

Our vaccination motivation study is now published in BMJ Open

On January 6th, 2022, I had referred to the preprint of our study „Why do people consent to receiving SARS-CoV2 vaccinations – A representative survey in Germany“ [and discussed it in detail there](#) [1].

Now it has been [published in British Medical Journal Open \(BMJ Open\)](#) [2]. The content has not changed from the preprint, so I won't go into detail about the study again now. Only one additional analysis was added at the request of a reviewer.

Brief reminder

In this study, we asked a population-representative sample about their motivation for getting vaccinated and if they did not get vaccinated, why not. In our sample, more people were vaccinated than mentioned by the RKI at the time, namely 83%. This is probably due to the special situation of an online survey panel. The most important reason for vaccination for 60% was fear of infection. The second most important reason for 30% was to be able to lead a normal life again, and the third reason was a social one: 30% wanted to contribute to the eradication of the virus.

Those who did not want to be vaccinated did not want to be treated with poorly tested substances (40%) or feared side effects (36%). A scale I constructed captures agreement with the mainstream narrative about Covid-19, called the Covid Orthodoxy Scale (COS). We can separate those who are willing to be vaccinated from those who are not via a [logistic regression model](#) with only 3 variables: Those willing to get vaccinated differ mainly in their agreement with the mainstream narrative and have a higher score in the Covid Orthodoxy Scale, they read significantly less original scientific publications and consume more information through public media channels (TV and radio). We can clarify 25% of the variation with these 3 variables and correctly attribute 78 % of people.

This is new

What is new in this publication is an additional exploratory logistic regression model proposed by one of the reviewers. We used it to examine the extent to which people who get vaccinated for medical reasons differ from those who claim other reasons. This was 523 people compared to 332 people who mainly cited social reasons for vaccination. Those citing medical reasons differed from those with social reasons by the following characteristics:

- They agreed more with the official Corona narrative (odds ratio [OR]= 1.28, i.e., 28% more agreement)
- They were older (OR = 1.20)
- They believed *less* that the vaccination would protect them from the disease (OR = 0.67)
- They believed that the vaccination would protect them from infecting others (OR = 1.30)
- They exchanged less information with friends (OR = 0.50)

With these variables, we clarify just under 13% of the variance. Interestingly, then, those who get vaccinated for medical reasons are significantly more likely to believe the mainstream narrative, but not to believe that vaccination would protect them from the disease. Conversely, this means that those who get vaccinated for social reasons believe less in the narrative, but have apparently changed their minds because of their attitude and now think vaccination protects them from the disease. This is a typical case of cognitive dissonance: those who get vaccinated for social reasons, even though they don't actually believe in the mainstream narrative, are doing something without really being convinced of it. Therefore, one must subsequently adjust one's own mental coordinate system and one's own belief system. One then believes that vaccination prevents disease. However, this is not (any longer) the case.

For me, the most remarkable finding is still that 16% of all respondents say they have experienced severe side effects. By this we meant clear systemic side effects, not some fever and redness, but illness, neurological and vascular symptoms such as thrombosis, fatigue and immunological problems. In our publication, we evaluate this as a clear safety signal that should be heard through careful prospective documentation. To my knowledge, such a study still does not exist.

In total, 30% do better after vaccination, mainly due to relief and better social integration. In psychology, this is called „negative reinforcement“: you take away a punishment and thus reinforce the desired behaviour. The „punishment“ in this case were the social restrictions for the unvaccinated and the continuous obligation to prove one's health status through tests. The desired behaviour was vaccination.

These are the psychological mechanisms. This is not to say that anyone did this on purpose. Psychological processes always kick in, whether they are triggered intentionally or unintentionally. Sadly, most people working in the health sector still understand too little about psychology.

By the way, the fact that vaccination does not protect against serious illness, or against

illness at all, as the respondents thought, is shown by the following graph (Fig. 1). It comes from the website of the Swiss Federal Office of Public Health (OFSP) and concerns those hospitalized with Covid-19, broken down by vaccination status. I use the Swiss data because, to my knowledge, the RKI does not currently provide such data. You can see – the black curve: most of the hospitalized Covid-19 cases were unvaccinated until the end of winter. Since about the end of March, the fully vaccinated have caught up (blue curve; unfortunately, the colour resolution is poor; if you want to have a closer look at it, you should go to the website; there is a cursor that provides the figures). And since about mid-April, more fully vaccinated than unvaccinated people have been hospitalized with Covid-19. In general, that is less than one person per 100,000, or about 80 for the whole of Switzerland, but in relative terms there are more vaccinated than unvaccinated people. It will be interesting to see what happens next.

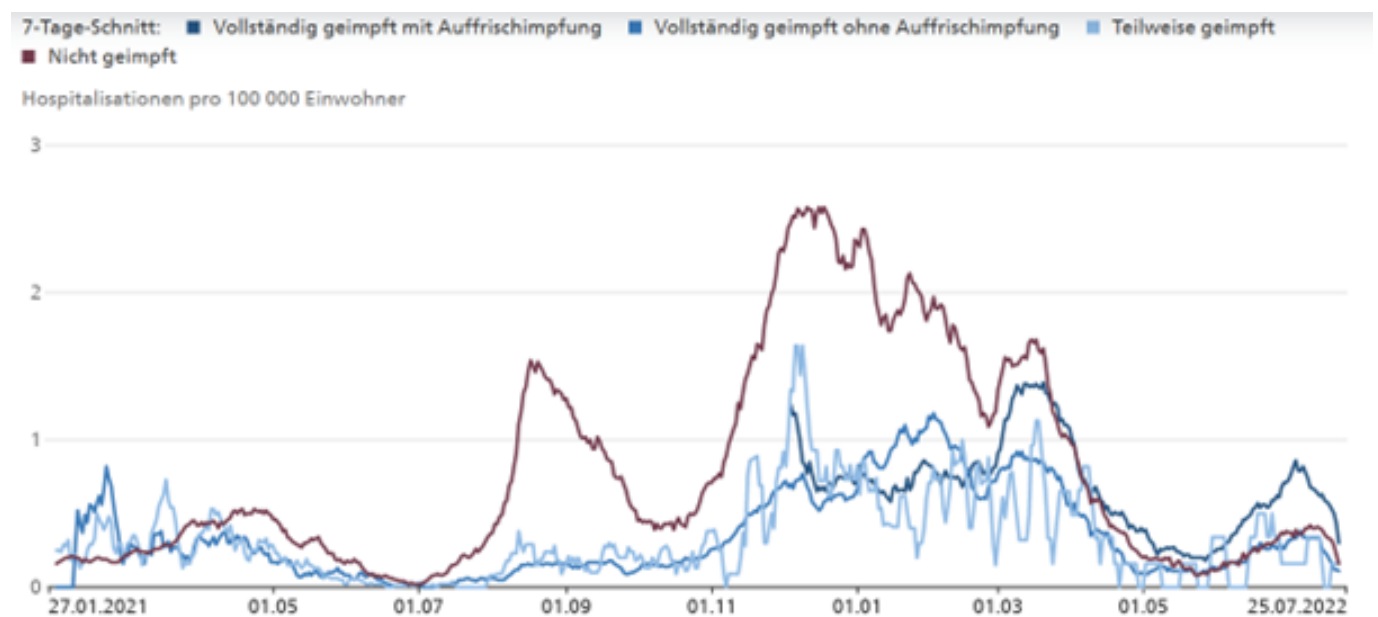


Figure 1 – Number of patients in hospital with full Covid-19 vaccination (dark blue line the top one since May 2022), with partial vaccination (light blue) or without vaccination (black), standardised to 100. 000 inhabitants; source: Swiss Federal Office of Public Health

(<https://www.covid19.admin.ch/de/vaccination/status?vaccStatusDevRel=inz100> accessed on 27.7.22)

Sources

1. Walach H, Ofner M, Ruof V, Herbig M, Klement RJ. Why do people consent to receiving SARS-CoV2 vaccinations? A Representative Survey in Germany. Research Square. 2022. doi: <https://doi.org/10.21203/rs.3.rs-1216502/v1>.
2. Walach H, Ofner M, Ruof V, Herbig M, Klement RJ. Why do people consent to

receiving SARS-CoV2 vaccinations? A Representative Survey in Germany. BMJ Open. 2022. doi: <http://dx.doi.org/10.1136/bmjopen-2021-060555>

