

EUCLID-Project
Risk perceptions & behavior in the context of the current Coronavirus outbreak
See for more information: <https://euclid.dbvis.de/home>

4th Report, June 09, 2020

Focus: Germany

8 Waves of Data Collection

Data Collection 2020-02-02 to 2020-05-24

Britta Renner, Julia Koller, Nadine Lages, Karoline Villinger & Harald Schupp

University of Konstanz,

Germany

Table of Contents

Project overview	2
1.1 EUCLID team at the University of Konstanz	2
1.2. Study Methods	2
1.3 Sample characteristics (Germany)	3
Highlights of the report	4
Results	5
2. Subjective health & symptoms	5
2.1 Subjective health	5
2.2 Disease symptoms	5
2.3 Coronavirus cases	6
3. Perceived risk & outbreak related perceptions	6
3.1 Perceived likelihood of getting infected: Self and others' risk	6
3.2 Affective risk perception: Worry about getting infected	7
3.3 Perceived severity of an infection	8
3.4 Willingness to get vaccinated against the Coronavirus	9
3.5 Willingness to pay for immunization	9
4. Protection motivation and behavior change	10
4.1 Behavior change to avoid a spread of the Coronavirus	10
4.2 Behavior change regarding other protective measures	11
5. Expected future development in the context of the current outbreak	12
5.1 Expected general developments worldwide and in Germany	12
5.2 Expected health and economic consequences	13
Summary points	15

Project overview

In response to the ongoing public health emergency caused by the worldwide Coronavirus (SARS-CoV-2 and the associated disease COVID-19) outbreak, the University of Konstanz developed an online survey called "EUCLID" to track:

- Subjective health & symptoms,
- Perceived risk & outbreak related perceptions,
- Protection motivation & behavior,
- Expected future developments of the current outbreak.

It is both interesting and important to record and compare risk perception and behavior in the context of the current Coronavirus pandemic, both in Germany and worldwide. The EUCLID study is designed to assess the participants' perceptions of their health and the risk they face, and their expectations regarding the outbreak. It also explores current behavior, behavioral change, and protection motivations since the outbreak began. Finally, it assesses perceptions and beliefs regarding future developments in the context of the current outbreak. The study uses repeated cross-sectional and longitudinal surveys to capture changes both over time and in relation to the current outbreak.

1.1 EUCLID team at the University of Konstanz

Responsible PIs: Prof. Dr. Britta Renner, Julia Koller, Nadine Lages, Dr. Karoline Villinger, Prof. Dr. Harald Schupp

Student team at the University of Konstanz: Isabel Brünecke, Joke Debbeler, Kai Engel, Sofia Griebel, Leonie Hartmann, Peer Homann, Sarah Höschele, Anna Katz, Robin Kaufmann, Johanna Knecht, Kim-Marie Koppe, Jennifer Martens, Hannah Oppenheimer, Vanessa Radtke, Friederike Roelcke, Sarah Rogula, Wiebke Schneider, Leonie Schuhmacher, Nelly Theiss

1.2. Study Methods

Online questionnaires (German, English). Cross-sectional design with nested longitudinal assessments.

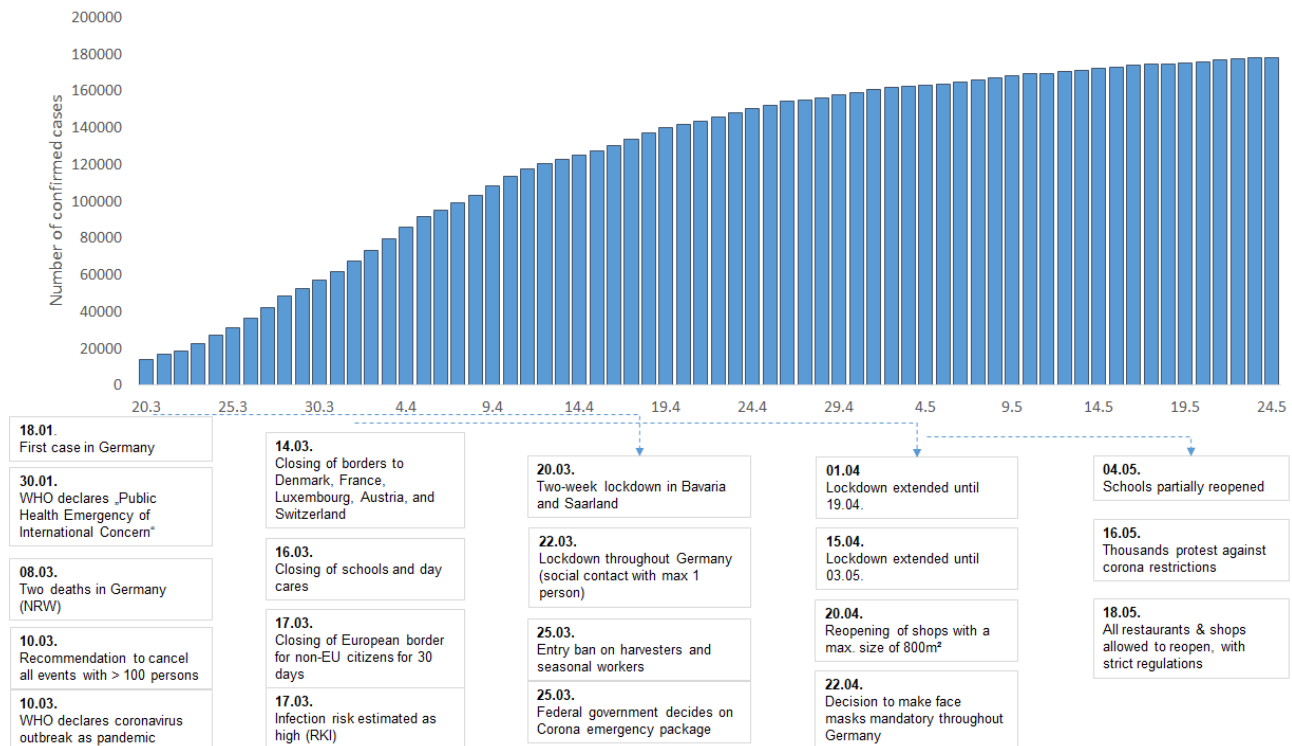
Recruitment: Online panel (Prolific Academic, Clickworker), social media (e.g. Facebook, Twitter), and email lists using a snowball system. Participation is voluntary and participants can withdraw at any time without any consequences. As compensation, participants could take part in a lottery.

Note: Cross-sectional data do not allow drawing conclusions about causal relations. They only represent a snapshot of the self-reports at the time of the survey. Furthermore, since collected data is not representative for the German population, any conclusions drawn from this data cannot be portrayed as being representative of the whole population.

Data collection: Data collection started February 02, 2020 as part of a student project.

Funding: DFG FOR 2374 RiskDynamics, BMBF 01EL1420A SMARTACT, EXC 2117 Collective Behavior

The Coronavirus outbreak: Confirmed cases and governmental decisions (Germany)



Sources: Bundesgesundheitsministerium (www.bundesgesundheitsministerium.de/coronavirus/chronik-coronavirus.html), Robert Koch Institute (www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Situationsberichte/Archiv.html).

Results are reported for eight assessment periods (calendar weeks [CW])

- Period: CW 5 (start: 2020-02-02) & CW 6 & 7 (2020-02-03 – 2020-02-16)
- Period: CW 8 & 9 (2020-02-17 – 2020-03-01)
- Period: CW 10 & 11 (2020-03-02 – 2020-03-15) see also Report 1 for additional results
- Period: CW 12 & 13 (2020-03-16 – 2020-03-29) see also Report 2 for additional results
- Period: CW 14 & 15 (2020-03-30 – 2020-04-12)
- Period: CW 16 & 17 (2020-04-13 – 2020-04-26) see also Report 3 for additional results
- Period: CW 18 & 19 (2020-04-27 – 2020-05-10)**
- Period: CW 20 & 21 (2020-05-11 – 2020-05-24)**

1.3 Sample characteristics (Germany)

13,511 participants, $M = 40$ years old (18-99 years, $SD = 15$), 70% female, 33% employed, and 26% in education or training

- Period (P1): 794 participants, $M = 32$ years old (18-84 years, $SD = 14$), 66% female, 37% employed, and 56% in education or training
- Period (P2): 228 participants, $M = 29$ years old (18-68 years, $SD = 11$), 72% female, 36% employed, and 60% in education or training
- Period (P3): 1,352 participants, $M = 36$ years old (18-99 years, $SD = 14$), 71% female, 53% employed, and 36% in education or training
- Period (P4): 2,830 participants, $M = 34$ years old (18-90 years, $SD = 13$), 82% female, 45% employed, and 45% in education or training

5. Period (P5): 2,891 participants, $M = 41$ years old (18-79 years, $SD = 13$), 75% female, 58% employed, and 18% in education or training
6. Period (P6): 2,678 participants, $M = 45$ years old (18-82 years, $SD = 14$), 58% female, 56% employed, and 13% in education or training
7. Period (P7): 1,663 participants, $M = 46$ years old (18-86 years, $SD = 15$), 55% female, 52% employed, and 12% in education or training
8. Period (P8): 1,075 participants, $M = 51$ years old (18-83 years, $SD = 15$), 75% female, 45% employed, and 11% in education or training

Highlights of the report

Highlights of the report: New developments by the end of May in Germany

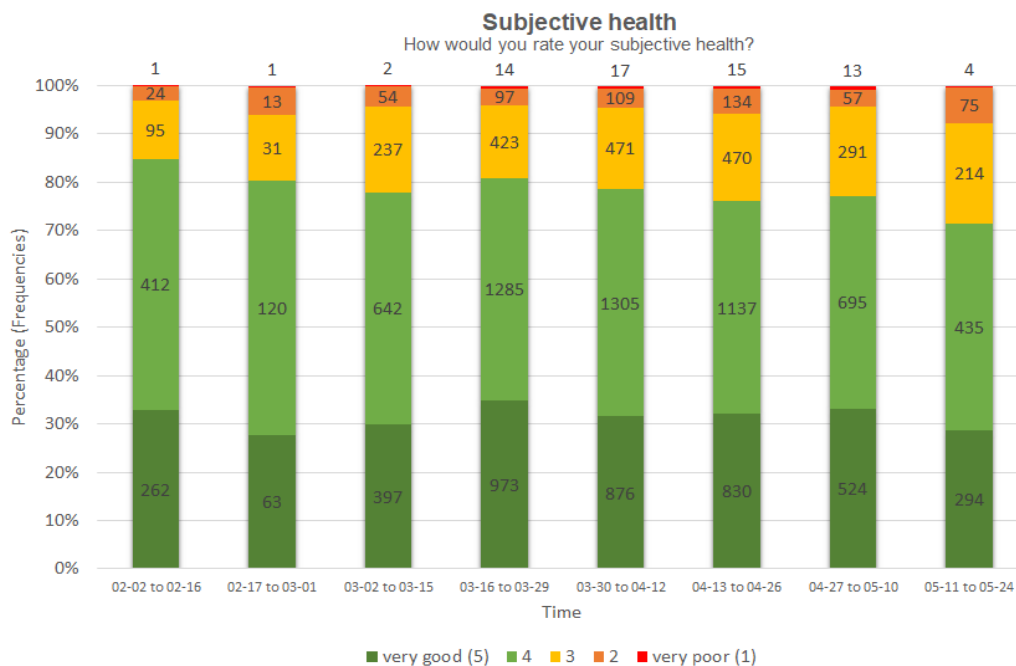
- Risk perception of a Coronavirus infection: Perceived risk of an infection and worry is decreasing
 - The sharp increase in risk perception and worry about a Coronavirus infection that occurred between February and March, slowed down in April and decreased in May. While the perceived likelihood of becoming infected increased from 1% to 49% from February to end of March, by the end of May only 19% considered it likely or very likely to become infected.
 - Similarly, worry increased from 5% at the beginning of February to 30% at the end of April and decreased to 25% at the end of May.
 - The perceived severity of a Coronavirus infection decreased between the first and second period of February and remained stable until late March. Thereafter, it increased again until end of May with 29% of the participants rating an infection as serious or very serious.
- Protection motivation & behavior: Very high adoption rate of wearing face masks but vaccination willingness is decreasing
 - Wearing face masks sharply increased from 5% at the beginning of March to 56% at the end of April when wearing face masks became mandatory in public places, and further increased to 90% by the end of May.
 - Other protective behaviors such as washing hands (75%) or avoiding touching one's face (59%) are slightly decreasing, albeit from a very high initial enactment level.
 - The willingness to get vaccinated (assuming that a generally safe vaccine is available), started to decline at the end of April (62%) for the first time since the start of the data collection and further decreased to a low of 50% at the beginning of May and 54% at the end of May.
- Recovery from the Corona pandemic: Future outlooks keep getting more pessimistic as the pandemic continues, but the majority is still showing "national optimism"
 - Since February, there is the constant pattern that most participants are convinced that Germany will recover faster from the outbreak than other countries in the world (national optimism).
 - The participants' outlook for Germany's recovery from the crisis continues to become more pessimistic, with a decrease from 71% at the end March, to 55% at the end of April, and 47% of participants at the end of May believing that the situation will improve within the next few months.
- Consequences for the economy are increasingly seen as being existential and serious
 - While 76% of the participants expected serious or very serious economic consequences for Germany at the beginning of March, the percentage continued to increase to 86% at the end of April and 88% at the end of May.
 - Estimations for the economic consequences for countries worldwide are even more negative and continue to become more pessimistic with 81% at the beginning of March, 90% at the end of April and 91% at the end of May expecting serious or very serious economic consequences.

Results

2. Subjective health & symptoms

2.1 Subjective health

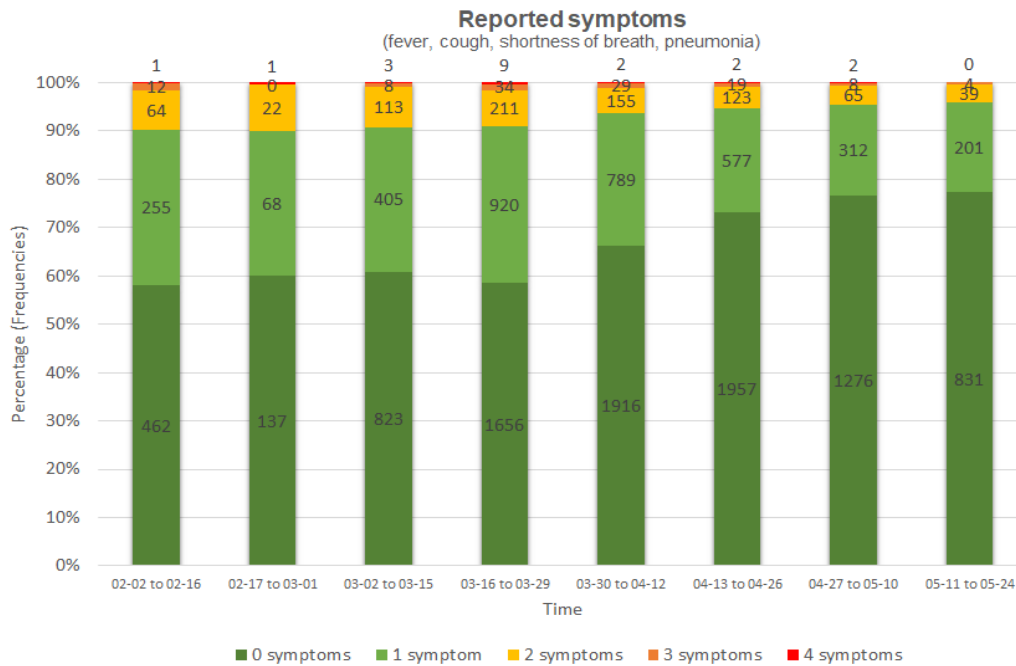
Overall, participants reported their health status as very good or good: Between 85% (P1) and 71% (P8) of participants reported a very good or good current health status. Subjective health remained relatively stable across the eight assessment periods with a small, albeit statistically significant decline across the assessment periods towards the end of May (P8), ($X^2(28) = 111.77, p < .001$).



2.2 Disease symptoms

The number of reported “core” symptoms and illness signs (cough, fever, shortness of breath, pneumonia) decreased continuously throughout April and May, ($X^2(28) = 345.26, p < .001$).

While 58% of the participants reported none of the four illness signs at the beginning of February (P1), 73% reported no symptoms at the end of April (P6) and 77% at the end of May (P8). 10% reported two or more symptoms at P1, 5% at P6 and 4% at P8, which is the lowest observed number of affected participants since the survey started.



2.3 Coronavirus cases (data available from March 2020 (P3) onwards)

While in the third assessment period (P3), the beginning of March, two participants (0.2%) reported that they had an active coronavirus infection, the number increased to 12 (0.5%) participants reporting an active infection at the end of March (P4) and the beginning of April (P5). The number started to decrease at the end of April (P6) to ten participants (0.4%) and continued to decrease within May with five participants (0.3%) at the beginning and one participant (0.1%) at the end of May.

The estimated prevalence rate in Germany, based on data from the Robert Koch Institute (www.rki.de), was on average 0.002% in the first half of March and 0.026% in the second half of March. In April, the estimated prevalence rate rose to 0.066% at the beginning and 0.055% at the end of the month and substantially decreased to 0.030% in the first half of May and to 0.015% at the second half of May (see for detailed data www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Situationsberichte/Gesamt.html; prevalence rate = total confirmed cases minus total number of deaths and total recovered cases in relation to the total population).

3. Perceived risk & outbreak related perceptions

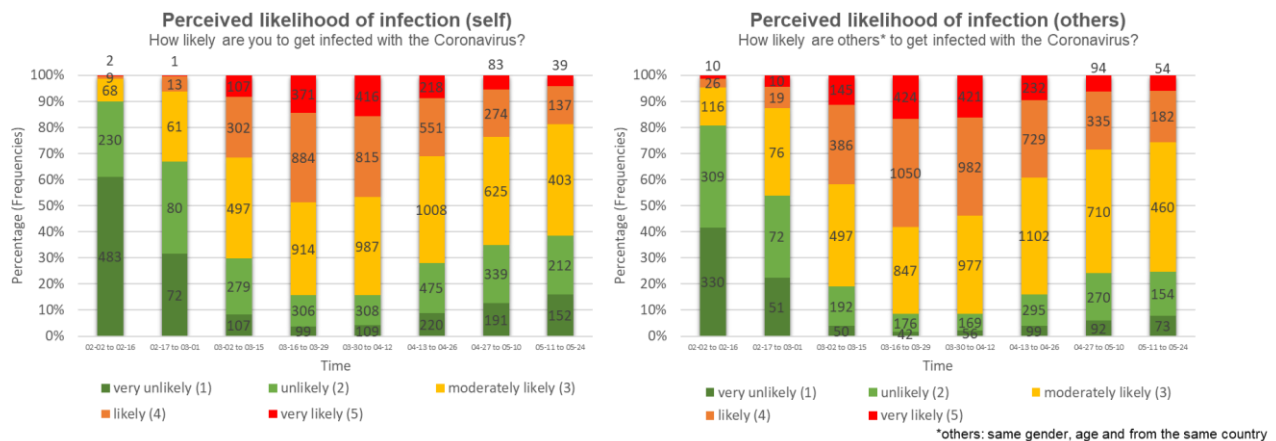
3.1 Perceived likelihood of getting infected: Self and others' risk

Participants started to feel less at risk of becoming infected with the Coronavirus at the end of April (P6) and the trend further accelerated until the end of May (P8).

In the first assessment periods (P1 to P4), the perceived likelihood of becoming infected with the Coronavirus increased sharply as the number of confirmed cases in Germany increased, but decreased thereafter ($F(7, 12481) = 421.92, p < .001$). At the beginning of February (P1), only 1% of the participants considered it likely or very likely to become infected with the Coronavirus. This number increased to 6% at the end of February (P2), with a sharp increase to 32% at the beginning of March (P3) and 49% at the end of March (P4). The effect leveled off at the beginning of April (P5), with 47% stating that it is very likely or likely that they become infected. Importantly, in late April (P6), a noticeable decline in the perceived risk of becoming infected started and continued through May. While in late April, 31% stated that they were very likely or likely to catch the Coronavirus, the number declined to 24% in early (P7) and 19% in late May (P8).

A similar pattern of results emerged for the perceived likelihood that others would become infected with the Coronavirus ($F(7, 12306) = 426.66, p < .001$). While the percentage of participants assuming that their peers are likely or very likely to become infected increased substantially from the first to the fifth assessment period (P1: 5%; P5: 54%), the percentage started to decrease continuously from the end of April (P6: 39%) to the end of May (P8: 26%).

Generally, participants believed that others were more at risk than they were themselves, indicating an optimistic bias in risk perceptions ($F(1, 12287) = 535.34, p < .001$). At the beginning of the outbreak, the optimistic bias decreased from February (M_{P1} and $M_{P2} = 0.33$) throughout March ($M_{P3} = 0.28$; $M_{P4} = 0.20$) to the beginning of April ($M_{P5} = 0.15$). Conversely, by the end of April, the optimistic bias started to increase ($M_{P6} = 0.24$; $M_{P7} = 0.23$) and has continued to increase until the end of May ($M_{P8} = 0.31$), $F(7, 12287) = 6.37, p < .001$.



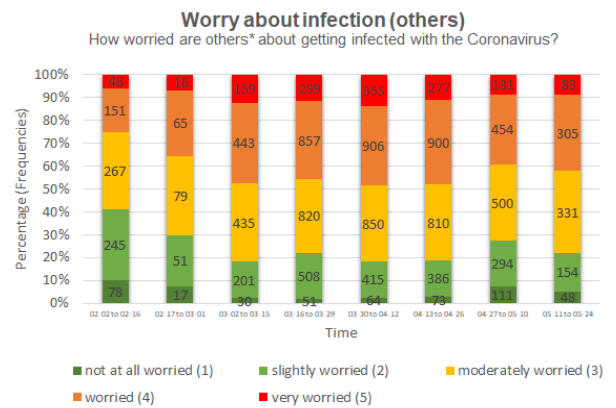
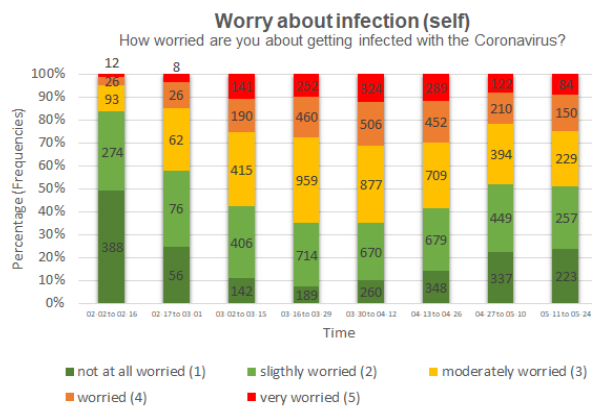
3.2 Affective risk perception: Worry about getting infected

As the perceived likelihood of becoming infected with the Coronavirus, worry about getting infected has been decreasing from the end of April (P6) until the end of May (P8), $F(7, 12488) = 132.06, p < .001$.

The number of participants who were worried or very worried about getting infected with the Coronavirus increased from 5% at the beginning of February (P1) to 26% at the beginning of March (P3). At the end of March (P4), the increase slowed down noticeably but still continued to 28% (P4) and 31% at the beginning of April (P5). Since the end of April, the number of participants being very worried or worried has been decreasing (P6: 30%, P7: 22%, P8: 25%). In addition, the number of participants who were not at all or only slightly worried increased (P6: 41%; P7: 52%, P8: 51%).

A similar pattern of results emerged for perceptions of how worried other people were about becoming infected with Coronavirus ($F(7, 12259) = 44.63, p < .001$). While the percentage of participants assuming that their peers were worried or very worried increased substantially from the first to the third assessment period (P1: 25%; P3: 47%), the percentage was stable from the third to the sixth period (P4: 46%; P5: 49%; P6: 48%) until it started to decrease at the beginning of May (P7: 39%; P8: 42%).

Overall, an optimistic bias emerged, with participants feeling less worried ($M = 2.77, SD = 1.20$) than they believed others were ($M = 3.30, SD = 1.01$; $F(1, 12247) = 1391.98, p < .001$). Furthermore, an interaction over time appeared ($F(7, 12247) = 27.87, p < .001$) which suggests that the optimistic bias decreased in February ($M_{P1} = 1.07, M_{P2} = 0.69$) and through March ($M_{P3} = 0.56; M_{P4} = 0.37$) before starting to increase again throughout April ($M_{P5} = 0.42; M_{P6} = 0.50$) and May ($M_{P7} = 0.57; M_{P8} = 0.65$).

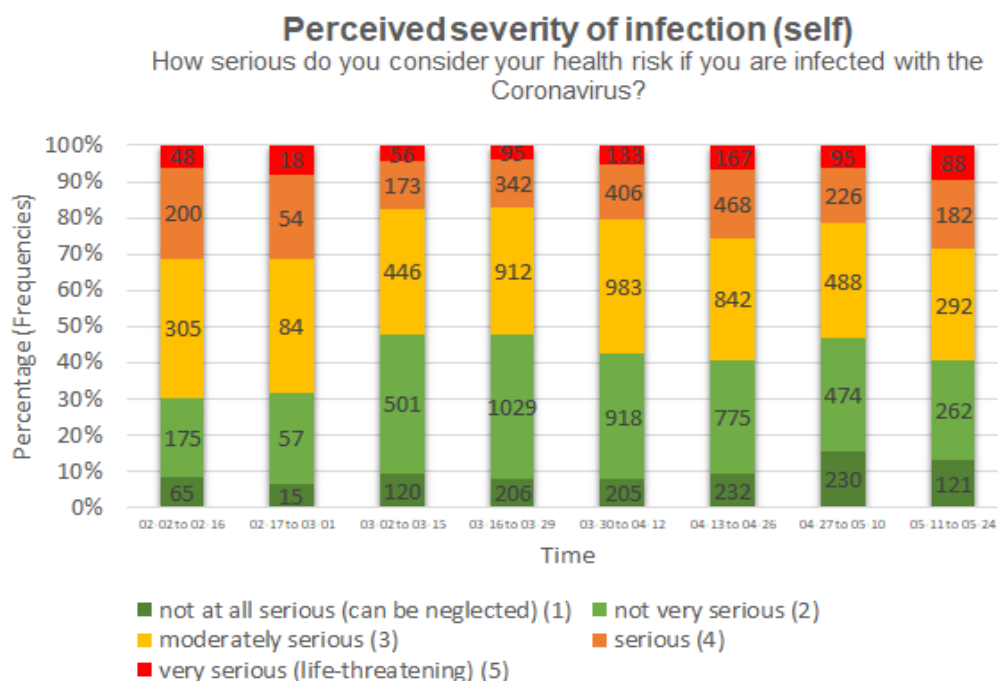


*others: same gender, age and from the same country

3.3 Perceived severity of an infection

Perceived severity is still high with a majority rating a Coronavirus infection as moderately serious to life-threatening.

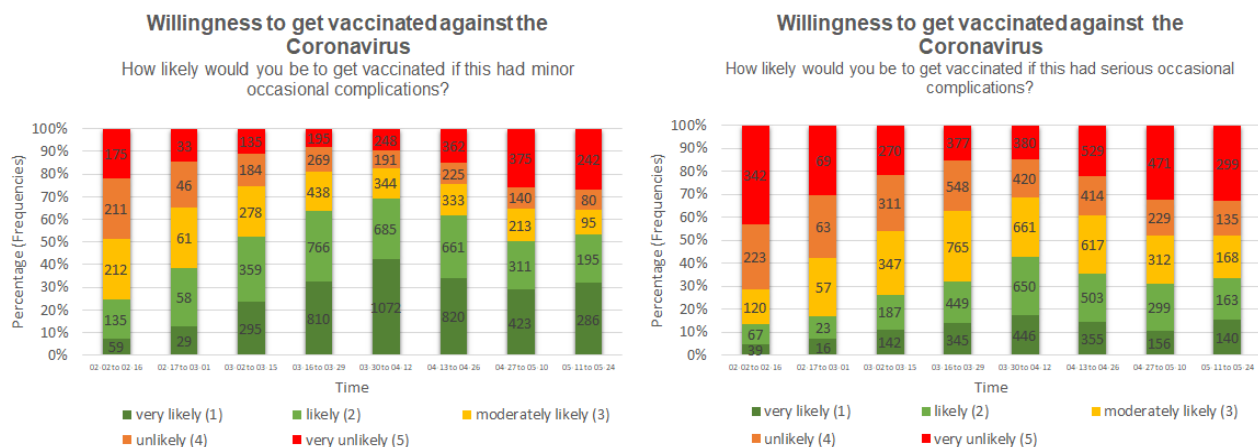
The percentage of participants considering an infection with the Coronavirus as a serious or very serious threat to their health decreased from February (P1: 31%, P2: 32%) to the beginning of March (P3: 18%), after which it remained stable during late March (P4: 17%). Since the beginning of April, the level of perceived severity has on average increased with 20% (P5) and 26% (P6) of participants rating an infection as serious or very serious in April and 21% (P7) and 29% (P8) in May.



3.4 Willingness to get vaccinated against the Coronavirus

The willingness to get vaccinated (assuming that there is a vaccine available) sharply increased across the first five assessment periods (P1-P5), but has started to decrease at the end of April (P6) and beginning of May (P7) ($F(7, 12022) = 102.48, p < .001$).

When a vaccination was described as available and generally safe (only occasionally causing minor side-effects), the percentage of people reporting that they were likely or very likely to get vaccinated increased from 24% and 38% in February to 52% and 64% within March and to 69% at the beginning of April (P5). Willingness to get vaccinated started to decline at the end of April (P6) for the first time since the survey started with 62% of participants reporting being likely or very likely to get vaccinated and continued to decline to 50% at the beginning of May (P7) and slightly rose to 54% at the end of May (P8). As expected, the overall likelihood of being willing to get vaccinated was lower when the vaccine was described as occasionally causing serious side-effects ($F(1, 12022) = 2679.50, p < .001$). However, the dynamic pattern of willingness to get vaccinated remained similar when the vaccination was described as having side-effects that were occasionally serious.

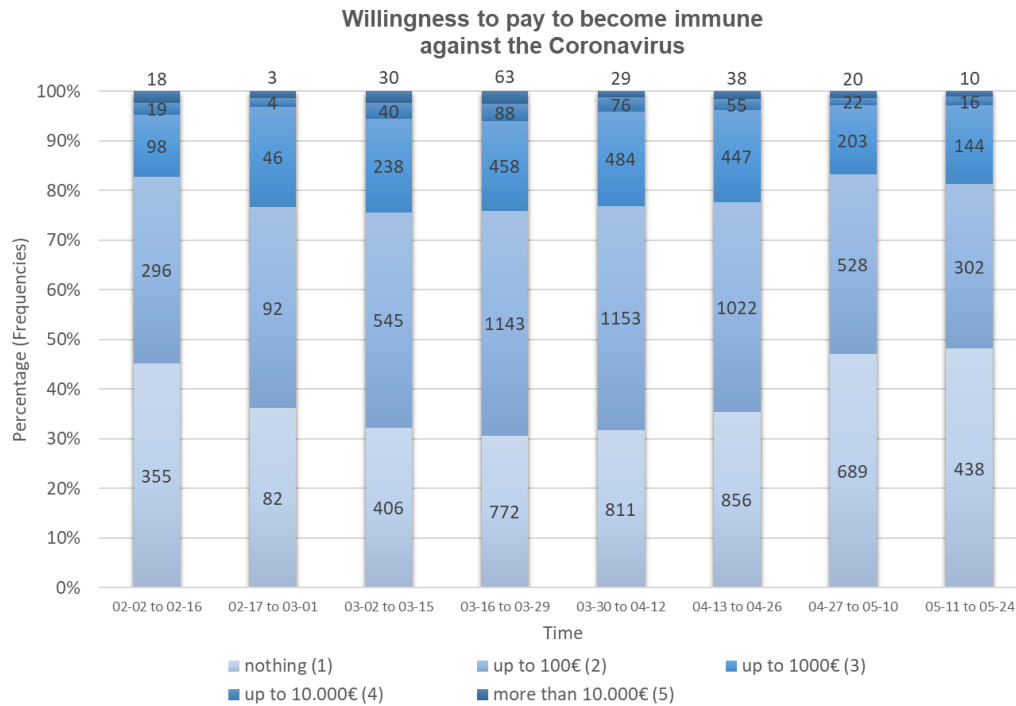


3.5 Willingness to pay for immunization

Willingness to pay to become immune against a Coronavirus infection increased until the beginning of April (P5) and is now declining ($F(7, 12131) = 23.37, p < .001$).

The percentage of participants who indicated that they were unwilling to pay anything to become immune decreased from 45% at the beginning of February (P1) to only 31% at the end of March (P4), but started to linearly rise again to 35% at the end of April (P6), 47% at the beginning (P7) and 48% at the end of May (P8).

The percentage of participants willing to pay 100€ to become immune increased constantly from 38% to 41% within February (P1-P2) and from 43% to 45% within March (P3-P4), and then remained stable at 45% at the beginning of April (P5). However, there was a slight decrease to 42% at the end of April (P6) that continued to 36% at the beginning (P7) and 33% at the end of May (P8). The percentage of participants showing a greater willingness to become immune (i.e. by indicating that they would pay 1000€ or more) also rose from 17% in February to 24% at the end of March (P4), but decreased slightly to 23% at the beginning (P5) and 22% at the end of April (P6) until it reached 17% at the beginning of May (P7). Since the mid of May it slightly started to increase again to 19% at the end of May (P8), $X^2(28) = 262.81, p < .001$.



4. Protection motivation and behavior change (data available from March (P3) onwards)

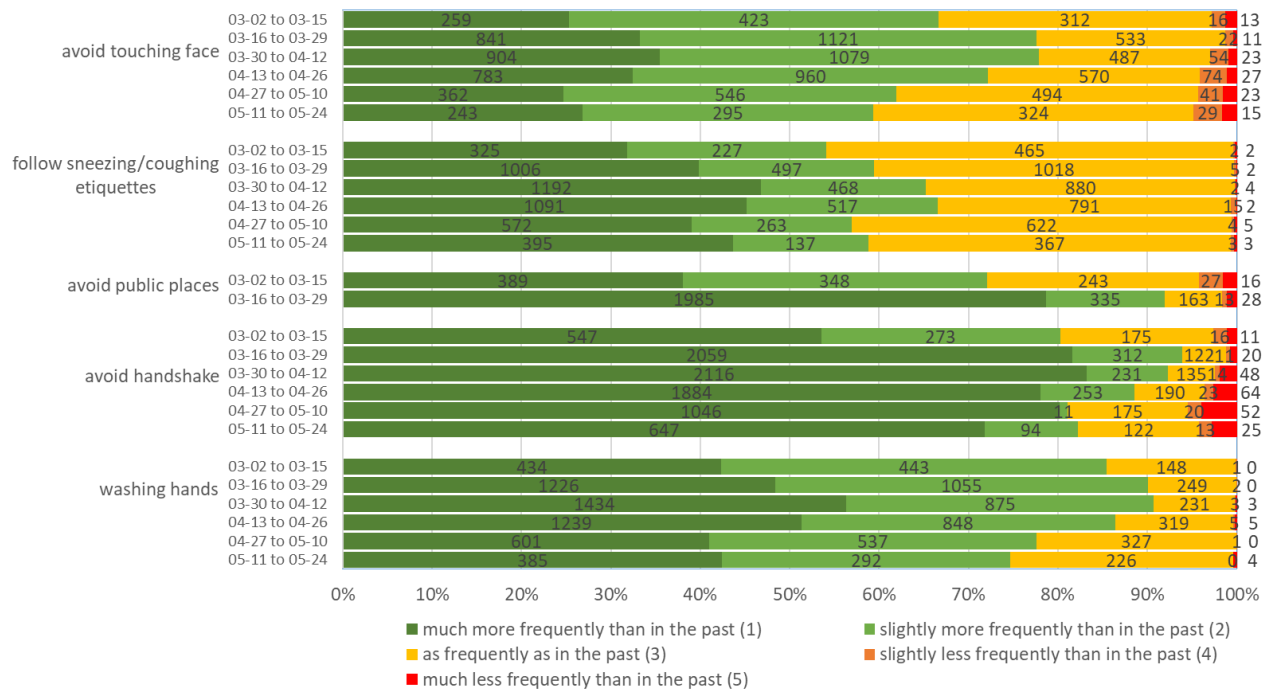
4.1 Behavior change to avoid a spread of the Coronavirus

The vast majority of participants still show a high level of protective behavior.

At the beginning of March (P3) 91% of participants indicated that they were currently taking protective measures against the Coronavirus. This percentage increased to 97% at the end of March (P4) and remained at a comparably high level with 96% at the beginning of April (P5), 93% at the end of April (P6) and 92% (P7) and 91% (P8) in May.

Focusing on protective behaviors recommended by the World Health Organization and the German Robert Koch Institute to contain the spread of the virus, the results also show high enactment levels but with a decreasing trend. 86% reported that they were now washing their hands much more or slightly more often at the beginning of March (P3), and this percentage rose to 90% at the end of March (P4) and 91% at the beginning of April (P5). However, the percentage decreased slightly to 86% at the end of April (P6) and continued to decrease to 78% at the beginning (P7) and 75% at the end of May (P8). A similar picture was seen for avoiding handshakes (80% and 94% in March; 92% and 89% in April; 83% and 82% in May) and avoiding touching the face (67% and 78% in March; 78% and 72% in April; 62% and 59% in May). The percentage reporting that they were following sneezing and coughing etiquettes has also been decreasing since May (54% to 60% in March; 65% to 67% in April; 57% and 59% in May). Since Germany introduced a lockdown on March 22 in 2020, the percentage of people reporting that they were voluntarily avoiding public places was only assessed in March (P3: 72% and P4: 92%).

Behavior change to avoid a spread of the Coronavirus
(recommended behaviors by the WHO and RKI)
Have you changed your behavior because of the Coronavirus?

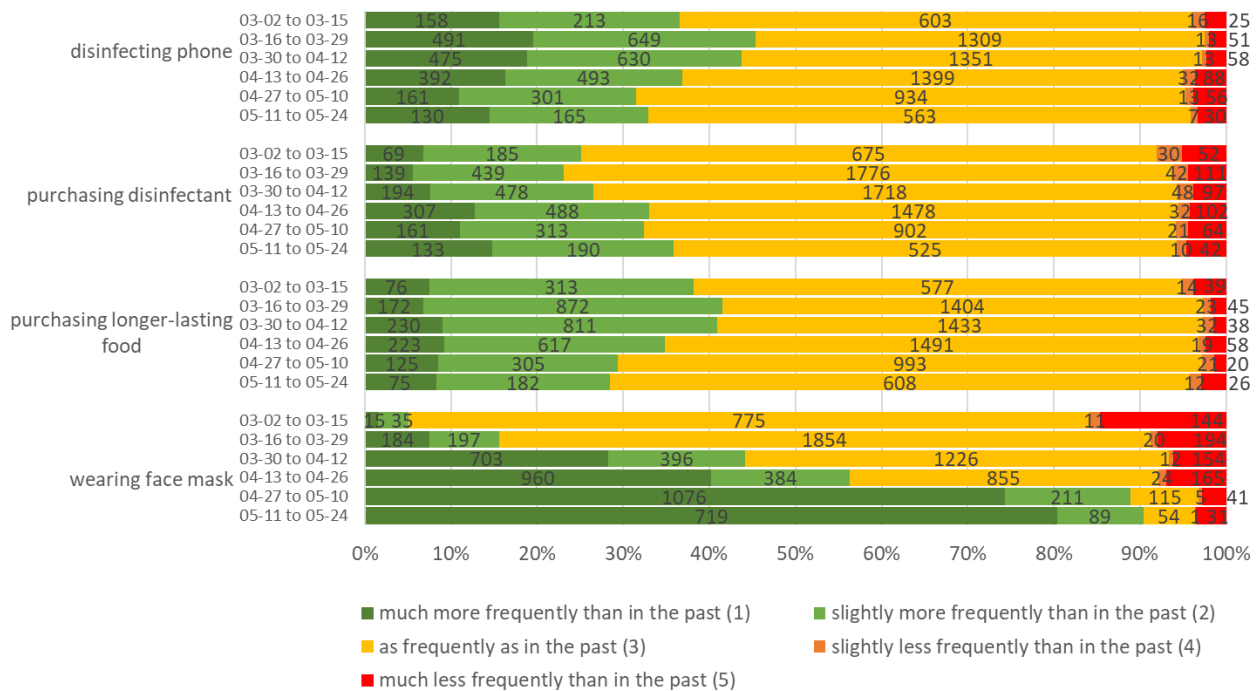


4.2 Behavior change regarding other protective measures

Participants also still show a high level of other behaviors as a response to the Coronavirus outbreak.

The number of people wearing face masks much or slightly more often rose sharply from 5% at the beginning of March (P3) to 44% at the beginning of April (P5), and this effect increased further when face masks became mandatory in public places at the end of April (P6: 56%) and continued to increase within May (P7: 89%, P8: 90%). While the percentage of participants reporting that they had bought longer-lasting foods (38% to 42%) and disinfected their mobile phone (37% to 45%) much or slightly more frequently increased during March, a slight decrease was recorded in April that continued further in May (longer-lasting foods: 41% and 35% in April; 29% at the beginning and end of May, disinfecting mobile phone: 44% and 37% in April; 32% and 33% in May). In contrast, the percentage of participants reporting that they had purchased disinfectant or hygiene products much or slightly more frequently increased between March (25% to 23%) and April (27% to 33%) and continued to increase in May (32% to 36%).

Behavior change (other protective measures)
Have you changed your behavior because of the Coronavirus?



5. Expected future development in the context of the current outbreak (data available from March 2020 (P3) onwards)

5.1 Expected general developments worldwide and in Germany

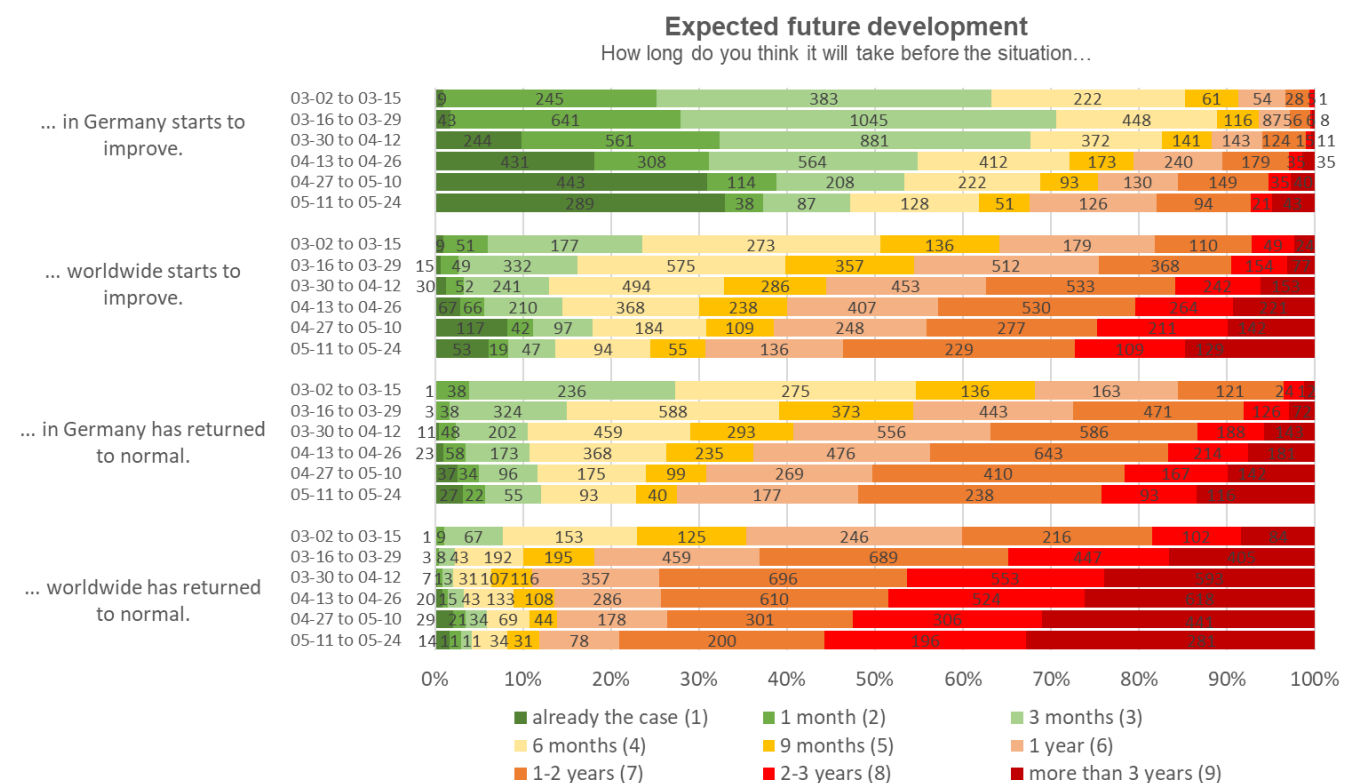
Participants still assume that Germany will recover faster from the outbreak than other countries worldwide, but the future outlook is overall becoming more pessimistic.

Overall, participants expect that the situation will start to improve faster in Germany than worldwide, indicating national optimism ($F(1, 10582) = 12700.60, p < .001$). However, the increasingly positive outlook for Germany during March has overall turned into a more pessimistic outlook since April ($F(5, 10632) = 25.45, p < .001$). Specifically, while the percentage of participants expecting the situation in Germany to improve within the next three months increased at first from 63% at the beginning of March (P3) to 71% at the end of March (P4), it started to decrease at the beginning of April (P5: 68%), fell further to 55% at the end of April (P6) and continued to decrease within May (P7: 53%; P8: 47%). Similarly, at the beginning of March (P3), 9% expected that it would take at least a year or more for Germany to start recovering from the outbreak. This percentage temporarily decreased to 6% at the end of March (P4), but then increased to 12% at the beginning of April (P5), 21% at the end of April (P6) and continued to increase to 25% (P7) and 32% at the end of May (P8). However, at the same time, there was a sharp increase in the percentage of participants who state the situation was already improving between March (P3: 1%) and the end of May (P8: 33%).

The outlook for the worldwide situation in the future is also becoming generally more pessimistic. At the beginning of March (P3), 24% of participants expected the worldwide situation to start improving within the next three months, but this percentage decreased to only 16% at the end of March (P4) and remained about stable until the end of May (P5: 13%; P6: 15%; P7: 18%; P8: 14%). The percentage of participants assuming that it will take at least one year before the worldwide situation starts to improve also increased noticeably from 36% at the beginning of March (P3) to 60% at the end of April (P6) and continued to increase to 69% at the end of May (P8).

Participants expect that Germany will recover and return back to normal faster than other countries worldwide $F(1, 10511) = 10468.17, p < .001$. However, confidence in a soon return to normality is increasingly declining ($F(5, 10511) = 130.43, p < .001$).

The percentage of participants assuming that it will take 12 months or less before the situation has returned to normal in Germany decreased continuously over the course of March (84% to 73%), April (63% to 56%) and continued to decrease within May (50% to 48%), $X^2(40) = 1069.18, p < .001$. Perspectives for the worldwide situation are even grimmer. At the beginning of March (P3) 60% expected the worldwide situation to normalize within 12 months, which fell to 37% at the end of March (P4), to 26% in April (P5 and P6) and even further to 21% at the end of May (P8) ($X^2(40) = 941.11, p < .001$). Furthermore, the percentage of participants expecting that it will take more than three years before the situation in Germany has returned to normal increased only slightly from 1% to 3% in March but started to increase more strongly in April (6% to 8%) and May (10% to 14%). Perceptions of the worldwide situation taking this long increased more strongly from 8% to 17% within March, from 24% to 26% within April and from 31% to 33% within May.



5.2 Expected health and economic consequences

While the outlook for public health started to become more positive at the end of April until the beginning of May, consequences for the economy are increasingly seen as being existential and serious. Germany is still assessed more positively regarding health consequences, but the country's economic consequences are increasingly seen as negative as the global consequences.

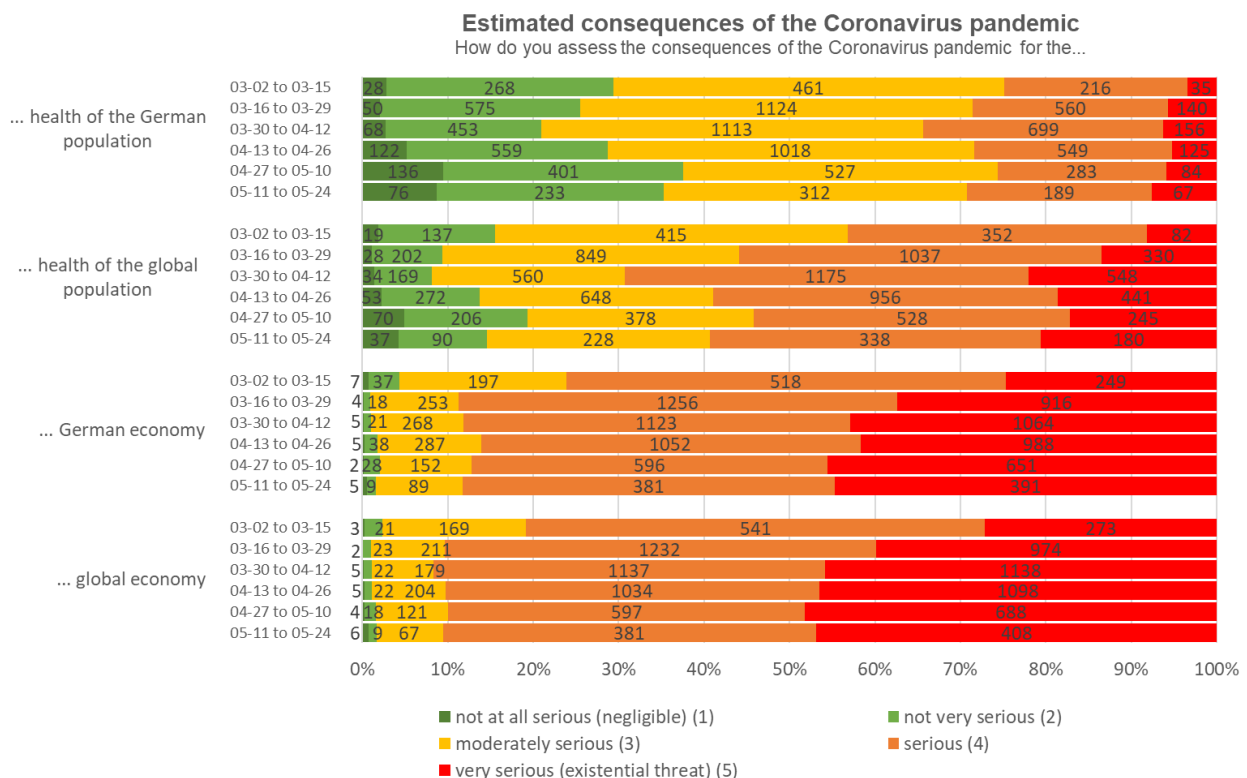
Most participants are generally rather optimistic and expect none to moderately serious health consequences for the German population. While the percentage of participants decreased from 75% (P3) to 71% (P4) within March and to 66% at the beginning of April (P5), the percentage increased to 72% for the first time at the end of April (P6) and to 74% at the beginning of May (P7). However, at the end of May it started to slightly decrease again to 71% (P8).

A similar pattern occurred for global health consequences, albeit at a less optimistic level. The percentage of participants assuming none to moderately serious health consequences for the global population decreased from 57% at the beginning (P3) to 44% at the end of March (P4), and fell further to 31% at the beginning of April (P5). As for the German population, perspectives became more positive for the first time at the end of April (P6), with 41% assuming none to moderately serious health consequences for global health. While the percentage increased further to 46% at the beginning of May (P7), it started to decrease again at the end of May (P8: 41%).

Participants assume that the outbreak will cause more serious consequences for the economy than for public health, with an increasingly negative outlook for the economy.

At both the beginning and end of March (P3 and P4) about 51% of participants assumed that the consequences for the German economy would be serious, while 25% expected very serious consequences at the beginning (P3) and 37% at the end (P4). Expectations became even more pessimistic in April, with 45% assuming serious consequences for the German economy at the beginning (P5) and 44% at the end (P6), and 43% and 42% respectively assuming very serious consequences. A similar picture emerged for May, with 42% assuming serious consequences at the beginning and 44% at the end of May, but 46% and 45% respectively assuming very serious consequences. While participants expect less serious economic consequences for Germany than for the worldwide economy ($F(1, 10570) = 122.09, p < .001$), this gap has decreased significantly over time ($F(5, 10570) = 3.58, p = .003$).

While at the beginning of March, 54% expected serious and 27% very serious consequences for the global economy, only 51% expected the consequences to be serious, but 40% very serious at the end of March. The future outlook became even more pessimistic in April with 46% expecting very serious consequences for the world economy at the beginning and 47% at the end of the month, with a similar picture in May (P7: 48%; P8: 47%), $X^2(20) = 220.67, p < .001$.



Summary points

- **Perceived risk of an infection continued to decrease constantly through the end of April and within May.** Specifically, while the percentage of participants feeling at risk rose over the course of February until the end of March (1% to 49%), a decline started (31%) at the end of April with only 19% of the participants considering a Coronavirus infection as likely or very likely in late May.
- **The pronounced increase in worry seemed to have levelled off at the end of April and started to decrease in May.** The sharp increase in reported worry about a Coronavirus infection was observed between the beginning of February and the beginning of March, slowed down during April and is now decreasing. At the beginning of February, only 5% reported that they were worried or very worried about an infection, while 26% were worried or very worried at the beginning of March. However, this pronounced increasing trend slowed down from 28% at the end of March to 30% at the end of April and started to decrease to 25% at the end of May.
- **The perceived severity of a Coronavirus infection decreased between February and March, but this effect started to reverse at the beginning of April, further increasing until the end of May.** The perceived severity of a Coronavirus infection decreased between the first and second period of February and remained stable until late March. However, since the beginning of April, becoming infected has increasingly been reassessed as more serious with the trend continuing within May.
- **There was a sharp increase in willingness to get vaccinated (assuming that there is a vaccine available) until the beginning of April, but this started to decrease at the end of April and beginning of May.** When a vaccination was described as generally safe (causing only occasionally minor side-effects), the percentage of people reporting that they were likely or very likely to get vaccinated increased from 24% at the beginning of February to 69% at the beginning of April. At the end of April, however, willingness to get vaccinated started to decline for the first time since the survey started and dropped down to 62% and declined even further to 50% of participants reporting being likely or very likely to get vaccinated at the beginning of May. At the end of May, willingness started to slightly increase again to 54%.
- **The great majority of people continue to report that they are currently taking protective measures.** While at the beginning of April, 96% of the participants reported that they are currently taking protective measures, the percentage declined to 91% at the end of May.
- **A sharp increase in wearing face masks occurred, while adoption rates for other core protective behaviors showed a slight decline.** Wearing face masks increased from 5% at the beginning of March to 44% at the beginning of April, with a substantial increase when face masks became mandatory in public places at the end of April (56%), further increasing within May to 89% and 90%. Protective measures such as washing hands (75%) or avoiding touching one's face (59%) were slightly decreasing, albeit from a very high initial enactment level.
- **Participants still assume that Germany will recover faster from the outbreak than other countries worldwide, but overall the future outlook is becoming more pessimistic.** While the percentage of participants believing that the situation will start to improve in the next three months at the latest was rather high at the end of March (71%), fewer participants shared this opinion at the end of April (55%) and an even lower percentage at the end of May (47%). Furthermore, the worldwide situation is rated continuously more pessimistically with only 16% (end of March), 15% (end of April) and 14% (end of May) expecting an improvement in the next three months.

- **The outlook for public health became more positive at the end of April and beginning of May, and the situation in Germany is continuously rated more positively than the situation in other countries worldwide.** At the beginning of March 75% of participants were expecting none to moderately serious health consequences for the German population, but at the beginning of April only 66% still held this optimistic belief. At the end of April, however, the percentage started to increase for the first time to 72% and to 74% at the beginning of May. However, there was a slight decline at the end of May to 71%. For global health, a similar but more pessimistic pattern emerged with 41% (end of April) and 46% (beginning of May), but only 41% (end of May) expecting none to moderately serious health consequences for global health.
- **The consequences for the economy are increasingly seen as being existential and serious.** 76% of participants expected serious or very serious economic consequences for Germany at the beginning of March, and this rose to 86% at the end of April and 88% at the end of May. The consequences for countries worldwide were perceived as even more negative with 81% at the beginning of March, 90% at the end of April and 91% at the end of May expecting serious or very serious economic consequences.

See upcoming reports for more results.

See for more information: <https://euclid.dbvis.de/home>