Supplementary Materials for

Anticipation of COVID-19 Vaccines Reduces Willingness to Socially Distance

Ola Andersson Pol Campos-Mercade Armando N. Meier Erik Wengström*

*Corresponding author. Email: erik.wengstrom@nek.lu.se

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4. The complete survey

1. Figures

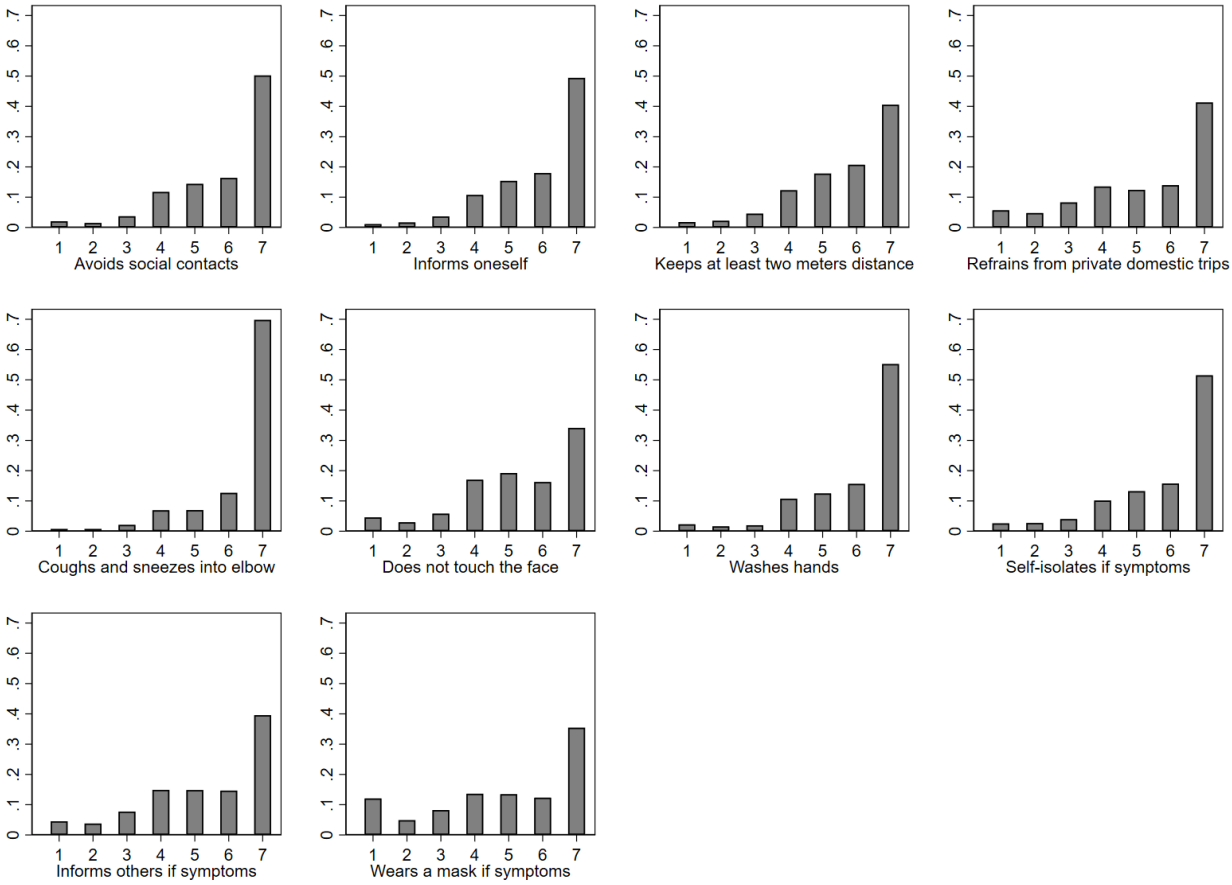


Fig. S1. Histograms of all health behaviors. For each item, we ask participants to what degree the described intended behavior applies to their own behavior on a 7-point scale from "does not apply at all" to "applies very much."

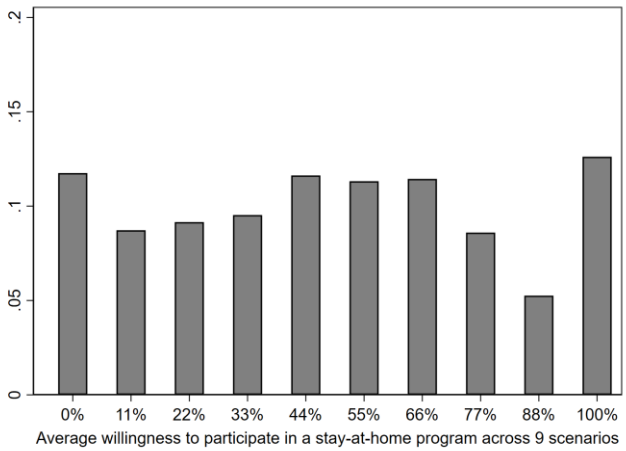


Fig. S2. Histograms of the likelihood to participate in a stay-at-home program across 9 scenarios. The average is calculated by taking the average across 9 binary decisions to participate or not for each participant. So 33% means that a participant was willing to participate in 3 out of nine proposed programs.

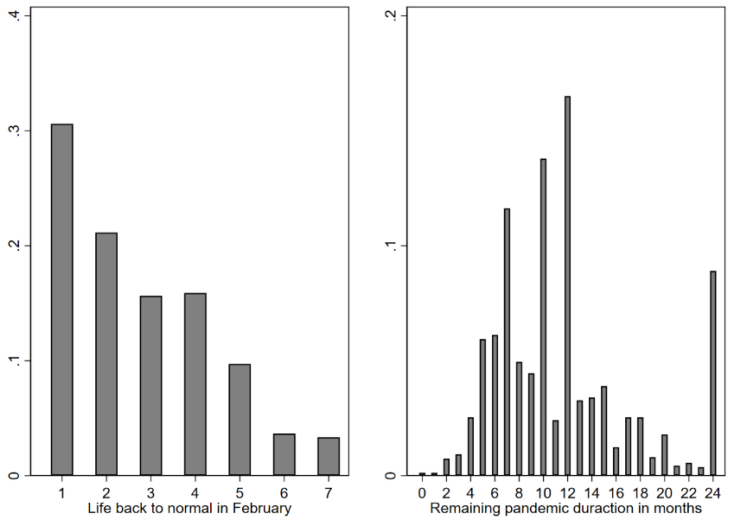


Fig. S3. Histograms of pandemic duration. Life back to normal in February refers to the question about whether life may start to ressemble life before the pandemic again in February to which participants could respond on a 1 to 7 scale ranging from 1 = strongly disagree to 7 = strongly agree.

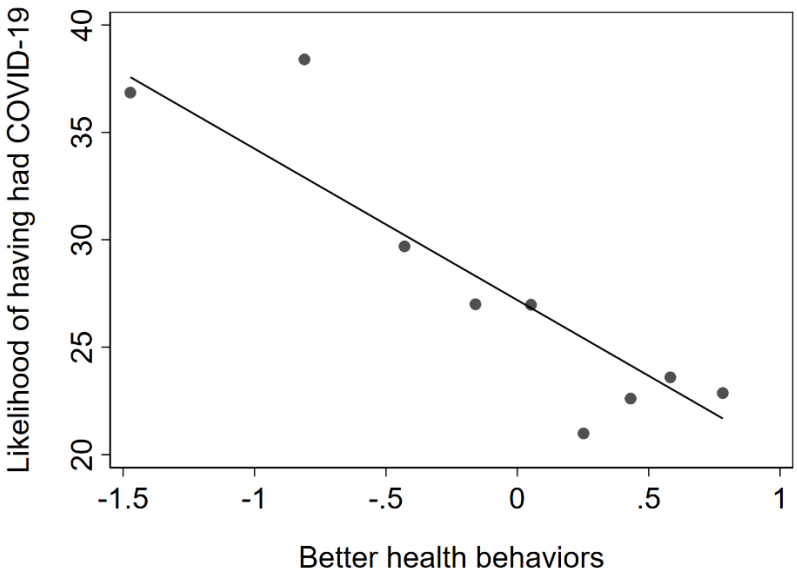


Fig. S4. Correlation of participant assessed likelihood of COVID-19 exposure (on a 10-point scale from 0% likely to 100% likely) with the health behavior index (better health behaviors). A 1 standard deviation improvement in health behaviors relates to 7 percentage point reduction in the likelihood of having had COVID-19 ($p<0.01$).

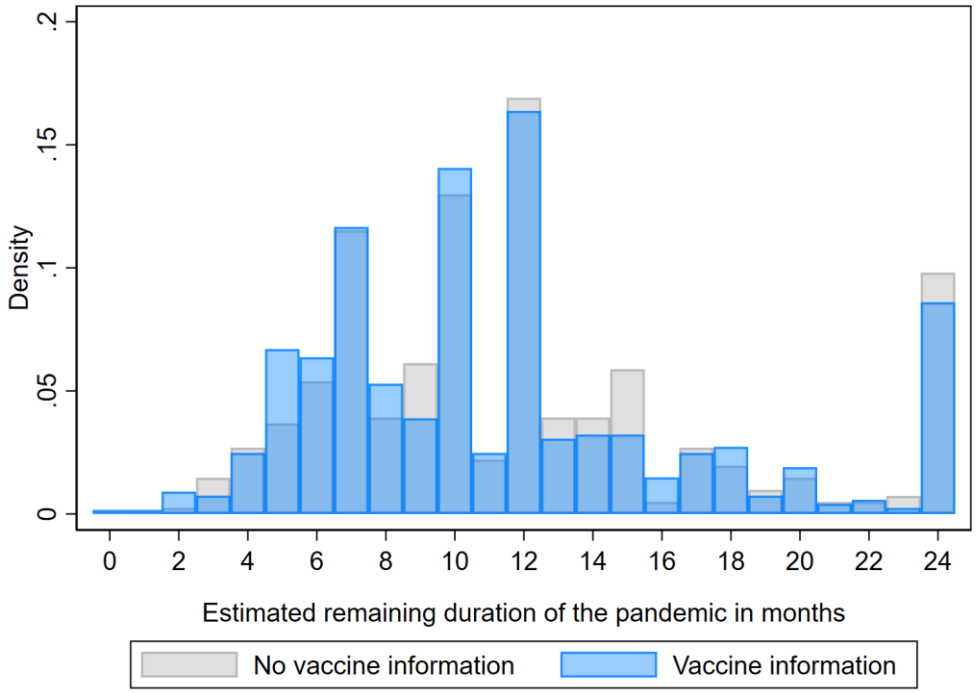


Fig. S5. The figure shows the raw distribution of expectations about the remaining duration of the pandemic in months across treatment groups comparing participants in Control A vs. Control B as preregistered (N=805). The light grey bars show the density for people who do not receive vaccine information before the question about the duration of the pandemic, whereas the light blue bars show the density for people who receive information before the question about the duration of the pandemic.

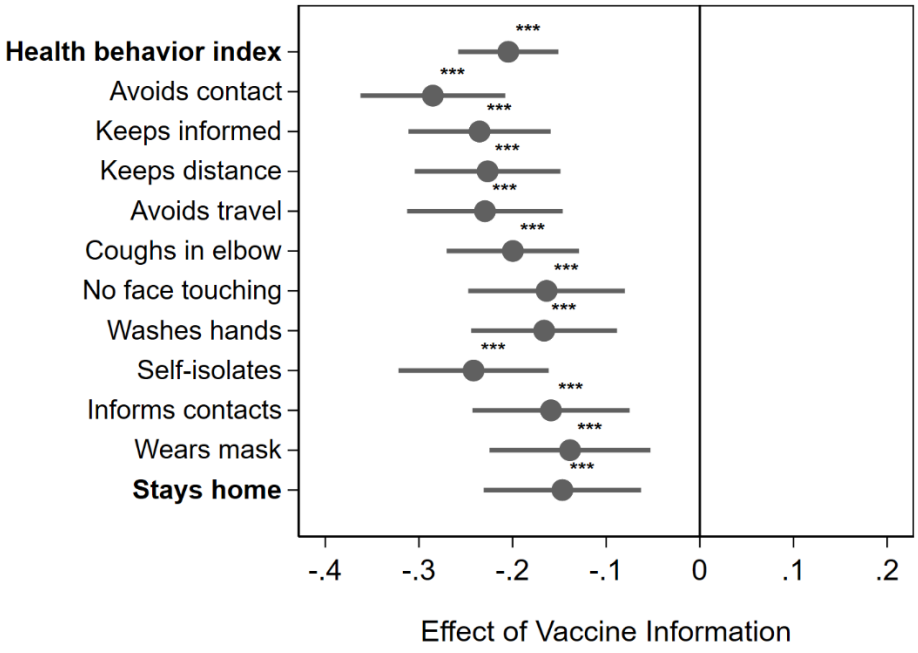
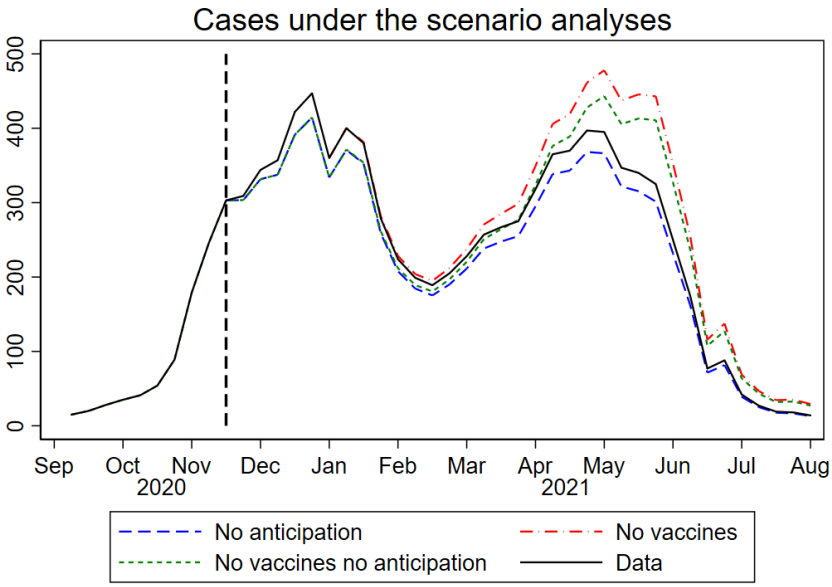


Fig. S6. The treatment effect by intended health behavior dropping participants who finished the survey in less than 5 minutes. The grey dots give the estimated difference on the outcome variables in standard deviations when comparing people who receive the vaccine information after describing future health behavior (Treatment 2) to people who receive vaccine information before describing future health behavior (Treatment 1). As pre-registered, the coefficient estimates are based controlling for gender, 6 dummies indicating age categories, adult income, a dummy indicating unemployment, a dummy indicating children, a dummy indicating single households, a dummy indicating a university degree, and dummies indicating whether people live in a big city/regular city/small city. $p<0.01$, ** $p<0.05$, * $p<0.1$



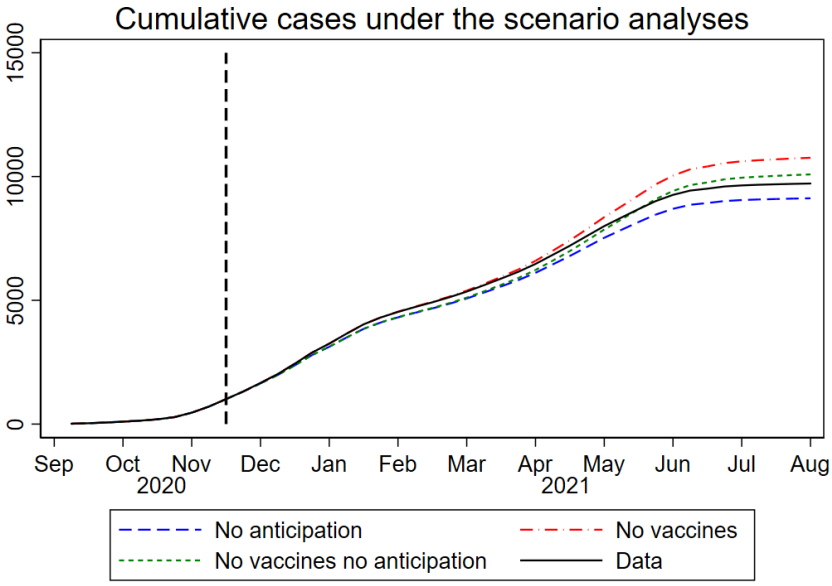


Fig. S7. Replication of Fig. 3 using the health behaviors that involve mobility. This figure replicates Fig. 3 in the main text but uses instead the treatment effect of the two health behaviors that explicitly involve mobility ("Self-isolates" and "Avoids travel"). The cumulative cases by mid-July are 9,719, the simulated cumulative cases without anticipation are 9,123, the simulated cumulative cases without vaccines are 10,760, and the simulated cumulative cases without anticipation nor vaccines are 10,088.

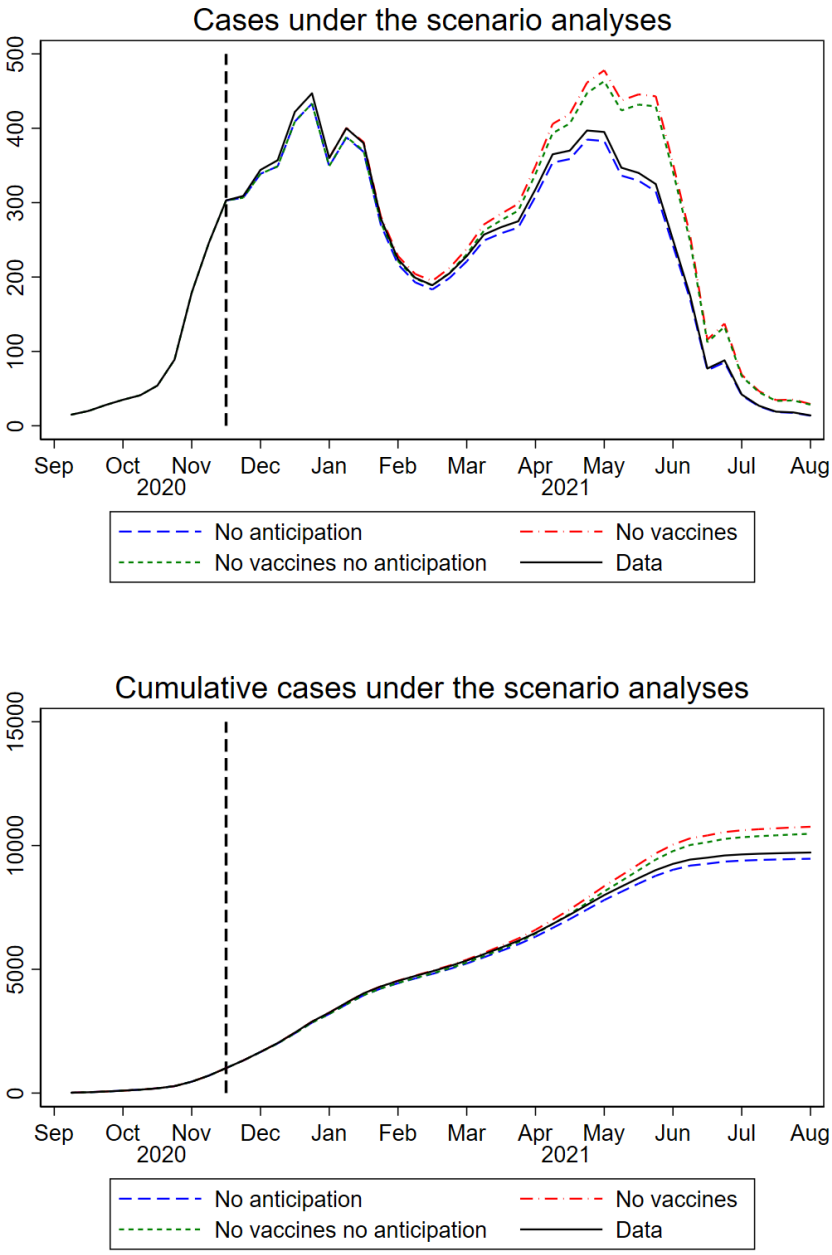
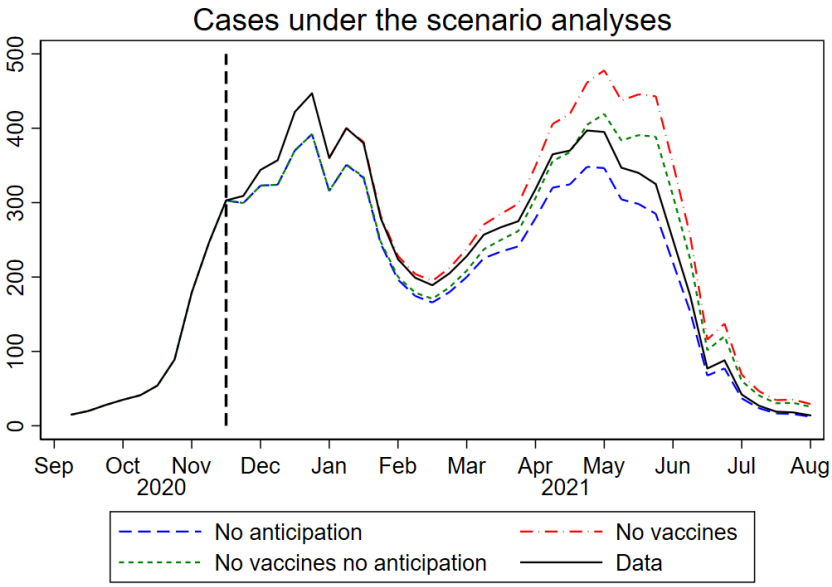


Fig. S8. Replication of Fig. 3 using half of the estimated treatment effect. This figure replicates Fig. 3 in the main text but assumes instead that the treatment effect on health behaviors translates into mobility at half the rate assumed in the main analysis (based on Zhou et al. 2020). The cumulative cases by mid-July are 9,719, the simulated cumulative cases without anticipation are 9,467, the simulated cumulative cases without vaccines are 10,760, and the simulated cumulative cases without anticipation nor vaccines are 10,475.



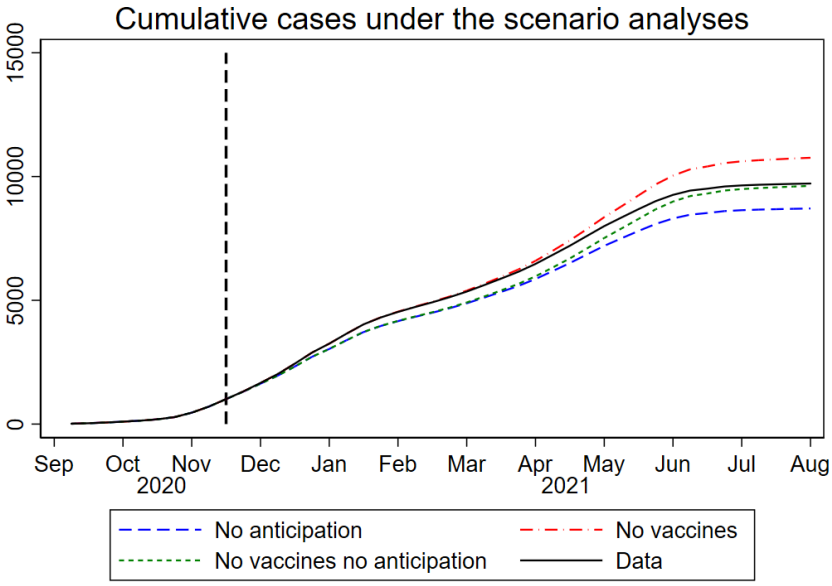


Fig. S9. Replication of Fig. 3 using two times the estimated treatment effect. This figure replicates Fig. 3 in the main text but assumes instead that the treatment effect on health behaviors translates into mobility at twice the rate assumed in the main analysis(based on Zhou et al. 2020). The cumulative cases by mid-July are 9,719, the simulated cumulative cases without anticipation are 8,709, the simulated cumulative cases without vaccines are 10,760, and the simulated cumulative cases without anticipation nor vaccines are 9,622.

2. Tables

Table S1. Summary statistics table of all control variables

Variable	N	mean	sd	min	max
Female	1,617	0.510	0.500	0	1
University degree	1,617	0.365	0.482	0	1
Single household	1,617	0.326	0.469	0	1
Income in 1,000 SEK per adult	1,617	21.40	12.84	1	95
No children at home	1,617	0.700	0.458	0	1
Big city	1,617	0.327	0.469	0	1
City	1,617	0.237	0.426	0	1
Small city	1,617	0.154	0.361	0	1
Work	1,617	0.515	0.500	0	1
Age categories:					
18-29	1,617	0.145	0.353	0	1
30-39	1,617	0.200	0.400	0	1
40-49	1,617	0.169	0.375	0	1
50-59	1,617	0.181	0.385	0	1
60-69	1,617	0.140	0.347	0	1
70+	1,617	0.164	0.370	0	1

Table S2. Balance check with all control variables that are included in the most extensive specification.

Variable:	Treatment Difference
Female	-0.038
	(0.025)
Age categories:	
18-29	0.007
	(0.018)
30-39	-0.009
	(0.020)
40-49	-0.009
	(0.019)
50-59	0.006
	(0.019)
60-69	-0.002
	(0.017)
70+	0.007
	(0.018)
Income in 1000 SEK per adult	0.744
	(0.639)
Work	-0.028
	(0.025)
No children at home	-0.023
	(0.023)
Single household	0.011
	(0.023)
University degree	0.028
	(0.024)
Big city	0.031
	(0.023)
City	-0.032
	(0.021)
Small city	0.012
	(0.018)

Note: Treatment Difference indicates the coefficient estimate from a regression of each respective variable shown on the left on an indicator variable capturing the treatment. The table shows that there were no substantial differences across treatment and control group in the experiment. Heteroscedasticity robust standard errors in parentheses.

Table S3. Avoids contact and keeps informed.

Dependent variables:	(1) Avoids contact	(2) Avoids contact	(3) Avoids contact	(4) Keeps informed	(5) Keeps informed	(6) Keeps informed
Vaccine Information	-0.27***	-0.26***	-0.26***	-0.21***	-0.20***	-0.20***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Observations	1,617	1,617	1,617	1,617	1,617	1,617
R-squared	0.02	0.16	0.17	0.01	0.15	0.16
Gender		Yes	Yes		Yes	Yes
Age categories		Yes	Yes		Yes	Yes
Controls			Yes			Yes

Note: The table shows the treatment effect estimate for people receiving vaccine information on health behaviors using linear regressions. Age categories include 6 indicators for age categories. Controls include adult income, a dummy indicating unemployment, a dummy indicating children, a dummy indicating single households, a dummy indicating a university degree, and dummies indicating whether people live in a big city/regular city/small city. Heteroscedasticity robust standard errors are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table S4. Keeps distance and avoids travel

Dependent variables:	(1) Keeps distance	(2) Keeps distance	(3) Keeps distance	(4) Avoids travel	(5) Avoids travel	(6) Avoids travel
Vaccine Information	-0.22***	-0.21***	-0.21***	-0.22***	-0.21***	-0.20***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Observations	1,617	1,617	1,617	1,617	1,617	1,617
R-squared	0.01	0.12	0.13	0.01	0.06	0.07
Gender		Yes	Yes		Yes	Yes
Age categories		Yes	Yes		Yes	Yes
Controls			Yes			Yes

Note: The table shows the treatment effect estimate for people receiving vaccine information on health behaviors using linear regressions. Age categories include 6 indicators for age categories. Controls include adult income, a dummy indicating unemployment, a dummy indicating children, a dummy indicating single households, a dummy indicating a university degree, and dummies indicating whether people live in a big city/regular city/small city. Heteroscedasticity robust standard errors are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table S5. Coughs in elbow and no face touching.

Dependent variables:	(1) Coughs in elbow	(2) Coughs in elbow	(3) Coughs in elbow	(4) No face touching	(5) No face touching	(6) No face touching
Vaccine Information	-0.19***	-0.18***	-0.18***	-0.16***	-0.16***	-0.15***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Observations	1,617	1,617	1,617	1,617	1,617	1,617
R-squared	0.01	0.11	0.13	0.01	0.05	0.07
Gender		Yes	Yes		Yes	Yes
Age categories		Yes	Yes		Yes	Yes
Controls			Yes			Yes

Note: The table shows the treatment effect estimate for people receiving vaccine information on health behaviors using linear regressions. Age categories include 6 indicators for age categories. Controls include adult income, a dummy indicating unemployment, a dummy indicating children, a dummy indicating single households, a dummy indicating a university degree, and dummies indicating whether people live in a big city/regular city/small city. Heteroscedasticity robust standard errors are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table S6. Washes hands and self-isolates.

Dependent variables:	(1) Washes hands	(2) Washes hands	(3) Washes hands	(4) Self-isolates	(5) Self-isolates	(6) Self-isolates
Vaccine Information	-0.17***	-0.16***	-0.15***	-0.20***	-0.20***	-0.20***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Observations	1,617	1,617	1,617	1,617	1,617	1,617
R-squared	0.01	0.09	0.11	0.01	0.08	0.09
Gender		Yes	Yes		Yes	Yes
Age categories		Yes	Yes		Yes	Yes
Controls			Yes			Yes

Note: The table shows the treatment effect estimate for people receiving vaccine information on health behaviors using linear regressions. Age categories include 6 indicators for age categories. Controls include adult income, a dummy indicating unemployment, a dummy indicating children, a dummy indicating single households, a dummy indicating a university degree, and dummies indicating whether people live in a big city/regular city/small city. Heteroscedasticity robust standard errors are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table S7. Informs contacts and wears mask.

Dependent variables:	(1) Informs contacts	(2) Informs contacts	(3) Informs contacts	(4) Wears mask	(5) Wears mask	(6) Wears mask
Vaccine Information	-0.17***	-0.16***	-0.16***	-0.14***	-0.13***	-0.13***
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Observations	1,617	1,617	1,617	1,617	1,617	1,617
R-squared	0.01	0.06	0.06	0.00	0.03	0.04
Gender		Yes	Yes		Yes	Yes
Age categories		Yes	Yes		Yes	Yes
Controls			Yes			Yes

Note: The table shows the treatment effect estimate for people receiving vaccine information on health behaviors using linear regressions. Age categories include 6 indicators for age categories. Controls include adult income, a dummy indicating unemployment, a dummy indicating children, a dummy indicating single households, a dummy indicating a university degree, and dummies indicating whether people live in a big city/regular city/small city. Heteroscedasticity robust standard errors are shown in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table S8. Impact on perceived duration oft the pandemic: Life starts getting back to normal in February (standardized)

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Pand. over Feb.	Pand. over Feb.	Pand. over Feb.	Pand. over Feb.	Pand. over Feb.	Pand. over Feb.
Vaccine Information	0.14*	0.14**	0.15**	0.10*	0.10*	0.10*
	(0.07)	(0.07)	(0.07)	(0.06)	(0.06)	(0.05)
Observations	805	805	805	1,617	1,617	1,617
R-squared	0.00	0.06	0.09	0.00	0.07	0.09
Gender		Yes	Yes		Yes	Yes
Age Categories		Yes	Yes		Yes	Yes
Controls			Yes			Yes

Note: The table shows the treatment effect estimate for people receiving vaccine information on the perceived duration of the pandemic (standardized). Columns (1) to (3) only include the comparison between treatment 2a and treatment 2b as preregistered and therefore have a lower number of observations. Age categories include 6 indicators for age categories. Controls include adult income, a dummy indicating unemployment, a dummy indicating children, a dummy indicating single households, a dummy indicating a university degree, and dummies indicating whether people live in a big city/regular city/small city. Heteroscedasticity robust standard errors are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table S9. Impact on perceived duration oft the pandemic: Remaining duration of the pandemic in months (standardized)

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	Months left	Months left	Months left	Months left	Months left	Months left
Vaccine Information	-0.06	-0.05	-0.07	-0.09	-0.08	-0.09
	(0.07)	(0.07)	(0.07)	(0.06)	(0.06)	(0.06)
Observations	805	805	805	1,617	1,617	1,617
R-squared	0.00	0.02	0.06	0.00	0.01	0.04
Gender		Yes	Yes		Yes	Yes
Age Categories		Yes	Yes		Yes	Yes
Controls			Yes			Yes

Note: The table shows the treatment effect estimate for people receiving vaccine information on the perceived duration of the pandemic (standardized). Columns (1) to (3) only include the comparison between treatment 2a and treatment 2b as preregistered and therefore have a lower number of observations. Age categories include 6 indicators for age categories. Controls include adult income, a dummy indicating unemployment, a dummy indicating children, a dummy indicating single households, a dummy indicating a university degree, and dummies indicating whether people live in a big city/regular city/small city. Heteroscedasticity robust standard errors are shown in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table S10. Probit regression of the willingness to stay-at-home (yes or no) on treatment using the data across scenarios (one decision per scenario), controlling for scenario characteristics and clustering of standard errors on the participant level.

	(1)	(2)	(3)
Dependent variable:	Stay home	Stay home	Stay home
Vaccine Information	-0.10**	-0.10**	-0.10**
	(0.04)	(0.04)	(0.04)
Observations	14,553	14,553	14,553
Individuals	1,617	1,617	1,617
Scenario Fixed Effects	Yes	Yes	Yes
Gender		Yes	Yes
Age categories		Yes	Yes
Controls			Yes

Note: The table shows the treatment effect estimate for people receiving vaccine information on the likelihood of participating in a specific stay-at-home program scenario using probit regression. Throughout and as pre-specified, we control for scenario characteristics by including one indicator variable for each scenario (scenario fixed effects). Age categories include 6 indicators for age categories. Controls include adult income, a dummy indicating unemployment, a dummy indicating children, a dummy indicating single households, a dummy indicating a university degree, and dummies indicating whether people live in a big city/regular city/small city. Cluster robust standard errors clustered at the individual level are shown in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table S11. Linear regression of the willingness to stay-at-home on treatment using linear regression using the average likelihood to participate across scenarios as the outcome.

	(1)	(2)	(3)
Dependent variable:	Stay home	Stay home	Stay home
Vaccine Information	-0.04**	-0.04**	-0.04**
	(0.02)	(0.02)	(0.02)
Observations	1,617	1,617	1,617
Individuals	0.00	0.02	0.02
Gender		Yes	Yes
Age categories		Yes	Yes
Controls			Yes

Note: The table shows the treatment effect estimate for people receiving vaccine information on the average likelihood for a participant to participate in a stay-at-home across scenarios. Age categories include 6 indicators for age categories. Controls include adult income, a dummy indicating unemployment, a dummy indicating children, a dummy indicating single households, a dummy indicating a university degree, and dummies indicating whether people live in a big city/regular city/small city. Cluster robust standard errors clustered at the individual level are shown in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table S12. Prinicipal component of health behaviors as the dependent variable.

Dependent variable:	(1) Health Behaviors PC	(2) Health Behaviors PC	(3) Health Behaviors PC
Vaccine Information	-0.27***	-0.26***	-0.25***
	(0.05)	(0.05)	(0.05)
Observations	1,617	1,617	1,617
R-squared	0.02	0.16	0.17
Gender		Yes	Yes
Age FE		Yes	Yes
Controls			Yes

Note: The table shows the treatment effect estimate for people receiving vaccine information on health behaviors using linear regressions and the principal component as the dependent variable. All health items have similar factor loadings for the principal component and are all positive. Age categories include 6 indicators for age categories. Controls include adult income, a dummy indicating unemployment, a dummy indicating children, a dummy indicating single households, a dummy indicating a university degree, and dummies indicating whether people live in a big city/regular city/small city. Heteroscedasticity robust standard errors are shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table S13. Sample characteristics and the Swedish population

Variables:	Sample mean	Sweden Mean
Age categories:		
18–25 years	0.09	0.12
26–35 years	0.18	0.18
36-45 years	0.17	0.16
46-55 years	0.20	0.17
56-65 years	0.13	0.14
66 years and older	0.23	0.24
Female	0.51	0.50
Region Stockholm	0.22	0.23
Region Östra Mellansverige	0.17	0.17
Region Smaland med öarna	0.09	0.08
Region Sydsverige	0.15	0.15
Region Västsverige	0.19	0.20
Region Norra Mellansverige	0.08	0.08
Region Mellersta Norrland	0.04	0.04
Region Övre Norrland	0.05	0.05

Note: The table shows summary statistics compared to the whole Swedish population based on 2020 data.

Table S14. Treatment effect on the main outcome variables interacted with patience and risk attitudes.

Dependent variables:	(1) Health Behaviors	(2) Health Behaviors	(3) Health Behaviors	(4) Stays Home	(5) Stays Home	(6) Stays Home
Vaccine Information	-0.12***	-0.20***	-0.14***	-0.10	-0.12**	-0.10
	(0.04)	(0.04)	(0.05)	(0.06)	(0.06)	(0.07)
Risk-Tolerant	0.06		0.06	0.06		0.06
	(0.05)		(0.05)	(0.07)		(0.07)
Risk-Tolerant x Vaccine Inf.	-0.15**		-0.16**	-0.06		-0.06
	(0.07)		(0.07)	(0.10)		(0.10)
Patient		0.26***	0.26***		0.14*	0.14*
		(0.04)	(0.04)		(0.08)	(0.08)
Patient x Vaccine Inf.		0.06	0.06		0.01	0.01
		(0.06)	(0.06)		(0.10)	(0.10)
Observations	1,617	1,617	1,617	1,617	1,617	1,617
R-squared	0.17	0.22	0.22	0.03	0.04	0.04
Gender	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes

Note: The table shows the treatment effect estimate for people receiving vaccine information on health behaviors using linear regressions. Higher values in "Health behavior index" indicate better intended health behaviors to stop the spread of the virus. Stays at home indicates a higher willingness to stay at home for the different scenarios in the choice experiment. Risk-Tolerant indicates an above-median response to a question about general willingness to take risks: "Please tell me, in general, how willing or unwilling you are to take risks?" with answers ranging from 0 ("completely unwilling to do so") to 10 ("very willing to do so"). Patient indicates an above-median response on a scale from 0 ("very impatient") to 10 ("very patient to") to a question about general patience: "Are you generally an impatient person, or someone who always shows great patience?". The corresponding interaction terms are shown below the main preference coefficients. Age categories include 6 indicators for age categories. Controls include adult income, a dummy indicating unemployment, a dummy indicating children, a dummy indicating single households, a dummy indicating a university degree, and dummies indicating whether people live in a big city/regular city/small city. Heteroscedasticity robust standard errors are shown in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

3. Scenario analysis

1. Translating changes in health behaviors to mobility changes and changes in cases:

a) Mobility and cases: To build the counterfactual scenario in which there are no vaccine anticipation effects, we first use the previous evidence on how social distancing affects COVID-19 cases. Zhou et al. (2020) document that a 20% mobility reduction roughly translates into a 30% reduction in peak cases in Wuhan, China.[1] Interestingly, this effect is surprisingly linear across mobility levels. The authors find that a mobility reduction of 20%, 40%, and 60% leads to a reduction in peak cases of 33%, 66% and 91%, respectively.

b) The mapping of health behaviors to mobility and cases: To build a measure of social distancing roughly comparable to the effects of the mobility restrictions studied in Zhou et al. (2020), we construct an index for each participant in our dataset ranging from 0 to 100, where 0 corresponds to the minimum level of compliance for each health behavior, and 100 corresponds to the maximum level of compliance. In line with the main analysis, we use all health behavior questions in the survey. More concretely, we take the arithmetic mean across all questions and rescale it from 0 to 100. The treatment effect of vaccine information on this variable is -5.12. We then assume that this treatment effect is equivalent to an equivalent reduction in mobility: We assume a 1 point change on the scale of health behaviors from 0 to 100 translates in to 1 percentage point change in mobility. Assuming the treatment effects is a valid proxy for the mobility drop, the results from Zhou et al. (2020) imply a decrease in peak cases of -7.68%: A 20% mobility reduction means a 30% percent reduction in peak cases, so (-20%/-5.12%)*-30% = -7.68%.

Fig. S8 and Fig. S9 further provide sensitive analyses by assuming that the treatment effect translates into mobility at half (Fig. S8) or double (Fig. S9) the 1 to 1 rate.

In Fig. S7, we show the results only using the two health behaviors that explicitly involve mobility ("Self-isolates" and "Avoids travel"). Since the treatment effects on these two variables are very similar to the treatment effect on all the variables, the results are nearly identical.

[1] While this study is based on data from China and not from Sweden, it provides, to our knowledge, the best available evidence on how changes in mobility impact COVID-19 cases.

2. *Timing of news and accrual of anticipation effects:*

In the scenario analysis, we make assumptions about when the main positive news about the efficiency and safety of the COVID-19 vaccines affected behavior. On November 9th, 2020, Pfizer-BioNTech reported that their vaccine is safe and has an effectiveness of 90%, way above FDA's efficiency requirement of 50%. On November 16th, 2020, Moderna reported that their vaccine is also safe and has an effectiveness of 94.5%. Both news prompted a wave of optimism. The Dow Jones Industrial Average closed up 2.95% on November 9th and 1.4% on November 16th. Swedish newspapers had headlines such as "This is how the world rejoices the gratifying vaccine reports" (Aftonbladet, November 10th) and "Light in the darkness with promising vaccines" (Dagens Nyheter, November 21st).[2]

While there were more positive news throughout the following weeks, none prompted a response from the stock market nor the media as substantial as the news on November 9th and 16th. In the scenario analysis, we hence assume that the dates November 9th-16th prompted the vaccine optimism effect, and that the effect on COVID-19 cases started to be effective in the following week. Moreover, since we expect our treatment effects to lead to a reduction in peak cases of 7.68%, we assume that the effect linearly increased daily until it reached 7.68% at the peak of the wave, which took place in December 23 (see Fig. 3). More concretely, we assume a uniform reduction in case growth from November 16 until the peak of the wave in December 23.

3. *Development of COVID-19 cases:*

Throughout we base our scenario analysis on the exp-post data of actual weekly case numbers, obtained from the Public Health Agency of Sweden (Folkhälsomyndigheten). To construct counterfactual scenarios without vaccine anticipation *after* the peak in December, we simply assume that the cases increase and decrease in the same way as with the real data. This is, for each week we compute the proportional increase or decrease in cases in the data and apply this change to the counterfactual simulation.

[2] Aftonbladet and Dagens Nyheter are the two largest newspapers in Sweden. These titles are translated from the original Swedish titles "Så jublar världen efter glädjande vaccinbeskedet" (https://www.aftonbladet.se/nyheter/a/pAAqKw/sa-jublar-varlden-efter-gladjande-vaccinbeskedet) and "Ljus i mörkret med lovande vaccin" (https://www.dn.se/vetenskap/karin-bojs-ljus-i-morkret-med-lovande-vaccin/).

4. *Accounting for the effects of vaccination on cases:*

As of summer 2021, it remains unknown how vaccination affects community spread. While there is mounting evidence that vaccinated people are less likely to infect others (Harris et al. 2021; Layan et al. 2021; Salo et al. 2021), the current studies focus on intra-household infection and the estimates vary greatly. We therefore restrict our analysis to the much-studied and robust effects of vaccination on infection at the individual level. In particular, we follow Pritchard et al. (2021) who report an effectiveness of the Pfizer-BioNTech vaccine in the UK of 66% after the first dose and 80% after the second one. The paper also reports similar effects for other vaccines. However, we focus on the Pfizer-BioNTech vaccine estimates since more than three quarters of the COVID-19 vaccines used in Sweden to date are Pfizer-BioNTech. To construct the counterfactual scenario without vaccines, we merge the COVID-19 cases data with data from the Swedish Public Health Agency on the number of people vaccinated each week with one and with two doses. By assuming that the proportion who is vaccinated is protected as in Pritchard et al. (2021), we estimate a counterfactual scenario in which no one is vaccinated.

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Zhou, Y., Xu, R., Hu, D., Yue, Y., Li, Q., & Xia, J. 2020. Effects of human mobility restrictions on the spread of COVID-19 in Shenzhen, China: a modelling study using mobile phone data. Lancet Digit. Health, 2(8), e417-e424.

4. Complete survey

Below follows the complete set of question blocks. The order of the different parts follows the structure presented in Table S1. The questions are translated from Swedish.

Vaccine information

During the latest weeks, positive information about several vaccines against Covid-19 has emerged.

Studies show that several of these have over 90 % effectiveness, which is much better compared to the vaccines against the seasonal flu.

Vaccination against Covid-19 has already started in Great Britain among other countries. Sweden has together with the EU signed agreements with several of these vaccine suppliers and preliminary information suggest that the first vaccine will be approved for use within EU late December. The likelihood is therefore high that vaccinations will commence in Sweden around the turn of the year.

The government has informed that the vaccination will be free of charge.

We now ask you to answer a couple of questions about the Covid-19 vaccines.

Are the following statements on the coming vaccines against Covid-19 true?

The vaccines give better protection than the regular seasonal-flu vaccine.
[Possible answers: Correct/incorrect]

The first vaccines are expected to be approved in late December
[Possible answers: Correct/incorrect]

[Participants could only move on after answering the above two questions correctly.]

To what extent do the following statements describe you?

I have closely followed the news about the rapid vaccine development
[Possible answers: 7-point scale from "Does not apply at all" to "Applies very much"]

Over the last months my hopes concerning the effectiveness of a COVID-19 vaccine become more optimistic
[Possible answers: 7-point scale from "Does not apply at all" to "Applies very much"]

I think it is more likely today than two months ago that a vaccine will help us returning to a more normal way of living in the early 2021
[Possible answers: 7-point scale from "Does not apply at all" to "Applies very much"]

Pandemic durations questions

In February 2021 life will start to look like it did in February 2020, before the outbreak of the pandemic.

[Possible answers: 7-point scale from "Strongly disagree" to "Strongly agree"]

In how many months do you think the restrictions imposed by the coronavirus will be removed? That is, when do you think life returns to normal in Sweden? (in months)
[Possible answers: 1,2,…,24 months +]

Health Behaviors

Now we will ask you about your behavior regarding the ongoing outbreak of the coronavirus (COVID-19).

Looking ahead, to what extent do the following statements describe your behavior in response to the outbreak of the coronavirus (COVID-19)?

- I will try to avoid social contacts in person (for example, I attend fewer social gatherings)
- I will inform myself about how the spread of the corona virus can be prevented
- I will keep at least two meters distance from other people
- I will refrain from private domestic trips outside my home municipality (e.g., to holiday homes and acquaintances)
- I will cough and sneeze into my elbow or a tissue instead of the hand
- I will touch my face less often than usual
- I will wash my hands more often than usual when not at home

[Note: Participants answered on a 7-point scale ranging from from 1= "Does not apply at all" to 7= "Applies very much"]

If you exhibited mild symptoms of illness (e.g., coughing) tomorrow, how much do the following statements apply to your behavior in the next two weeks?

- I will self-quarantine
- I will immediately inform people who had contact with me
- I will wear a mask, or something else to cover my mouth (e.g., a scarf), if I have to leave home

[Note: Participants answered on a 7-point scale ranging from from 1= "Does not apply at all" to 7= "Applies very much"]

Choice Experiment

What would you do?
Imagine that in an attempt to reduce the number of people infected by the corona virus (COVID-19) in Sweden, the government is introducing a program with the possibility for households to go on voluntary self-quarantine. For the program to be effective, at least 30 percent of households in Sweden must participate, *which includes your age group and where you live*. Adults who participate in the program would still be able to work (either from home or in the workplace), but they would **have to stay in their home during their free time** and only go out for a limited time each day.

We consider a situation where shops, restaurants, gyms, parks and cinemas would be open and only large events are closed.

If you voluntarily participates in the program you would need to do so throughout the duration of the program. When the maturity has expired, you are free to go back to your usual routines.

Exactly how such a program would look like depends on a number of aspects. For this reason, we will ask about your household's willingness to participate in such a program under different circumstances. More precisely, we will examine the following aspects:

1) **Length of quarantine** (the number of weeks that one needs to stay at home). We consider three different levels:

- 2 weeks
- 4 weeks
- 6 weeks

2) **Hours outside the home** (number of hours per week that each person in the household (adult and child) is allowed to be outside the home except for work). This would be controlled and violations of the rules would result in fines for those in the household who violate the rules. We consider three different levels:

- 2 hours a week
- 8 hours a week
- 14 hours a week

3) **Compensation** The authorities are aware that it is costly for people to participate and may therefore pay compensation. We examine six different levels of remuneration per adult in the household per week (after tax):

- SEK 0 per adult (no compensation)
- SEK 500 per week per adult
- SEK 1000 per week per adult
- SEK 1500 per week per adult
- SEK 2000 per week per adult
- SEK 2500 per week per adult

Let us show you an example of how we will ask you questions (you cannot mark any answer in this example).

If the program looked like below, what would your household do?

Quarantine length	4 weeks
Hours outside the home	8 hours a week
Compensation (after tax)	SEK 1000 per week per adult

☐ I would want my household to participate

☐ I would not want my household to attend

We would like to know what you would like your household to do in these different situations. Note that you make a choice for the entire household so that participation will affect all members of the household. We will ask you to make nine such choices. It is important that you try to see each question as a stand-alone question.

Note that there is no right or wrong answer. We are interested in what different people think and what choices they make. Even we ourselves who are conducting this study feel different about participating in such a program.

Below are the nine different versions of the program that we ask you to consider. Please consider your choices carefully and feel free to go up and down the page and change your choices until you are satisfied.

Remember that **shops, restaurants, gyms, parks and cinemas would be open regardless of whether you are in the program or not. Only major events are closed.**

[All the choices come here but we only include one for sake of space. Please refer to the paper for the full set of parameter configurations]

If the program looked like below, what would your household do?

Quarantine length	X weeks
Hours outside the home	Y hours a week
Compensation (after tax)	SEK Z per week per adult

☐ I would want my household to participate

☐ I would not want my household to attend

Additional Survey Questions

During the last 7 days, how often did you leave your home to:

- Buy things other than food and medicine (e.g. clothes)
- Do physical activities with other people (e.g. gym, football, tennis, golf, group workouts)?
- hang out with friends and relatives who do not live in the same household?

[Possible answers: "never", "1-2 times/week" "3-4 times/week" "5-6 times/week" "7-8 times/week" "more than 8 times/week"]

Think now about a normal week one **year ago**. During this week, how often did you leave your home to:

- Buy things other than food and medicine (e.g. clothes)
- Do physical activities with other people (e.g. gym, football, tennis, golf, group workouts)?
- hang out with friends and relatives who do not live in the same household?

[Possible answers: "never", "1-2 times/week" "3-4 times/week" "5-6 times/week" "7-8 times/week" "more than 8 times/week"]

What year were you born? (select year)

Do you identify yourself as a woman or a man?

[Possible answers: woman, man, neither man nor woman]

What describes you best?

[Possible answers: single, living apart, couple, married, other]

What is your main occupation?

[Possible answers: work, unemployed, student, retired, other]

What education do you have (fill out the highest you have)?

[Possible answers: elementary, highschool, professional training, ongoing university studies, university studies, research studies]

Which of the following topics describes best what you studied at the university?

[Possible answers: Humanities, pedagogics, business economics and law, social sciences (not including economics), medicine, health sciences and social work, natural sciences and math, technical education]

Does your job allow you to work from home?

[Possible answers: yes to a large extent, yes to some extent, no, I have no job]

Does your partner's job allow him/her to work from home?

[Possible answers: yes to a large extent, yes to some extent, no, She/he has no job]

How many children live in your household?

[Possible answers: no children, 1 child, 2 children, 3 children, 4 children, 5 or more children]

How many adults (over 18 years old) live in your household (including yourself)?

[Possible answers: 1 adult, 2 adults, 3 adults, 4 adults, 5 or more adults]

How much is your households total income per month after taxes including public benefits? Include also your student loan if you are a student. Please answer even if you're not sure.

[Possible answers: 0-10000kr, 10001-20000kr, 20001-30000kr, 30001-40000kr, 40001-50000kr, 50001-60000kr, 60001-70000kr, 70001-80000kr , 80001-90000kr, more than 90001 kr]

Where do you live?

[Possible answers: Stockholm, Gothenburg, Malmö, large city (more than 50000 inhabitants), middle city (between 20000 and 50000 inhabitants), small city (less than 20000 inhabitants)]

What type of home do you have?

[Possible answers: House, terraced house, flat]

How large is your home in square meters?

[Possible answers: 0-40, 41-60, 61-80, 81-120, 120-200, more than 200]

Do you have a garden?

[Possible answers: yes, no]

Do you have one or more balconies?

[Possible answers: yes, no]

How likely do you think it is that you have had Covid-19? Answer between 0 and 100%, where 0% is that you are absolutely certain that you have not been infected with Covid-19, and 100% that you absolutely believe you have been infected.

[Possible answers: 0%, 10%, …, 100%]

How many relatives and close friends do you have that belong to the risk group for coronavirus?
[Possible answers: none, 1, 2-3, 4-5, 6-8, more than 8]

How many of your relatives and close friends have had a confirmed Covid-19 infection? **[Possible answers: none, 1, 2-3, 4-5, 6-8, more than 8]**

To what extent do the following statements describe your concerns about the ongoing outbreak of the coronavirus (COVID-19)

- I'm worried about getting infected
- I am worried that healthcare will not be able to offer good care to everyone
- I am worried that my finances will be hit hard
- I am worried that the Swedish economy will be hit hard
- Sweden has responded strongly enough
- I believe that social distancing is important to overcome the outbreak of viruses

[Note: Participants answered on a 7-point scale ranging from from 1= "Does not apply at all" to 7= "Applies very much"]

Imagine that a vaccine for the coronavirus (COVID-19) becomes available in Sweden in Spring 2021. The vaccine has passed all safety checks in Sweden and is effective in protecting against the coronavirus. What do you think are the chances that you will get the vaccine?

[Possible answers: 0%, 10%, …, 100%]

Do you have facemasks home?
[Possible answers: yes, no]

How much do you trust the government?
[Possible answers: a lot, quite a lot, not so much, none at all]

Please tell me, in general, how willing or unwilling you are to take risks?, Respond using a scale from 0 to 10, where 0 means you are "completely unwilling to take risks" and 10 means you are "very willing to take risks." You can also use any number between 0 and 10 to indicate where you fall on the scale
[Possible answers: 0, 1, 2,…,10]

How willing or unwilling are you to take risks affecting your health? Respond to a scale of 0 to 10 where 0 means you are "totally unwilling to take risks that affect my health" and 10 means you are "very willing to take risks that affect my health".
Possible answers: 0, 1, 2,…,10]

How well does each of the following statements describe you as a person? Please indicate your answer on a scale from 0 to 10. A 0 means "does not describe me at all," and a 10 means "describes me perfectly."

- I assume that people have only the best intentions.
- I am good at math.

[Possible answers: 0, 1, 2,…,10]

Now we describe a person. **How much do you think this person looks like you?**

- It is important for this person to always act correctly and to avoid doing what people would say is wrong

[Possible answers: a lot like me, like me, partly like me, a little like me, not like me, not like me at all]

We now ask you for your willingness to act in a certain way. Please again indicate your answer on a scale from 0 to 10. A 0 means "completely unwilling to do so," and a 10 means "very willing to do so."

- How willing are you to give to good causes without expecting anything in return?
- How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future?

Possible answers: 0, 1, 2,…,10]

Are you generally an impatient person, or someone who always shows great patience? Respond to a scale of 0 to 10 where 0 means you are "very impatient" and 10 means you are "very patient"
Possible answers: 0, 1, 2,…,10]

One often speak of political views as being placed on a scale from left to right. Where would you place yourself on such a scale?
[Possible answers: 1-5: 1= Clearly to the left, 2=Somewhat to the left',' 3=Neither left or right,' 4= Somewhat to the right,' 5= Clearly to the right]

One often speak of political views being founded either on the perception of the importance of the individuals rights and freedoms or on the importance of national traditions and experiences. Where would you place yourself on this scale?
[Possible answers: 1-5; 1= individual's rights and freedom is most important, 5 = national traditions and experiences are most important]

To what extent do the following statements describe your views about the measures taken by governmental agencies and politicians in Sweden.
[Possible answers: 1= Do not agree,…, 7=Fully agree]

- They should periodically completely close restaurants, cafes, gyms, and gyms.
- They should periodically close primary schools (grades F-9) and switch to distance learning
- They should be periodically banned from leaving the home other than for necessary purposes (such as doctor visits and the purchase of food and medicine)
- They should issue a recommendation to wear a mouth guard in environments where the recommended distance cannot be maintained.
- They should introduce stricter quarantine rules for those traveling to Sweden
- Politicians should listen less to the authorities and instead make their own assessments of what measures are necessary
- All in all, Sweden should have done as our neighboring countries and implemented a tougher shutdown of society