



# PUBLIC PERCEPTION OF NONPHARMACOLOGICAL INTERVENTIONS FOR COVID-19-PANDEMIC CONTAINMENT

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**ABSTRACT:** Since the end of 2019, the COVID-19 pandemic has been weighing heavily on countries worldwide. Different measures have been taken in Germany to combat this pandemic. In addition to nonpharmacological measures, vaccination strategies have been used to contain the pandemic. A retrospective survey was conducted to get a snapshot of what the population thinks about these measures and how they prefer to be informed. It collected attitudes of the inhabitants of Ansbach towards the COVID-19 situation in June 2020, June 2021 and December 2021. The survey shows that there was a change of opinion regarding the measures and the behaviour on the part of the government as the pandemic progressed. While occupational restrictions decreased, the positive opinion of the undertaken measures decreased. The fear of infection is steadily decreasing. After a sharp rise of the fear of economic consequences in June 2021, it decreases again in December 2021.

**Keywords:** COVID-19; Nonpharmacological measures; Germany; Opinions; Population

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## 1. INTRODUCTION

COVID-19 has been considered a pandemic since March 11, 2020. This disease is caused by the SARS-CoV-2 virus and is a severe respiratory disease. (Bundesministerium für Gesundheit, 2022) Infection occurs from person to person via droplet infection and aerosols (released e.g. when breathing, coughing and speaking). A number of hygiene and protective measures were taken during the pandemic due to the high risk of infection. (Bundeszentrale für gesundheitliche Aufklärung, 2022a) These include the AHA+A+L rules and the G-rule. To reduce the risk of infection, the AHA+A+L rule recommends keeping at least 1.5 m away from other people and washing your hands frequently. Furthermore, according to this guideline, one should only sneeze into the crook of one's arm or into a handkerchief when facing away from other people. Protective face

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coverings should be worn. In addition, this regulation recommends ventilating rooms regularly and using the COVID-19 warning app, which warns of encounters with infected people. The G-rule defines admission to public places (e.g., movie theaters, restaurants, etc.) by vaccination status.(Bundeszentrale für gesundheitliche Aufklärung, 2022b) In addition to hygiene regulations, vaccine research has had success since December 2020 (Paul-Ehrlich-Institut, 2022). The vaccines reduce the risk of falling ill. If a person still falls ill, the risk of a serious course of the disease is minimized. In addition, the chance of infection is reduced.(Robert Koch-Institut, 2022)

## 2. Method

In order to obtain data, a retrospective survey was conducted in December 2021. The sample size for this survey was  $n = 67$ . All of the participants were from Ansbach and varied in age. Approximately 40% were younger than 40 years old when the survey was conducted. Approximately 60% of the participants were female. More than half (approx. 55%) of the participants report that their highest school-leaving qualification was the "mittlere Reife" (intermediate school leaving certificate). The survey collected data related to the information channel used, professional constraints and fears, as well as personal opinions about the nonpharmacological measures taken and about the vaccine.

## 3. Results

The COVID 19 pandemic resulted in professional restrictions. In the course of the survey, however, fewer and fewer of the participants were affected by those restrictions. Above all, contact restrictions, mask requirement and home office were named as professional restrictions. This also applies to opinions about the nonpharmacological measures taken (see figure 1).

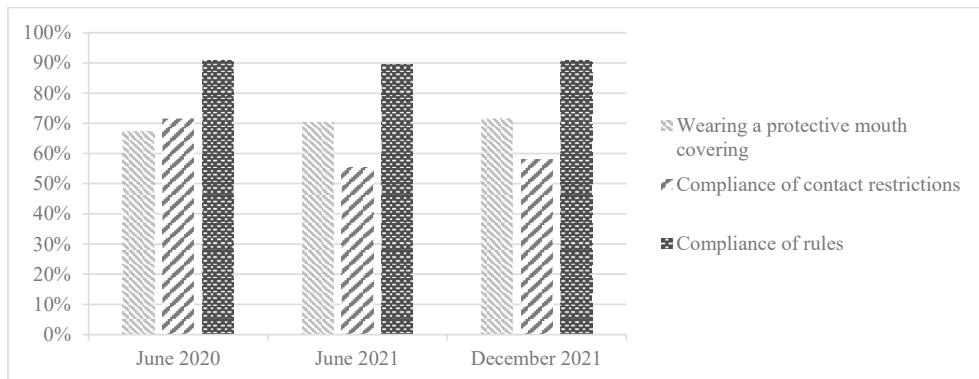


Figure 1: Compliance of the measures

In December 2021, less than half of the respondents consider them appropriate. While COVID-19 compliance increases in June 2021, it decreases again in December 2021 (see

figure 2). More than half of the respondents are generally following the regulations. For half (approx. 46%) of the respondents, a change of opinion took place in the time period surveyed. This was mainly triggered by the knowledge gained about COVID-19 (approx. 27%) and in the opinion of the respondents, inappropriate or bad measures (approx. 27%).

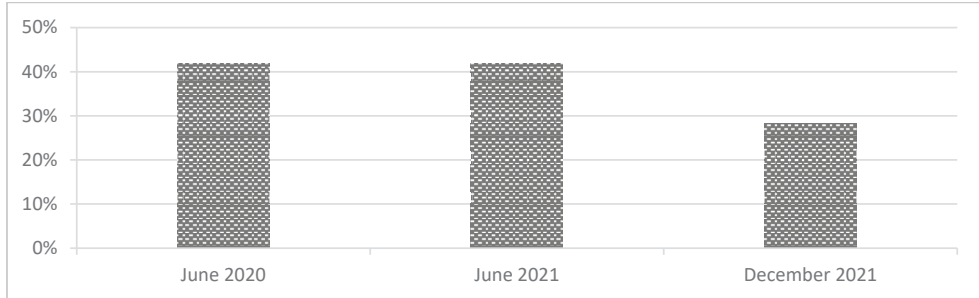


Figure 2: Positive evaluation of the measures

Figure 3 shows that the fear of infection is constantly decreasing among the German population. Fear of economic consequences decreases after a previous steep rise from June 2021.

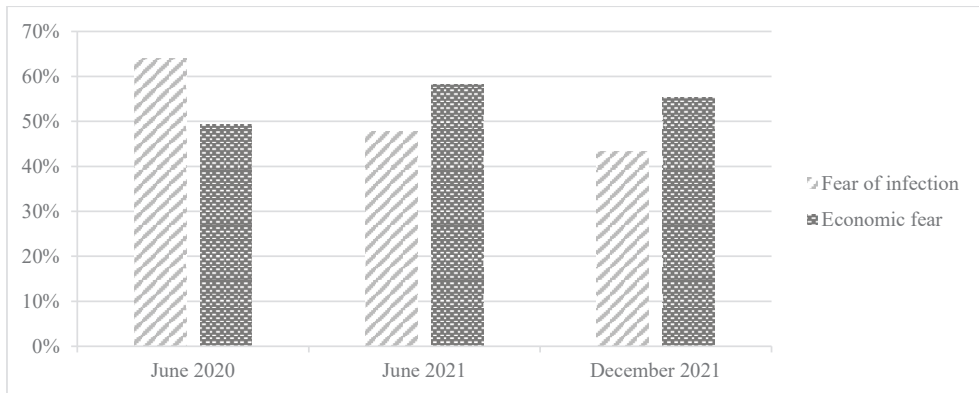


Figure 3: Fears due to COVID-19

The internet (ca. 76%) was the most frequently used source of information about COVID-19. Television (approx. 66%) and radio (approx. 61%) were also important sources of information for the respondents. More than half of the participants reported that they critically question the information they obtain. The majority seek a second opinion. Almost the entire respondent group has been vaccinated or is planning to be vaccinated. Information about vaccination is mainly obtained from the media (approx. 70%). With one single exception, the participants consider vaccine and drug research to be useful. Above all, the respondents consider the weakened course of the disease achieved by vaccination to be an advantage. However, some of the participants believe that the lack of research is

a disadvantage of vaccines. The increased chance of a (faster) recovery argues mainly in favour of a COVID-19 drug. However, the lack of long-term research is also criticised here.

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