-mannheim.de/en/gip/corona-study/>.

# 1 Do the measures taken to contain the corona pandemic reduce social meetings in Germany?

To decelerate the spread of the coronavirus, minimizing physical contacts between people, so-called social distancing, is of great importance. For this purpose, the federal government as well as state governments in Germany have implemented unprecedented restrictions of public life.

Figure 1 shows how the frequency of social meetings with friends, relatives or work colleagues in Germany has changed in recent weeks. Each bar in the figure consists of several sections, the size of which corresponds to the proportion of people who either have never met socially with others, once, several times, or daily in a week. For example, the larger the green section of a bar is, the more people have never met socially with friends, relatives or work colleagues in the respective week. The bar on the far left shows how often people in Germany met socially with people in the week before the first measures to contain the pandemic were introduced (March 02 – March 08). The other bars represent the frequency of social meetings after the first measures came into effect, in the last seven days before the date indicated above the bar.

The frequency of social meetings with friends, relatives or work colleagues per week **before the coronavirus measures** came into effect was as follows:

Frequency	Share	Confidence interval
Every day	10.8%	[9.5%; 12.0%]
Several times	41.0%	[38.6%; 42.5%]
Once	30.0%	[28.4%; 32.1%]
Never	15.0%	[13.7%; 16.5%]

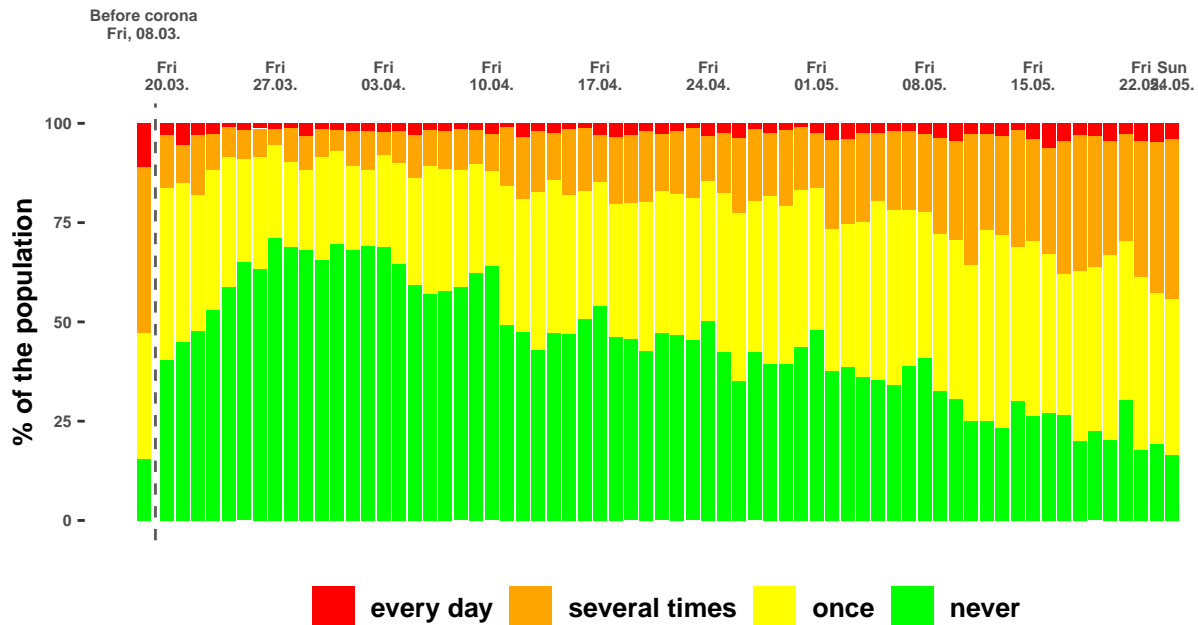
Note:

Confidence interval: 95% of all random samples produce a value within the specified confidence interval.

The frequency of social meetings with friends, relatives or work colleagues in the past seven days was on May 24, 2020 as follows:

Frequency	Share	Confidence interval
Every day	3.9%	[1.4%; 6.3%]
Several times	40.0%	[34.0%; 46.5%]
Once	40.0%	[33.3%; 45.7%]
Never	16.0%	[11.7%; 21.1%]

**Figure 1: Frequency of social meetings with friends, relatives or work colleagues per week**



Note:

Question texts: How often did you meet socially with friends, relatives or work colleagues in the week of March 02–08, the week before the first corona measures were introduced?; And how often did you meet socially with friends, relatives or work colleagues in the past 7 days?

Response options: never, once a week, several times a week, every day or several times a day, don't know.

## 2 Which measures to contain the corona pandemic are currently considered appropriate by the German population?

There are different views on the most effective way to decelerate the spread of the coronavirus. There are also different views about which measures are appropriate in the current situation. Undisputed is the fact, however, that the social acceptance of these measures is essential for their successful implementation, especially over the long term. Therefore, the Mannheim Corona Study also examines which measures are considered appropriate by the population in Germany, and how the social acceptance develops over time.

Figure 2 shows the proportion of the population that considers certain measures appropriate on the respective day. Each measure is indicated by a separate line. The shaded area around the lines indicates the statistical uncertainty (95% confidence intervals), which results from the fact that only a random sample of the population was interviewed and not the entire population.

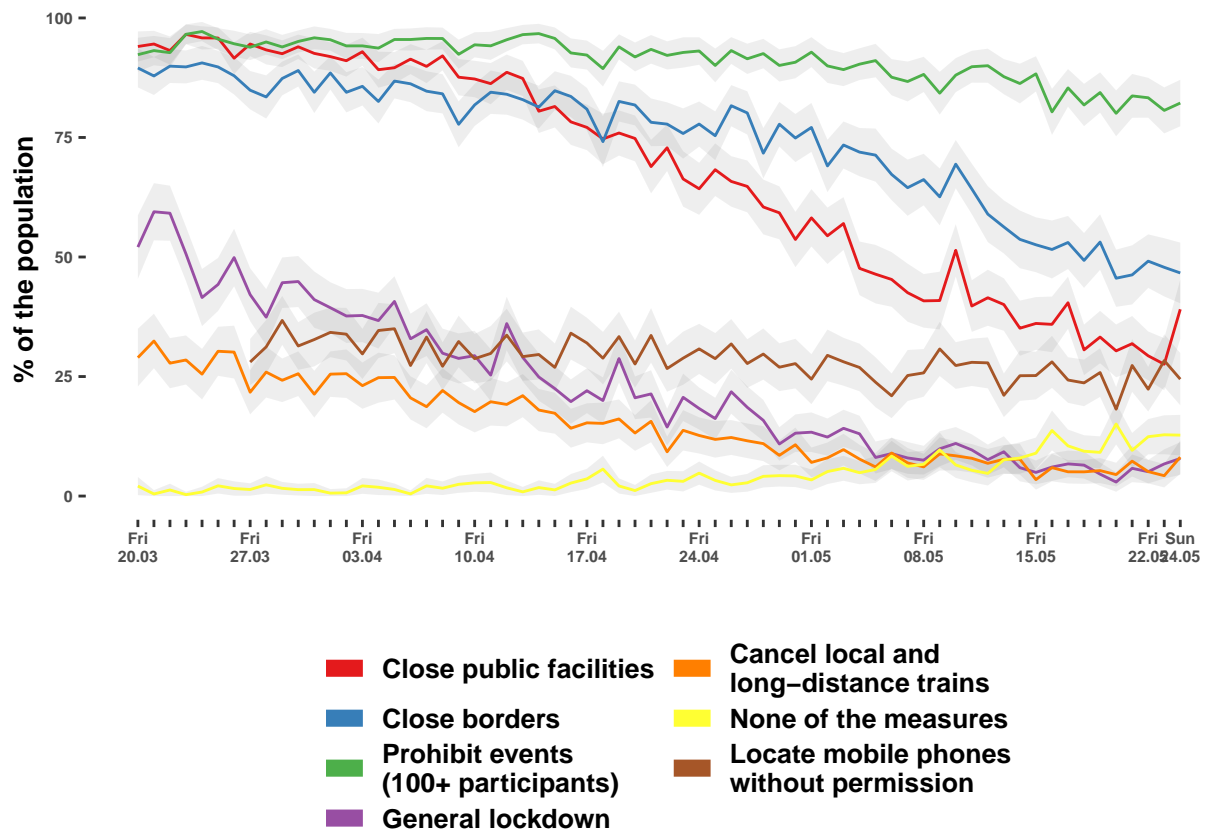
The acceptance of the measures on May 24, 2020:

Measures	Share	Confidence interval
Prohibit events	82.2%	[77.3%; 87.1%]
Close public facilities	39.1%	[32.9%; 45.3%]
Close borders	46.7%	[40.3%; 53.0%]
General lockdown	7.9%	[4.4%; 11.3%]
Cancel local and long-distance trains	8.1%	[4.7%; 11.6%]
Locate mobile phones without permission	24.4%	[19.0%; 29.9%]
None of the measures	12.7%	[8.5%; 17.0%]

Note:

Confidence interval: 95% of all random samples produce a value within the specified confidence interval.

Figure 2: Proportion of the population that endorses certain measures on the day of the survey



Note:

Question text: In Germany various measures to contain the corona pandemic are being discussed and taken. We would now like to know from you what you think of measures that have already been implemented as well as potential future measures. Which of the following measures do you consider appropriate in today's situation?

Response options: close public facilities (e.g., universities, schools and kindergardens), close national borders for travelers, prohibit events with more than 100 participants, general lockdown, cancel local and long-distance trains, locate mobile phones of infected persons to identify contact persons without the consent of those involved, I do not consider any of these measures to be appropriate in today's situation (multiple responses were possible).

### 3 Is the economic damage greater than the benefit for society?

To effectively contain the new coronavirus, a massive shutdown of social life is implemented all over Germany as well as worldwide. The measures taken by governments are aimed at reducing social contacts in particular. This is to slow down the spread of the virus to such an extent that hospital capacity is sufficient and national health systems do not collapse due to a too rapid increase in seriously ill people.

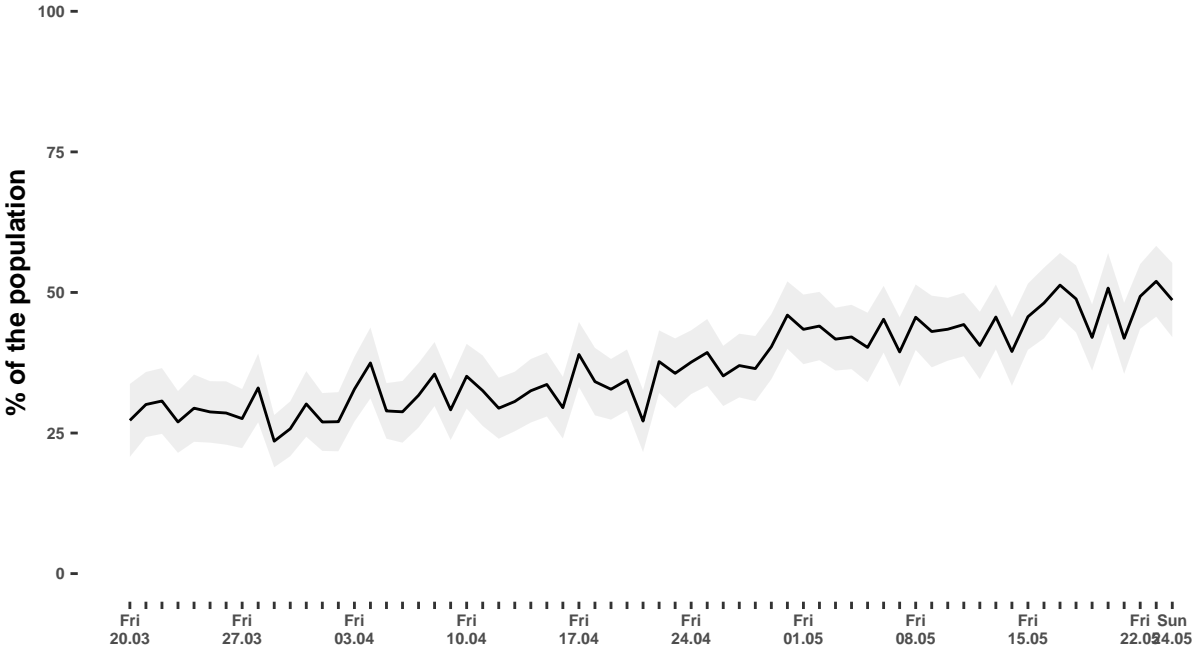
The downside of these measures, however, is that they have a major impact on the economy. The considerable financial aid that the federal government and the state governments provide will probably not be able to protect all companies from bankruptcy. There is already a clear increase in employees switching to government-subsidized short-time work and in unemployment. A council of experts of the federal government (Sachverständigenrat) also forecasts a significant decline of the German economic performance, depending on the further course of the corona pandemic.

With increasing duration of the pandemic, the question arises as to how long the economic consequences can be tolerated to combat the virus. So far, the media especially reflect the opinion of politicians and business representatives. With our study we can expand this picture and identify what the people in Germany think about the relationship between the benefit for society and the economic consequences of the measures.

Figure 3 shows the proportion of people in Germany that rates the damage to the German economy as greater than the benefit of the measures for society. We assume that respondents who answered on a scale of 1 (“The benefit for society is greater than the economic damage.”) to 7 (“The economic damage is greater than the benefit for society.”) with greater or equal 5 are of the opinion that the economic damage of the measures exceeds their benefit for society. Again, the gray shaded area indicates the statistical uncertainty.



**Figure 3: Proportion of the population that rates the economic damage of the measures as greater than their benefit for society**



**Note:**  
 Question text: Is the economic damage of the current measures to contain the corona pandemic in Germany currently greater than its benefit for society, or is the benefit for society greater than the economic damage?  
 Response options: 1 The benefit for society is greater than the economic damage –7 The economic damage is greater than the benefit for society.

## 4 How does the corona crisis affect the employment situation of the population?

The corona crisis not only threatens the health of many people, but also affects the economy. Many companies stand still, employees are supposed to work from home, are sent on short-time work with reduced pay (their employers receive “short-time work money” from the Federal Employment Agency) or are laid off.

Figure 4 shows how the employment situation of the population has changed since January 2020. People who were employed in January 2020, including the self-employed and so-called mini-jobbers (earning up to EUR 450 a month), are included in the figure. The segments of a bar show how many people work in each of the employment categories on the day of the interview.

The figure shows how many people regularly work at their workplace and the same hours as before the corona crisis, how many are working from home, have been furloughed with or without pay, have been sent on short-time work, or are unemployed.

The figure shows on a daily basis how the employment situation in Germany has been changing since Friday, March 20.

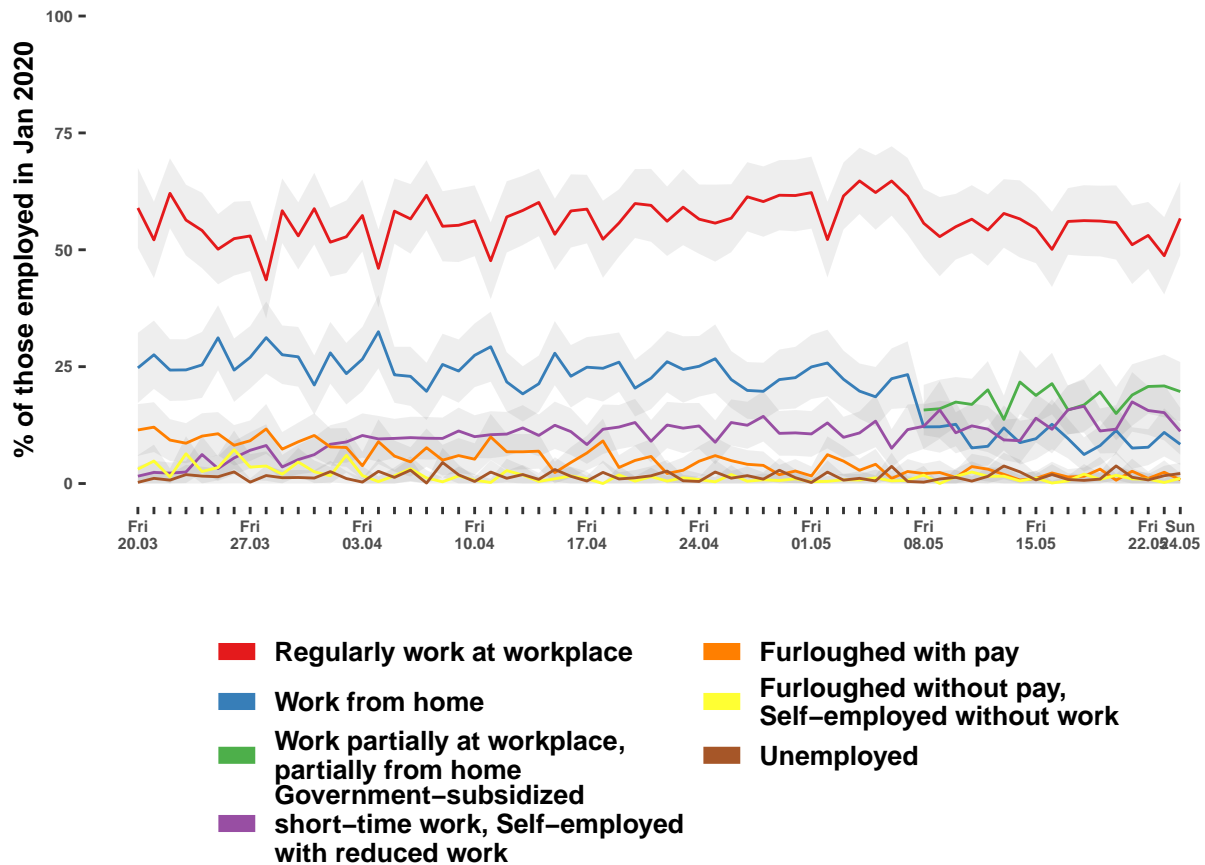
Of those employed in January 2020, the current employment situation on May 24, 2020 is as follows:

<b>Employment situation</b>	<b>Share</b>	<b>Confidence interval</b>
Regularly work at workplace	56.7%	[48.8%; 64.6%]
Work from home	8.4%	[4.0%; 12.8%]
Work partially at workplace, partially from home	19.7%	[13.3%; 26.0%]
Government-subsidized short-time work	11.2%	[6.2%; 16.2%]
Furloughed with pay, Self-employed with reduced work	0.8%	[0.0%; 2.2%]
Furloughed without pay, Self-employed without work	1.1%	[0.0%; 2.8%]
Unemployed	2.1%	[0.0%; 4.4%]

Note:

Confidence interval: 95% of all random samples produce a value within the specified confidence interval.

Figure 4: Employment situation in Germany during the corona crisis



Note:

The figure shows people who were employed in January 2020.

Change of the question on employment status since May 8, 2020.

Employment status:

Question text: Which (professional) activity do you mainly do at the moment?

Response options: Employee, worker or civil servant (even if currently on government-subsidized short-time work or furloughed), Self-employed, Unemployed

Scope of work – employee:

Question text: To what extent are you currently working as employee, worker or civil servant?

Response options: I work full-time, I work part-time, I was sent to government-subsidized short-time work, with [response]% of a full-time job, I am furloughed with pay, I am furloughed without pay

Scope of work – self-employed:

Question text: To what extent are you currently working in your self-employed activity?

Response options: I work more than before the corona pandemic, I work about the same amount as before the corona pandemic, I work less than before the corona pandemic, I currently do not work at all in my self-employed activity

Place of work:

Question text: Where do you currently work in your main job?

Response options: Only on-site at the employer or client, Mostly on-site at the employer or client, occasionally from home, Around the same amount on-site at the employer or from home, Mostly from home, occasionally on-site at the employer or client, Only from home

## 5 How does the corona crisis affect feelings of anxiety?

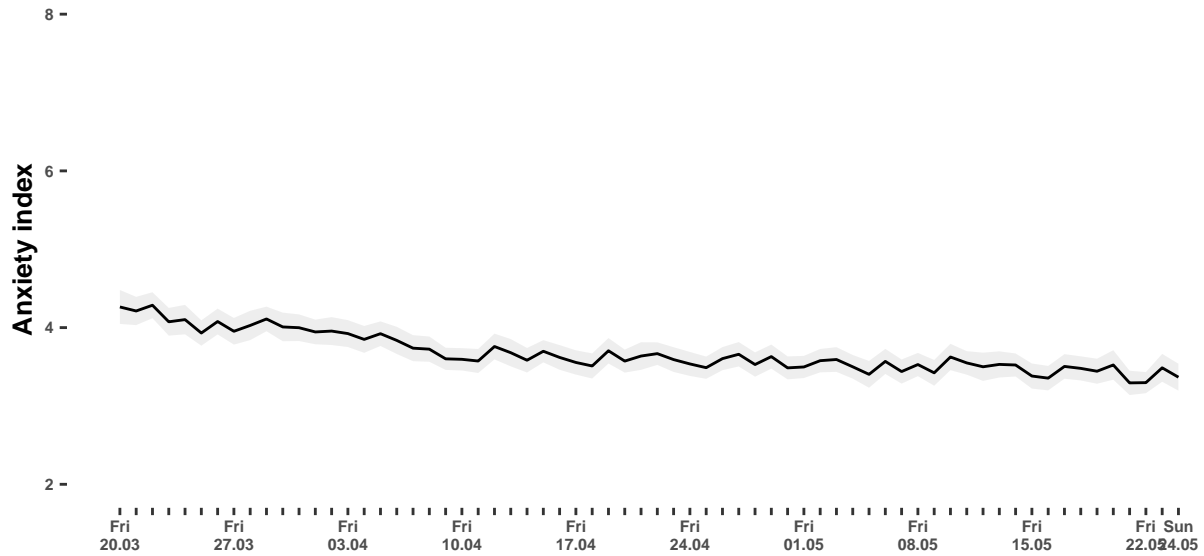
Does the corona pandemic fundamentally change our society and our coexistence?

Anxiety is an emotion that warns us of danger and at the same time can mobilize us. People who are anxious of a great danger are sometimes capable of accomplishments that they would not have been capable of under normal circumstances. But anxiety can also strain people, severely impair them mentally and paralyze them.

Figure 5 shows how anxiety in the German population changes on average from day to day. The larger the values, the more likely are respondents to describe their emotional state as worried or nervous on the day of the survey.

To measure anxiety, we provided respondents with two statements that people use to describe themselves. The statements to be evaluated were: I am worried that something could go wrong, I am nervous. Respondents were asked to indicate whether the statements correspond to their current emotional state not at all (1), a little (2), fairly (3) or a lot (4). To estimate how anxious a respondent is, we calculate the sum of the answers to these 2 questions so that higher values mean more anxiety.

Figure 5: Feelings of anxiety in the course of the corona crisis



Note:

Question text: Below you will find a number of statements that people use to describe themselves. Please indicate to what extent the respective statements indicate how you feel at the moment. There are no right or wrong answers. Please do not think long and choose the answer that best describes your current emotional state.

Statements to be evaluated: I am worried that something could go wrong, I am nervous.

Response options: not at all (1), a little (2), fairly (3) or a lot (4).

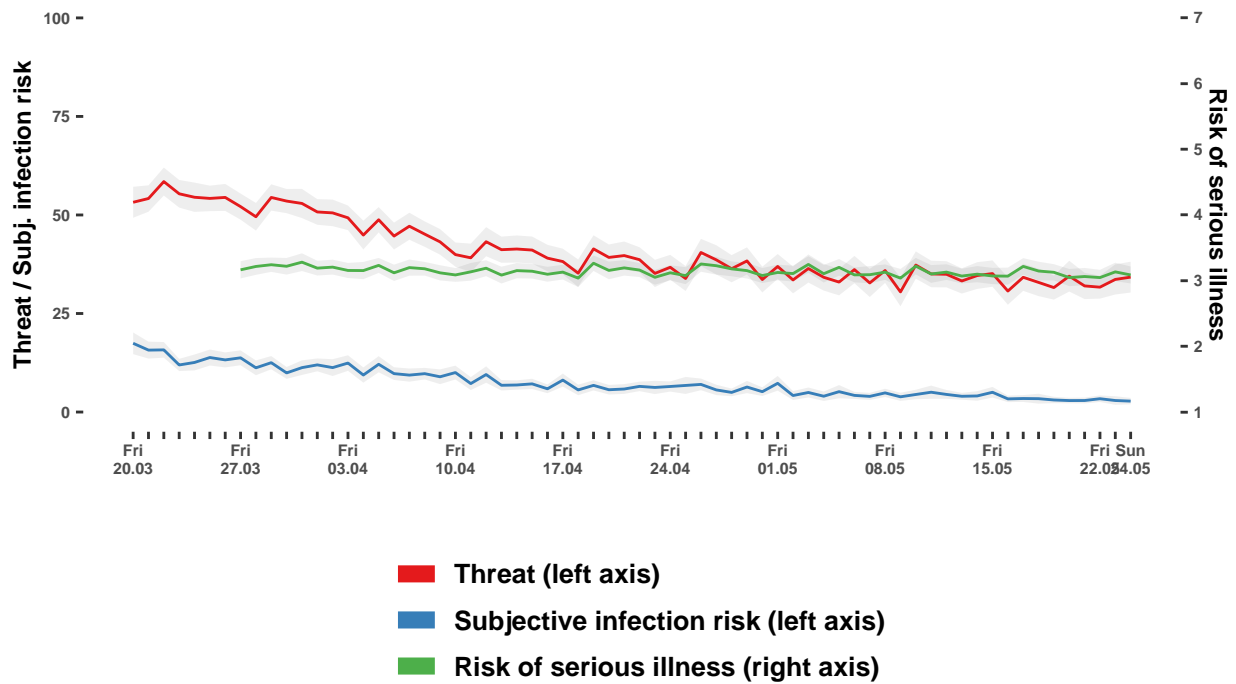
Index creation: The answers to the two questions are added up for each respondent, resulting in a value between 2 (no anxiety) and 8 (great anxiety).

## 6 Perceived risk of infection and feelings of threat by the corona pandemic

There is hardly any report on the corona pandemic that does not mention numbers of newly infected people. Many people are watching the developments with tension and concern. But to what extent does each individual actually feel threatened by the pandemic? How do people assess their own risk of getting infected with the coronavirus? And do people think that the disease would have serious consequences for them?

In figure 6, the red line shows to what extent the respondents feel threatened by the corona pandemic and how this perceived threat changes from day to day. Such feelings of threat can be influenced by how high the own infection risk is perceived. The perceived own infection risk is shown in figure 6 by the blue line and can take values between 0 (no risk of getting infected in the next 7 days) and 100 (will definitely get infected in the next 7 days). The green line shows the extent to which people in Germany think that, if they get infected, they will become so seriously ill that they will have to go to the hospital.

Figure 6: Threat, infection risk, and risk of serious illness in the course of the corona crisis



Note:

Threat:

Question text: To what extent do you perceive the corona pandemic as a threat to yourself?

Response options: No threat at all to myself (0) – Extreme threat to myself (100)

Subjective infection risk:

Question text: Now we are interested in how likely you think it is that you or people who are very similar to you will get infected with the coronavirus in the next 7 days. Please think of 100 people who are very similar to you, for example, are of the same age, have similar medical conditions, live in the same area, have a similar job and a similar lifestyle to you. What do you think, how many of these 100 people who are very similar to you will get infected with the coronavirus in the next 7 days?

Risk of serious illness:

Question text: Suppose you get the coronavirus. How likely do you think would you get seriously ill, such that you would need to be treated in the hospital?

Response options: Not at all likely (1) – Definitely (7)

## Methodology of the Mannheim Corona Study

The Mannheim Corona Study is based on the methodology and infrastructure of the German Internet Panel (GIP). Like the GIP, the Mannheim Corona study is led by Prof. Dr. Blom and conducted by the GIP team. The questionnaires are developed together with the researchers at the Collaborative Research Center (SFB) 884 “Political Economy of Reforms”.

### Sample

The GIP is based on a random sample of the general population in Germany and has been carried out regularly since 2012. The GIP sample was divided into eight random sub-samples for the Corona Study. The sub-samples 1-7 were assigned to a specific day of the week, while the eighth sub-sample serves as control group and is not surveyed for the Corona Study.

### Daily Surveys

On each day of the week one of the sub-samples receives an email invitation to the day’s survey. Contacted panel members have 48 hours to participate. However, they are encouraged to take part on the day of the week that they were assigned to, i.e. within the first 24 hours.

Results for each day are analyzed together, i.e. persons who responded directly on the first day (e.g. Monday) are included in the analysis of that specific day (Monday). Answers of respondents, who participated on the day after (Tuesday), are analyzed together with the answers on that day of the next sub-sample. In this way, we minimize biases, because every daily analysis includes both early as well as late respondents.

Within one week, the questionnaire remains exactly the same for all participants. Across weeks, we also aim to keep the questionnaires constant to allow for a daily continuation of our time series for a long time. However, to conduct in-depth analyses of selected topics and to react to unforeseen events, the questionnaire is evaluated and updated every week.



## Study Contents

The Mannheim Corona Study conducts research on the following topics:

- Changes to the job (e.g. home office, leave of absence, job loss) due to the corona crisis
- Financial hardship induced by the corona crisis
- The childcare situation of children and adolescents under the age of 16 before and during the corona crisis
- Satisfaction with the work of selected politicians
- Attitudes towards democratic processes during the corona crisis
- Frequency of social interactions
- Attitudes towards the economic costs and benefits for society of measures taken to contain the pandemic
- The extent to which individuals are personally affected by the corona crisis and their subjective health risks
- Feelings of anxiety and concern

## Weighting and Representativeness

No serious academic study in the field of social and economic research will generally claim to be representative of the population. While commercial research institutes tend to emphasize their representativeness, academia usually tries to avoid the use of this term.

Of course, high-quality academic studies go through great lengths to come as close as possible to the ideal of representativeness. To this end, researchers use random samples, elaborate fieldwork procedures, and scientific weighting algorithms to represent the general population as closely as possible across a variety of population statistics. The Mannheim Corona Study in the German Internet Panel is also committed to this professional ethos.

The analyses conducted with the Mannheim Corona Study are weighted with a carefully calculated weight. For this purpose, we carried out a two-stage weighting procedure:

In the first stage, we calculated a response propensity weight, which projects the characteristics of the Corona Study participants to the general GIP study. This included two characteristics: employment and occupational sector.

In the second stage, a raking weight was estimated. This raking weight extrapolated the characteristics of Corona Study participants to those of the general population of Germany

(based on the German Mikrozensus). The following characteristics informed the raking procedure: age, gender, marital status, highest level of education, household size, and federal state.

A chained equation algorithm imputed missing values in the weighting variables. The final weight was trimmed for values  $> 4$  and values  $< 1/4$ .

## **Further Methodological Information**

General information on the methodology of the GIP, including sampling and implementation, can be found here:

<https://www.uni-mannheim.de/en/gip/for-data-users/methodology/>.

## **Funding**

The Mannheim Corona Study is conducted within the GIP at the Collaborative Research Center (SFB) 884 “Political Economy of Reforms” and funded by the German Research Foundation (DFG). All researchers involved are part of the SFB 884 and mostly funded by the DFG. Neither the Mannheim Corona Study nor the GIP pursue economic or political interests of any kind.

## **Disclaimer**

The authors of this report and all the scientists involved in the Mannheim Corona Study do their best to provide results promptly, in an understandable form and correctly. Nevertheless, unintentional mistakes and misunderstandings can occur of course. All results are therefore without guarantee, we assume no liability for their accuracy.