



Stamping the vaccine passport? Public support for lifting COVID-19 related restrictions for vaccinated citizens in France, Germany, and Sweden †

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Abstract

New evidence suggests that people who are fully vaccinated against COVID-19 pose a limited risk for others, prompting the question of whether restrictions should be lifted for those who are vaccinated. Both domestic and international vaccine passports are currently being rolled out that lift restrictions for the vaccinated, while keeping such restrictions in place for the unvaccinated. Setting different rules based on people's vaccination status remains a contentious issue among health policy experts, government officials, and the public. Our analysis focuses on the levels and correlates of support for the lifting of restrictions for the vaccinated. We use representative quota samples of the populations of France (N=1,752), Germany (N=1,759), and Sweden (N=1,754). We find that a slight plurality support lifting restrictions for the vaccinated, but that sentiment is split. Vaccine hesitancy emerges as the strongest predictor of opposition to such a policy. Additionally, individuals who are already vaccinated (in France and Germany) and who are higher in risk-seeking express more support for the lifting of restrictions for the vaccinated. We discuss implications for the debate on vaccine passports.

Keywords: Covid-19, vaccination, lifting restrictions, vaccine hesitancy, public opinion, public health

Many countries have implemented various restrictions to limit the spread of the SARS-CoV-2 virus, such as travel restrictions, limits on social gatherings, and “lockdowns”. With increased availability of vaccines that inoculate against the SARS-CoV-2 virus and hinder its spread (Levine-Tiefenbrun et al. 2021), governments must grapple with the questions of whether, when and for whom such restrictions should be lifted. Few countries have reached vaccination levels that make a blanket lifting of all restrictions viable. Some governments have lifted restrictions (and others are considering doing so) for those who are vaccinated, as a middle ground between widespread restrictions and full reopening. Moreover, the emergence of new variants may further complicate and delay full re-openings.

A prominent and hotly debated policy proposal in this context is to lift restrictions for those who can show their vaccination status with a dedicated “vaccine passport” (see Hall & Studdert 2021; Phelan 2020). This idea is not entirely new; the International Certificate of Vaccination booklet is a common way to document vaccinations. COVID vaccine passports (also referred to as immunization pass or COVID pass, among other terms) are a physical or electronic means of documenting COVID immunizations (Guidi, Romano, & Sotis 2021). While there are a variety of potential and actual implementations, the main difference is between domestic and international applications. Domestic applications allow citizens to access domestic events and services with fewer or no restrictions. Denmark already introduced the “Coronapas” app in April 2021 which allows those who have been vaccinated to engage in a greater number of activities (Murray 2021).¹ Germany began to lift restrictions for the vaccinated using criteria similar to Denmark’s, originally doing so without an accompanying app or dedicated COVID passport (DeutscheWelle 2021b), before introducing an electronic version of a vaccine passport in June 2021. International vaccine passports facilitate travel between countries. The EU is introducing a “digital COVID certificate” in July 2021 in an attempt to harmonize immunization status documentation as a means of easing travel between EU member states – although what vaccinated visitors must and must not do upon arrival

¹The Coronapas app also loosens restrictions for people who can show a negative test within the past 72 hours *or* who have tested positive between 2 and 12 weeks previously. Businesses that accept customers without a valid Coronapas can be fined.

is set nationally (DeutscheWelle 2021a). In the UK, there are ongoing debates concerning the lifting of self-isolation and quarantine restrictions for fully vaccinated travelers that enter the country (Faulconbridge & Young 2021), including British citizens returning from holiday.

Selectively lifting restrictions only for those who are fully vaccinated is a potentially divisive issue. For instance, if individuals pose a limited or negligible risk of spreading COVID-19, restricting their freedoms could be seen as unjustified (Brown, Kelly, Wilkinson, & Savulescu 2020). Returning rights to citizens on the condition that they get vaccinated might also work as an incentive that increases vaccine uptake and in turn public health, especially since few countries, if any, are implementing policies that would make COVID-19 vaccination mandatory for the entire population. At the same time, some individuals might be eager to get vaccinated but have not been offered the full complement of jabs, or may have medical reasons that preclude getting vaccinated. Individuals in these latter groups could feel unduly penalized if restrictions are only lifted for the vaccinated.

We contribute to the emerging discussion of COVID-19 exit strategies (Bauer et al. 2021; Diseases 2021; Lewandowsky et al. 2021; Motta, Sylvester, Callaghan, & Lunz-Trujillo 2021) by examining public support for returning freedoms to citizens based on vaccination status. Our data come from surveys in France, Germany and Sweden in April 2021, when the question was at the forefront of debate in each country (Reuters 2021a, 2021b). Since not all countries will treat the selective lifting of restrictions as a “vaccine passport”, we elected to use a more general wording about the policy. We also examine the association between policy support and self-reported vaccination status, vaccine hesitancy, general risk orientation, and partisan attachment. While existing policies and our data come from European cases, this is a general issue that many countries will continue to face as vaccination proceeds and new COVID-19 variants emerge.

Theoretical expectations

We begin our discussion of the data and method by briefly discussing our expectations for three explanatory variables: vaccination status, general vaccination attitudes, and risk acceptance.

Vaccination status may be critical in how citizens view lifting restrictions for the vaccinated. Individuals who are vaccinated may no longer perceive themselves as vulnerable to the novel coronavirus *or* as posing a transmission risk to others. As a consequence, the fully vaccinated may feel deserving of additional freedoms in the current environment (and may additionally see these freedoms as pro-social in terms of helping promote economic activity). If so, we would expect those who have received a job to support lifting restrictions for the vaccinated. Furthermore, such a result implies that political pressure to lift restrictions of the vaccinated could mount as vaccination rates increase.

We expect that vaccine hesitancy will be negatively associated with wanting to lift restrictions *for the vaccinated*. Requiring a vaccination for restrictions to be lifted could be viewed as *de facto* making vaccines mandatory or as a way to restrict the rights of people who choose not to get vaccinated, which we expect the vaccine-hesitant will oppose.² That said, the vaccine-hesitant may be supportive of lifting restrictions more generally, or otherwise oppose COVID-19 containment policies.³

Individuals also differ in their risk preferences, a predisposition likely to affect policy preferences in the context of a pandemic. Individuals with higher tolerance for risk are less impaired by the uncertainty of how well and for how long current vaccines can protect against potential variants (Williams & Burgers 2021). Accordingly, we expect that risk acceptance will be positively associated with support for lifting restrictions. Risk aversion, in turn, will be positively associated with keeping restrictions in place, even for the vaccinated.

²There are additional possible explanations for why the vaccine-hesitant may oppose the selective lifting of restrictions. Other possibilities include not wanting to implicitly be labeled as pariahs for not vaccinating, or not wanting to reward those who – in their view – have unavisedly accepted vaccination. Our data cannot discriminate between competing interpretations.

³Our data do not allow us examine the association between vaccine hesitancy and subtle but important distinctions across these different outcomes.

We consider partisan attachment in the analyses that follow for two reasons. First, research finds ideological and partisan divides in many countries when it comes to COVID-19 (Barry, Anderson, Han, Presskreischer, & McGinty 2021; Clinton, Cohen, Lapinski, & Trussler 2021; Freira, Sartorio, Boruchowicz, Boo, & Navajas 2020; Gadarian, Goodman, & Pepinsky 2021; Grossman, Kim, Rexer, & Thirumurthy 2020; Stecula & Pickup 2021). While politicians and parties on the political right, especially populists, have more typically taken positions against widespread COVID restrictions, the extent to which parties should support or oppose partial lifting of restrictions for ideological reasons is less clear. Second, opposition parties (regardless of their ideological commitments) may have political reasons to support or oppose the (selective) lifting of restrictions depending on the preferences of the governing coalition.

Method

We conducted online surveys using the survey platform Qualtrics in France (N = 1,753; April 7-22, 2021), Germany (N = 1,759; March 29-April 24, 2021), and Sweden (N = 1,756; April 8-23, 2021). The survey sampling (provided by the sampling company Dynata) implemented nationally representative quotas for gender, age, and region. Tables A1-3 in the Appendix provide an overview of the demographics of the three samples. We analyze the data using OLS, with variables described below. (Additional sample and questionnaire details are available in the appendix.)

Measures

Outcome: Lifting COVID restrictions for vaccinated citizens

To capture whether respondents are *for* or *against* lifting restrictions for vaccinated citizens, we asked the following question: “Some people demand that current coronavirus related restrictions should be lifted for those who already got vaccinated. Would you support this idea or would you reject it?”. We used a 5-Point scale from ‘*reject strongly*’ (1) to ‘*support strongly*’ (5).

Vaccination status

To test whether the support for lifting restrictions for vaccinated citizens depends on peoples' own vaccination status, we asked respondents whether they have already received a vaccine against the coronavirus. Respondents could respond with 'No' (0) or 'Yes' (1).

Vaccine Hesitancy

To test the relationship between the support for lifting restrictions for vaccinated citizens and dispositional vaccine hesitancy, we used seven items from the parental perspectives regarding vaccines scale (Freed, Clark, Butchart, Singer, & Davis 2010; Nyhan, Reifler, Richey, & Freed 2014) plus one novel item. Items were answered on a 5-Point scale from 'strongly disagree' (1) to 'strongly agree' (5). The reliability (α) was satisfactory for all three samples (Germany = .81, France = .75, Sweden = .78). Note that we re-coded the items in a way that higher scores indicate higher vaccine hesitancy and then computed mean scores across the seven items for all three countries separately.

Risk Acceptance

To test whether support for lifting restrictions for vaccinated citizens depends on citizens' general acceptance of risk, we asked the following question: "How do you see yourself: are you generally a person who is fully prepared to take risks or do you try to avoid taking risks?". We instructed respondents to give a value between 0 ('Not at all willing to take risks') and 10 ('Very willing to take risks').

Party Attachment

In order to analyze the role of party attachments, we used a standard measure that asks respondents to identify which political party they feel closest to (including an option for not feeling close to any party). In the regression analysis that follows, the reference category in each country are respondents who feel close to the party that leads the government, with indicator variables for those who feel closest to other parties (or no party). To unify analysis across the three countries, we employ

party family categories using expert coding from the the Chapel Hill Expert Survey (Bakker et al. 2020); the categorisation can also be found in the Appendix (Tables A4-6).

Sociodemographics

We include age, gender, and education as additional control variables.

Results

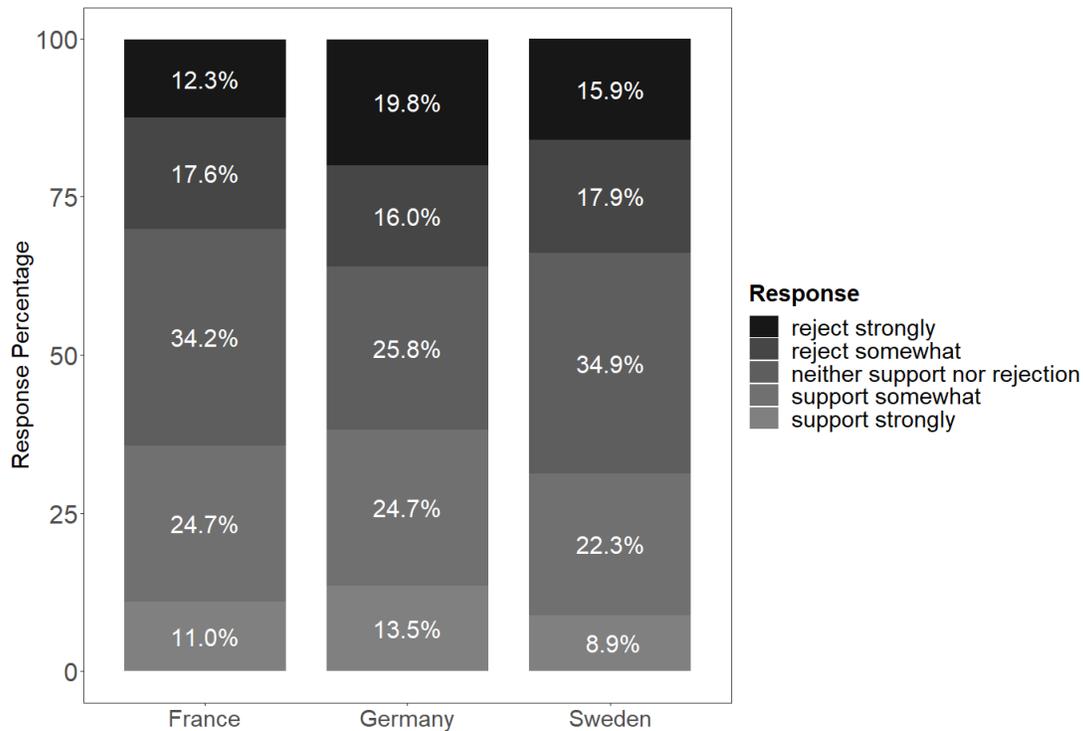
Figure 1 shows the distribution of citizens' views on our outcome variable for each of the three countries in our sample. We find public opinion to be divided: 36% of respondents exhibit support (either “somewhat” or “strongly”) for lifting of restrictions in France, 38% in Germany,⁴ and 31% in Sweden. When it comes to opposition to the lifting of restrictions, we find 30% of respondents in France oppose the policy (either “somewhat” or “strongly”), 36% in Germany, and 34% on Sweden. A sizeable share of respondents are undecided: 34% in France, 26% in Germany, and 35% in Sweden. As Germany has the lowest proportion of respondents who are undecided, we observe an unusual situation: Germany has the highest share of respondents who *support* the lifting of restriction for the vaccinated, but also the highest share of respondents who *oppose* that policy.

Next, we turn to examining the predictors of support for the lifting of restrictions for the vaccinated. Table 1 shows the results of separate OLS regression models for each country (robustness checks are available in the Appendix).⁵ Overall, vaccine hesitancy is the strongest predictor for citizens' views in our model. We find individuals who are more vaccine-hesitant are less supportive of lifting restrictions for the vaccinated. This finding is consistent with our expectation. We also find that individuals who are vaccinated exhibit more support for the lifting of restrictions for those who are vaccinated in France and Germany, but not in Sweden. Additionally, individuals who

⁴This paints a different picture than a national poll which suggested that a majority (68 percent) of Germans would oppose the lifting of restrictions (“Der Stimmungsknick” 2021), though this poll was conducted in February 2021 and methodology is unavailable, so we are ultimately unsure about factors driving this disparity.

⁵Results are substantively similar once we restrict the sample to respondents who passed attention checks that we included in the survey (see Table A7). Results from ordered logit models also lead to substantively similar results (see Table A8).

Figure 1: Support for lifting COVID-19 related restrictions for vaccinated citizens by country



are risk-accepting are more supportive for the lifting of COVID-19 restrictions for the vaccinated ($p < .005$).

The party attachment variables in our models, for the most part, are not significant predictors of attitudes to vaccine passports. Individuals who are attached to radical left parties show less support for the lifting of restrictions for vaccinated citizens in Germany and Sweden (but not France). Yet, we do not find that individuals who support parties that are in opposition rather than in government exhibit systematically different views than those who are attached to the government, nor do we observe that those who support radical “TAN” parties (e.g. Rassemblement National, Alternative for Germany, Sweden Democrats; Polk et al. 2017) have distinct views. We return to this in the discussion.⁶ We also do not find statistically significant effects for gender, age, or education.

⁶TAN refers to traditional, authoritarian and nationalistic parties

Table 1: Correlates of support for the lifting of COVID-19 related restrictions for vaccinated citizens by country

	France	Germany	Sweden
Vaccinated	0.300*** [0.150, 0.451]	0.379*** [0.188, 0.571]	-0.060 [-0.204, 0.085]
Vaccine Hesitancy	-0.238*** [-0.329, -0.148]	-0.416*** [-0.508, -0.324]	-0.137*** [-0.215, -0.059]
Risk Acceptance	0.053*** [0.027, 0.079]	0.081*** [0.054, 0.108]	0.056*** [0.029, 0.083]
Conservative Party	0.224 [-0.019, 0.468]		0.114 [-0.074, 0.302]
Socialist Party	0.010 [-0.274, 0.253]	-0.019 [-0.236, 0.199]	
Green Party	-0.184 [-0.465, 0.096]	-0.129 [-0.339, 0.082]	0.304 [-0.053, 0.661]
Radical TAN Party	-0.001 [-0.232, 0.230]	-0.204 [-0.463, 0.056]	0.027 [-0.152, 0.207]
Liberal Party	-0.096 [-0.527, 0.335]	-0.061 [-0.368, 0.247]	0.360* [0.004, 0.716]
Radical Left Party	0.074 [-0.229, 0.377]	-0.284* [-0.542, -0.025]	-0.601*** [-0.806, -0.396]
Agrarian Party			-0.076 [-0.399, 0.248]
No PID	-0.105 [-0.320, 0.111]	-0.257** [-0.449, -0.065]	-0.001 [-0.181, 0.178]
Other Party	0.110 [-0.165, 0.384]	-0.160 [-0.537, 0.218]	0.005 [-0.449, 0.458]
Gender	-0.063 [-0.183, 0.057]	0.083 [-0.048, 0.214]	-0.101 [-0.220, 0.019]
Age 35-54	-0.084 [-0.236, 0.068]	-0.060 [-0.238, 0.118]	-0.132 [-0.288, 0.024]
Age 55+	-0.160 [-0.321, 0.001]	-0.060 [-0.262, 0.090]	-0.118 [-0.266, 0.030]
Higher Secondary Edu.	0.040 [-0.152, 0.233]	-0.163* [-0.320, -0.007]	0.047 [-0.156, 0.251]
University Edu.	0.043 [-0.148, 0.234]	-0.154 [-0.352, 0.044]	-0.091 [-0.314, 0.131]
Intercept	3.379*** [2.982, 3.776]	3.741*** [3.397, 4.086]	3.124*** [2.789, 3.458]
Observations	1,518	1,564	1,631
R ²	0.066	0.090	0.069
Adjusted R ²	0.056	0.081	0.060

Note: * $p < .05$, ** $p < .01$, *** $p < .005$ (two-sided). Cell entries are OLS coefficients with 95% confidence intervals in square brackets. All $GVI\bar{F}s < 2$, reference categories: *Vaccinated*=no, *Party Attachment*=leading coalition party (LREM in France, CDU in Germany, SAP in Sweden), *Gender*=male, *Age*=18-34, *Education*=Secondary education/education not completed/no answer., TAN=traditional, authoritarian, nationalistic

Discussion

Our analysis reveals that vaccination status, vaccine hesitancy, and risk preferences differentiate those who support lifting restrictions for vaccinated citizens from those who do not. It is noteworthy that these effects are fairly robust across the countries in our sample, with the interesting exception of vaccination status in Sweden. As different countries may chart different paths in this regard, future research should continue to pay attention to cross-country differences.

These results suggest that the unvaccinated are a source of opposition to lifting restrictions for the vaccinated. This implies that support for the lifting of restrictions for the vaccinated is likely to grow in France and Germany as more citizens get vaccinated there. This may be welcome news for proponents of vaccine passports. A potentially more persistent source of opposition comes from vaccine-hesitant citizens. While some people hesitant towards COVID-19 vaccination have changed their minds (KCL 2021), many are also unlikely to change their minds (e.g. because their stance is tied to their identity, anti-science or anti-elite positions; see Motta, Callaghan, Sylvester, & Lunz-Trujillo 2021). Although we see little evidence that partisanship plays a significant role, politicization always remains a risk should some political elites choose to oppose vaccination or vaccine passports. Far right populist elites may try to mobilize supporters by portraying the lifting of restrictions only for the vaccinated as suspending the rights of people who choose not to vaccinate or even as a heavy-handed method to force vaccination. Such politicization of vaccination, if it were to occur, could have long-term negative consequences for vaccine uptake more broadly.

As such, we are reluctant to claim that partisan attachment has no effect on attitudes to lifting COVID restrictions. Previous research has found that the size of partisan differences on COVID-related issues can vary considerably (Spälti et al. in press; Ward et al. 2020). Our claim is appropriately cautious – we do not observe large partisan effects after accounting for our other variables of interest.⁷ Partisanship’s seemingly negligible role in shaping preferences over lifting restrictions for the vaccinated may be time-bound given the novelty of the debate. Future research should ex-

⁷In the Appendix, we estimate models that exclude other main variables of interest; the results are substantively the same (see Table A9).

amine more carefully why some COVID issues have stark partisan differences in public opinion, while others do not. Similarly, this research should examine the over-time dynamics to see whether and in what ways issues become politicized over time.

Nonetheless, these findings suggest that policymakers and other political elites may have meaningful opportunities to persuade the public towards one course of action or another. In addition to the absence of a clear majority for or against selective lifting of restrictions, the fact that opinion does not currently appear to map clearly onto existing political cleavages makes the public more open to such persuasion (Taber & Lodge 2006).

Limitations

We want to note important limitations of our study. Our measure for public support for lifting restrictions for vaccinated citizens is based on a single question rather than a fine-grained battery of measures. We opted for this wording because it has been fielded once recently in Germany (“Der Stimmungsknick” 2021), thereby giving us a reference point. While we believe that the question taps into citizens’ general willingness to support or oppose lifting restrictions for vaccinated citizens, opinions may differ on slightly different proposals or with variations in question wording. For instance, a particular restriction might be lifted not just for vaccinated citizens but also for individuals who can present a very recent negative COVID-19 test result (as with Denmark’s Coronapas). Similarly, citizens’ views may change as vaccination progress continues, becoming a more tangible scenario for a larger group of people, and as public discourse on the issue becomes more salient.

The correlates of support for lifting COVID-19 restrictions for the vaccinated that we discuss are robust across the three countries in our sample and consistent with theoretical expectations. Nonetheless, our (non-experimental) cross-sectional survey data cannot demonstrate the our variables of interest (vaccination status, vaccine hesitancy, and general risk) have causal effects on attitudes towards lifting restrictions. While we can likely rule out reverse causality (especially considering our outcome measure was asked *after* the independent variables in our survey), we cannot fully rule out other causal accounts. Observational data may be the best of what is available

– manipulating our variables of interest may be difficult (changing risk preference) or unethical (withholding vaccination or inducing vaccine hesitancy). We also cannot rule out that the effects we observe differ in other countries. Future research should assess the broader generalizability of the findings.

Conclusion

Using novel survey data, we find public opinion to be split over the lifting of restrictions for vaccinated citizens. A slight plurality supports the lifting of restrictions in France (36% in favor, 30% opposed) and in Germany (38% in favor, 36% opposed) but not in Sweden (31% in favor, 34% opposed). We also find a sizeable share of citizens who are undecided on the issue (34% in France, 26% in Germany, and 35% in Sweden). Vaccine hesitancy is the strongest predictor of opposition to this policy. Individuals who are already vaccinated and those who are more risk-accepting are more likely to support the lifting of restrictions for the vaccinated (although vaccination status plays no role in Sweden). Support for this policy does not map onto the traditional dimension of party political conflict after taking the aforementioned variables into account, which is noteworthy given the politicization of many other COVID-19 related issues. These findings have implications for decision-makers. If ethical considerations are accounted for and perverse incentives are mitigated, there is potentially room for implementing successful policies with support across the partisan spectrum.

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Appendix

Questionnaire

Gender

Now we would like to ask you a few questions about yourself. Please remember that your answers will remain confidential. What is your gender?

Male (0); Female (1)

Age

How old are you?

18 - 24 (0); 25 - 34 (0); 35 - 44 (1); 45 - 54 (1); 55 - 64 (2); 64 - 75 (2); 76 or older (2)

Education

What is the highest level of education you have successfully completed?

France

- Enseignement secondaire (sans obtenir de diplome) (0)
- Diplome de l'enseignement secondaire (baccalaureat ou equivalent) (1)
- Etudes superieures techniques/technologiques (sans obtenir de diplome) (1)
- Diplome d'etudes superieures de premier cycle (Bac +3) (2)
- Diplome d'etudes superieures techniques/technologiques (BTS, DUT ou equivalent) (2)
- Dipome d'etudes superieures de deuxieme ou troisieme cycle (Bac +5 : master, diplome d'ingenieur ou equivalent) (2)
- Doctorat, postdoctorat ou equivalent (Bac +8) (2)
- Prefere ne pas repondre (NA)

Germany

- Abgeschlossene Sekundarschulbildung/Ausbildung nicht abgeschlossen/Keine Antwort (0)
- Abschluss einer höheren weiterführenden Schulbildung/Abschluss von beruflichem Fachgymnasium/Abgeschlossene Berufs- oder Fachausbildung (1)

- Abgeschlossene Universitätsausbildung (2)

Sweden

- Grundskoleutbildning (0)
- Gymnasie-, komvux-, folkhögskole-, yrkesförberedande eller larlingsutbildning (1)
- Kvalificerad yrkesutbildning (KY) eller annan yrkesutbildning (1)
- Akademisk utbildning grundniva: Högskole- eller kandidatexamen (2)
- Akademisk utbildning avancerad niva: Magister- eller masterexamen (2)
- Akademisk utbildning forskarniva: Licentiats- eller doktorsexamen (2)

Coding: "Secondary education/education not completed/no answer" (0), "Higher secondary education/vocational specialized high school" (1), "University education"

Region

In which region of [country] do you currently reside?

France

Alsace (1)	Centre (7)	Languedoc-Roussillon (13)	Picardie (19)
Aquitaine (2)	Champagne-Ardenne (8)	Limousin (14)	Poitou-Charentes (20)
Auvergne (3)	Corse (9)	Lorraine (15)	Provence-Alpes-Cote d'Azur (21)
Basse-Normandie (4)	Franche-Comte (10)	Midi-Pyrenees (16)	Rhone-Alpes (22)
Bourgogne (5)	Haute-Normandie (11)	Nord-Pas-de-Calais (17)	
Bretagne (6)	Ile-de-France (12)	Pays de la Loire (18)	

Germany

Baden-Württemberg (1)	Bremen (5)	Niedersachsen (9)	Sachsen (13)
Bayern (2)	Hamburg (6)	Nordrhein-Westfalen (10)	Sachsen-Anhalt (14)
Berlin (3)	Hessen (7)	Rheinland-Pfalz (11)	Schleswig-Holstein (15)
Brandenburg (4)	Mecklenburg-Vorpommern (8)	Saarland (12)	Thuringen (16)

Sweden

Blekinge lan (1)	Jonkopings lan (7)	Skane lan (13)	Vasternorrlands lan (19)
Dalarnas lan (2)	Kalmar lan (8)	Sodermanlands lan (14)	Vastmanlands lan (20)
Gavleborgs lan (3)	Kronobergs lan (9)	Stockholms lan (15)	Vastra Gotalands lan (21)
Gotlands lan (4)	Norrbottnens lan (10)	Uppsalas lan (16)	
Hallands lan (5)	Orebro lan (11)	Varmlands lan (17)	
Jamtlands lan (6)	Pstergotlands lan (12)	Vasterbottnens lan (18)	

Vaccinated

Have you already received a vaccine against the coronavirus?

Yes (0); No (1) (we recoded it to for our analysis)

Vaccine Hesitancy

Next we would like to ask you about your opinions regarding vaccinations. Please indicate whether you disagree or agree with the following statements.

- Getting vaccines is a good way to protect children from disease. (vax_att1)
- Generally, I do what my doctor recommends about vaccines. (vax_att2)
- New vaccines are recommended only if they are safe. (vax_att3)
- Children do not need vaccines for diseases that are not common anymore. (vax_att4)
- I am concerned about serious side effects of vaccines. (vax_att5)
- Some vaccines cause autism in healthy children. (vax_att6)
- Vaccinations are one of the most significant achievements in improving public health. (vax_att7)

Coding: We used a 5-Point scale from 'strongly disagree' (1) to 'strongly agree' (5).

Attention Checks

We integrated four attention checks throughout the whole survey.

- Two is greater than one. (check1)
- World War II came before World War I. (check2)
- Please select "neither agree nor disagree". (check3)
- Barack Obama was the first president of the United States of America. (check4)

Risk Acceptance

How do you see yourself: are you generally a person who is fully prepared to take risks or do you try to avoid taking risks? Please give a value between 0 and 10, with 0 for *not at all willing to take risks* and 10 for *very willing to take risks*.

Party Attachment

Do you usually think of yourself as close to any particular political party?

France

Non, vous ne vous sentez pas proche dun parti politique (1)	La Republique en Marche (8)	Union des Democratres et Independants (15)
Les Republicains (2)	Lutte ouvriere (9)	Debout la France (16)
Parti socialiste (3)	Nouveau parti anticapitaliste (10)	Les Patriotes (17)
Rassemblement national (4)	Parti communiste (11)	Union populaire republicaine (18)
Europe Ecologie - Les Verts (5)	Place publique (12)	Autre (90)
France insoumise (6)	Nouvelle donne (13)	Je ne sais pas (98)
Generation.s (7)	MoDem (14)	

Germany

Nein, ich stehe keiner Partei nahe (1)	Die Linke (5)	AfD (8)
CDU/CSU (2)	FDP (6)	Andere Partei (9)
SPD (3)	Piraten (7)	Weiss nicht (98)
Die Gruenen (4)		

Sweden

Nej, jag anser mig inte sta nara nagot politiskt parti (1)	Liberalerna (5)	Sverigedemokraterna (9)
Vansterpartiet (2)	Moderaterna (6)	Feministiskt initiativ (10)
Socialdemokraterna (3)	Kristdemokraterna (7)	Annat parti (11)
Centerpartiet (4)	Miljopartiet (8)	Vet ej (99)

Coding: For the party coding see section Party Coding in this Appendix.

Sociodemographics for Samples

Table A1: Sociodemographics France

Variable	N	Sample%	Population%
<i>Age</i>	1752		
18-34	479	27.3%	27%
35-54	613	35%	35%
55+	660	37.7%	36%
<i>Gender</i>	1749		
Male	829	47.4%	48%
Female	920	52.6%	52%
<i>Region</i>	1746		
Alsace	45	2.6%	3%
Aquitaine	89	5.1%	5%
Auvergne	35	2.0%	2%
Basse-Normandie	43	2.5%	2%
Bourgogne	47	4.2%	3%
Bretagne	93	5.3%	5%
Centre	74	4.2%	4%
Champagne-Ardenne	36	2.1%	2%
Corse	6	0.3%	1%
Franche-Comte	34	1.9%	2%
Haute-Normandie	53	3.0%	3%
Ile-de-France	319	18.2%	18%
Languedoc-Roussillon	73	4.2%	4%
Limousin	20	1.1%	1%
Lorraine	71	4.1%	4%
Midi-Pyrenees	88	5.0 %	5%
Nord-Pas-de-Calais	111	6.3%	6%
Pays de la Loire	98	5.6%	6%
Picardie	53	3.0%	3%
Poitou-Charentes	35	2.0%	3%
Provence-Alpes-Cote d'Azur	145	8.3%	8%
Rhone-Alpes	178	10.2%	10%

Table A2: Sociodemographics Germany

Variable	N	Sample%	Population%
<i>Age</i>	1759		
18-34	412	23.4%	24%
35-54	555	31.6%	35%
55+	792	45.0%	41%
<i>Gender</i>	1753		
Male	871	49.5%	52%
Female	882	50.1%	48%
<i>Region</i>	1756		
Baden-Wurttemberg	232	13.2%	13%
Bayern	261	14.8%	15%
Berlin	86	4.9%	4%
Brandenburg	58	3.3%	3%
Bremen	18	1.0%	1%
Hamburg	53	3.0%	2%
Hessen	133	7.6%	7%
Mecklenburg-Vorpommern	33	1.9%	2%
Niedersachsen	164	9.3%	10%
Nordrhein-Westfalen	377	21.4%	22%
Rheinland-Pfalz	84	4.8%	5%
Saarland	18	1,0%	1%
Sachsen	98	5.6%	5%
Sachsen-Anhalt	44	2.5%	3%
Schleswig-Holstein	57	3.2%	3%
Thuringen	40	2.3%	3%

Table A3: Sociodemographics Sweden

Variable	N	Sample%	Population%
<i>Age</i>	1754		
18-34	461	26.3%	28%
35-54	569	32.4%	33%
55+	724	41.3%	39%
<i>Gender</i>	1750		
Male	872	49.8%	49%
Female	878	50.2%	51%
<i>Region</i>	1752		
Blekinge lan	32	1.8%	2%
Dalarnas lan	46	2.6%	3%
Gavleborgs lan	56	3.2%	3%
Gotlands lan	17	1.0%	1%
Hallands lan	42	2.4%	3%
Jamtlands lan	23	1.3%	1%
Jonkopings lan	53	3.0%	4%
Kalmar lan	57	2.1%	3.2%
Kronobergs lan	35	2.0%	2%
Norrbottnens lan	35	2.0%	3%
Orebro lan	58	3.3%	3%
Ostergotlands län	86	4.2%	5%
Skane lan	242	13.8%	13%
Sodermanlands lan	57	3.2%	3%
Stockholms lan	406	23.1%	22%
Uppsalas lan	71	4.0%	4%
Varmlands lan	33	1.9%	3%
Vasterbottens lan	44	2.5%	3%
Vasternorrlands lan	47	2.7%	3%
Vastmanlands lan	43	2.4%	3%
Vastra Gotalands lan	269	15.3%	17%

Party Coding

Table A4: Parties in France

	Options	Recorded Value	Party Code
1	Non, vous ne vous sentez pas proche dun parti politique	1	No PID
2	Les Republicains	2	Conservative Party
3	Parti Socialiste	3	Socialist Party
4	Rassemblement national	4	Radical TAN Party
5	Europe Ecologie - Les Verts	5	Green Party
6	France insoumise	6	Radical Left Party
7	Generation.s	7	Other Party
8	La Republique en Marche	8	Gov. Party
9	Lutte ouvriere	9	Other Party
10	Nouveau parti anticapitaliste	10	Other Party
11	Parti communiste	11	Radical Left Party
12	Place publique	12	Other Party
13	Nouvelle donne	13	Other Party
14	MoDem	14	Liberal Party
15	Union des Democratres et Independants	15	Other Party
16	Debout la France	16	Radical TAN Party
17	Les Patriotes	17	Other Party
18	Union populaire republicaine	18	Other Party
19	Autre	90	Other Party

Table A5: Parties in Germany

Options	Recorded Value	Party Code
1 Nein, ich stehe keiner Partei nahe	1	No PID
2 CDU/CSU	2	Gov. Party
3 SPD	3	Socialist Party
4 Die Gruenen	4	Green Party
5 Die Linke	5	Radical Left Party
6 FDP	6	Liberal Party
7 Piraten	7	Other Party
8 AfD	8	Radical TAN Party
9 Andere Partei	9	Other Party

Table A6: Parties in Sweden

Options	Recorded Value	Party Code
1 Nej, jag anser mig inte sta nara nagot politiskt parti	1	No PID
2 Vansterpartiet	2	Radical Left Party
3 Socialdemokraterna	3	Gov. Party
4 Centerpartiet	4	Agrarian Party
5 Liberalerna	5	Liberal Party
6 Moderaterna	6	Conservative Party
7 Kristdemokraterna	7	Conservative Party
8 Miljopartiet	8	Green Party
9 Sverigedemokraterna	9	Radical TAN Party
10 Feministiskt initiativ	10	No PID
11 Annat parti	11	Other Party

Robustness Checks

Table A7: Lift Restrictions for Vaccinated Citizens (Respondents ≥ 2 Attention Checks)

	France	Germany	Sweden
Vaccinated	0.240** [0.074, 0.407]	0.399** [0.178, 0.620]	-0.060 [-0.225, 0.105]
Vaccine Hesitancy	-0.265*** [-0.362, -0.168]	-0.476*** [-0.574, -0.377]	-0.152*** [-0.237, -0.068]
Risk Acceptance	0.043** [0.015, 0.071]	0.075*** [0.047, 0.104]	0.048** [0.019, 0.077]
Conservative Party	0.153 [-0.109, 0.415]		0.135 [-0.070, 0.340]
Socialist Party	-0.069 [-0.355, 0.217]	0.016 [-0.221, 0.253]	
Green Party	-0.258 [-0.558, 0.043]	-0.109 [-0.337, 0.120]	0.192 [-0.219, 0.603]
Radical TAN Party	-0.023 [-0.270, 0.224]	-0.150 [-0.430, 0.131]	0.026 [-0.169, 0.222]
Liberal Party	-0.048 [-0.498, 0.402]	0.002 [-0.323, 0.326]	0.278 [-0.145, 0.701]
Radical Left Party	-0.031 [-0.356, 0.295]	-0.255 [-0.530, 0.020]	-0.489*** [-0.718, -0.260]
Agrarian Party			-0.048 [-0.405, 0.309]
No PID	-0.144 [-0.374, 0.085]	-0.179 [-0.389, 0.030]	0.026 [-0.169, 0.221]
Other Party	-0.011 [-0.310, 0.288]	-0.107 [-0.501, 0.288]	-0.027 [-0.521, 0.466]
Gender	-0.053 [-0.182, 0.077]	0.098 [-0.043, 0.240]	-0.126 [-0.257, 0.005]
Age 35-54	-0.120 [-0.289, 0.049]	0.019 [-0.182, 0.220]	-0.043 [-0.221, 0.135]
Age 55+	-0.143 [-0.320, 0.034]	0.000 [-0.191, 0.192]	-0.029 [-0.194, 0.135]
Higher Secondary Edu.	0.054 [-0.155, 0.262]	-0.191* [-0.363, -0.019]	0.069 [-0.157, 0.294]
University Edu.	0.033 [-0.174, 0.239]	-0.182 [-0.397, 0.034]	-0.092 [-0.338, 0.153]
Intercept	3.535*** [3.111, 3.960]	3.763*** [3.397, 4.129]	3.089*** [2.725, 3.453]
Observations	1,367	1,400	1,412
R ²	0.060	0.095	0.050
Adjusted R ²	0.048	0.086	0.039

Note: * $p < .05$, ** $p < .01$, *** $p < .005$ (two-sided). Cell entries are OLS coefficients. All *GVIFs* < 2 , i.e. there is no multicollinearity problem. Reference levels: *Vaccinated*=no, *Party Attachment*=gov. party, *Gender*=male, *Age*=18-34, *Education*=Secondary education/education not completed/no answer.

Table A8: Lift Restrictions for Vaccinated Citizens (Ordered Logit)

	France	Germany	Sweden
Vaccinated	0.477*** [0.238, 0.716]	0.546*** [0.278, 0.814]	-0.109 [-0.335, 0.117]
Vaccine Hesitancy	-0.410*** [-0.560, -0.260]	-0.632*** [-0.769, -0.496]	-0.243*** [-0.369, -0.116]
Risk Accenptance	0.094*** [0.052, 0.136]	0.117*** [0.079, 0.156]	0.095*** [0.052, 0.137]
Conservative Party	0.395* [0.012, 0.778]		0.164 [-0.125, 0.452]
Socialist Party	0.014 [-0.394, 0.423]	-0.038 [-0.337, 0.261]	
Green Party	-0.270 [-0.708, 0.169]	-0.192 [-0.486, 0.102]	0.535 [-0.031, 1.101]
Radical TAN Party	0.044 [-0.320, 0.408]	-0.294 [-0.677, 0.088]	0.028 [-0.252, 0.308]
Liberal Party	-0.120 [-0.791, 0.551]	-0.043 [-0.486, 0.401]	0.602* [0.044, 1.159]
Radical Left Party	0.170 [-0.311, 0.652]	-0.378* [-0.743, -0.014]	-0.971*** [-1.297, -0.646]
Agrarian Party			-0.114 [-0.601, 0.372]
No PID	-0.144 [-0.479, 0.190]	-0.355** [-0.621, -0.089]	-0.009 [-0.285, 0.268]
Other Party	0.227 [-0.204, 0.658]	-0.186 [-0.721, 0.347]	0.005 [-0.749, 0.762]
Gender	-0.113 [-0.301, 0.074]	0.112 [-0.071, 0.295]	-0.155 [-0.341, 0.030]
Age 35-54	-0.145 [-0.382, 0.092]	-0.091 [-0.337, 0.154]	-0.200 [-0.443, 0.042]
Age 55+	-0.255* [-0.506, -0.003]	-0.139 [-0.385, 0.106]	-0.184 [-0.413, 0.045]
Higher Secondary Edu.	0.054 [-0.249, 0.358]	-0.238* [-0.457, -0.019]	0.093 [-0.216, 0.401]
University Edu.	0.046 [-0.259, 0.350]	-0.208 [-0.489, 0.073]	-0.144 [-0.484, 0.195]
Observations	1,518	1,564	1,631

Note: * $p < .05$, ** $p < .01$, *** $p < .005$ (two-sided). Reference levels: *Vaccinated=no*, *Party Attachment=gov. party*, *Gender=male*, *Age=18-34*, *Education=Secondary education/education not completed/no answer*.

Table A9: Lift Restrictions for Vaccinated Citizens (Without Main Predictors)

	France	Germany	Sweden
Conservative Party	0.231 [-0.016, 0.477]		0.142 [-0.046, 0.330]
Socialist Party	-0.069 [-0.336, 0.198]	-0.010 [-0.234, 0.214]	
Green Party	-0.257 [-0.540, 0.027]	-0.128 [-0.345, 0.088]	0.341 [-0.017, 0.699]
Radical TAN Party	-0.125 [-0.357, 0.107]	-0.479*** [-0.739, -0.218]	0.013 [-0.165, 0.191]
Liberal Party	-0.074 [-0.513, 0.366]	-0.106 [-0.419, 0.206]	0.328 [-0.026, 0.681]
Radical Left Party	-0.011 [-0.314, 0.292]	-0.321* [-0.589, -0.053]	-0.631*** [-0.833, -0.428]
Agrarian Party			-0.050 [-0.373, 0.273]
No Family Party	-0.225* [-0.440, -0.011]	-0.409*** [-0.606, -0.213]	-0.029 [-0.209, 0.150]
Other Party	-0.003 [-0.277, 0.271]	-0.156 [-0.544, 0.232]	-0.027 [-0.483, 0.428]
Gender	-0.132* [-0.251, -0.012]	-0.003 [-0.136, 0.130]	-0.150* [-0.265, -0.034]
Age 35-54	-0.084 [-0.236, 0.068]	-0.108 [-0.289, 0.073]	-0.148 [-0.304, 0.008]
Age 55+	-0.054 [-0.205, 0.097]	-0.100 [-0.269, 0.069]	-0.118 [-0.262, 0.026]
Higher Secondary Edu.	0.057 [-0.139, 0.252]	-0.121 [-0.279, 0.037]	0.063 [-0.140, 0.267]
University Edu.	0.151 [-0.041, 0.342]	-0.007 [-0.207, 0.192]	-0.034 [-0.255, 0.187]
Intercept	3.172*** [2.887, 3.456]	3.302*** [3.082, 3.522]	3.109*** [2.865, 3.354]
Observations	1,545	1,586	1,642
R ²	0.025	0.022	0.057
Adjusted R ²	0.016	0.014	0.049

Note: * $p < .05$, ** $p < .01$, *** $p < .005$ (two-sided). Cell entries are OLS coefficients. All *GVIFs* < 2, i.e. there is no multicollinearity problem. Reference levels: *Party Attachment*=gov. party, *Gender*=male, *Age*=18-34, *Education*=Secondary education/education not completed/no answer.