Does receiving expert information about COVID-19 risk factors change people's perceptions of health and economic risks, subsequent support for mitigation policies, and demand for further information?[1]

Abstract. Most current pandemic preparedness plans make mention of expert information as a crucial part of health risk communication in public health emergencies. However, there is a dearth of research on the effect of such communication efforts in low- and middle-income countries. This paper uses data from a randomised control information experiment on the matter in El-Salvador during the onset of the recent COVID-19 pandemic to investigate the role of expert information in shaping risk perceptions and policy support. The findings suggest that the effect of expert information is limited to specific framings and certain conditions. Prior beliefs about the communicated risk as well as personal experiences are strong moderators of the effect of expert information.

Keywords: COVID-19, survey experiment, El-Salvador, LMIC, health risk communication, risk perception

[1] I would like to thank my academic mentor Dr. Justin Parkhurst and my supervisor Dr. Mylene Lagarde for their guidance and advice.

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1. Introduction

During public health emergencies like pandemics and epidemics of infectious diseases, the prevention and mitigation of harm is crucially dependent on support from the wider society [1–3]. This support (or lack thereof) influences protective behaviour, vaccination rates, and support for and compliance with containment measures [4]. Especially the latter can often involve severe sacrifices and civil rights trade-offs. In the aftermath of the H1N1 influenza pandemic that occurred between 2009 and 2011, scholars highlighted that risk perceptions are a main determinant for the willingness to accept said trade-offs [5]. The onsets of pandemics are also usually characterised by high levels of uncertainty around the novel public health threats and consequentially, risk perceptions are hard to predict due to lacking issue localisation. This uncertainty necessitates effective risk communication as an essential tool in public health crisis strategies [6]. Since the H1N1 pandemic, international organisations and national policy makers have often emphasized the role of expert information in minimising potential knowledge gaps about the epidemiological risk of a disease and therein raising policy support through such risk communication efforts [6]. This raises the questions, (a) whether better information actually does affect policy support and risk perception, and (b) how it needs to be presented to be most effective. These questions have been extensively addressed in high income countries in the wake of public health emergencies and non-emergencies as well as, to a lesser extent, in low-income settings regarding non-emergencies.

This study adds to the debate by examining risk preferences, their link to policy support, and the role of information in shaping them in the context of the recent COVID-19 pandemic in El-Salvador. Momentarily, there are several evidence gaps relating to risk communication in pandemics in low- and middle-income countries (LMICs). First, there is little scholarship on the economic and health struggles of poor segments of the populations. Of the emerging studies, most rely on data collected in high-income settings after the crises began and/or on samples that either do not include lower socioeconomic groups or very small samples. Second, it is unclear how these populations perceive and evaluate the economic and health risks they face, how these risks interact, and how these risks shape their potential support or rejection of policy. Third, it is important to understand whether false beliefs in risk groups correlate with higher risk tendencies.

Lastly, it needs to be confirmed whether people update their political beliefs and preferences when given information about known risk factors for the disease. This study aims to fill these gaps with experimental evidence from an information experiment in El-Salvador. It is found that the provision of expert information, specifically tailored information, alone does not lead to a general change of either risk perceptions or policy preferences among the poor in El-Salvador. The results further show that health risk perceptions are seemingly disconnected from economic risk perceptions and policy preferences.

The first section of this paper provides background information on the course of the COVID-19 pandemic in El-Salvador in the context of the country's healthcare and economic system. Following that, common theoretical approaches to risk perceptions and policy preferences will be presented and synthesised into assumptions for this study. Next, the experimental data and analysis plan will be introduced, followed by the results and discussion.

2. Background: COVID-19 in E-Salvador

The response to COVID-19 at the start of the pandemic in El-Salvador was among the strictest in the world [7]. Even before the first confirmed case was reported in the country, a 30-day state of emergency and 15-day state of exception were declared by the government [8,9]. Shortly afterwards, the borders of the country were closed for emigration and immigration with almost no exceptions. The measures were increased on March 20 with the introduction of a 30-day mandatory quarantine for all citizens and strict enforcement by the national and local polices [10]. The decree allowed only single individuals to leave the house to acquire groceries or medicine, with exceptions for essential workers. Any violation could result in a forced quarantine in public "containment centres", with health authorities determining whether an individual's action constitutes a violation [11]. The self-isolation policies and state of emergencies were extended several times, each time with increasing coerciveness [7]. Since then, thousands of citizens have been detained under the pandemic regulations without judicial review [7].

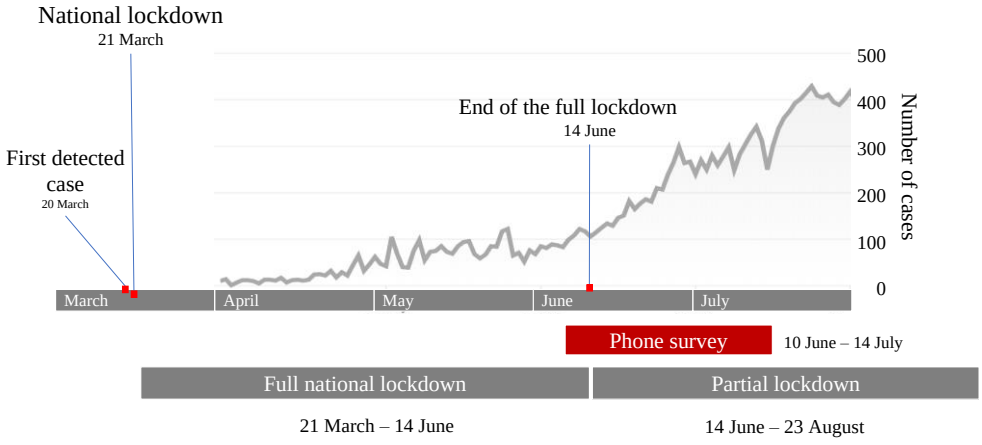

Figure 1: Timeline of the onset of the COVID-19 pandemic in El-Slavador

Notes: Retrieved from Our World in Data (OWD) based on data provided by COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University [12,13]

The country's supreme court declared the president's policies and enforcement tactics unconstitutional on April 16, however, the ruling was not met with compliance by the government.

Despite the country's low number of COVID-19 infections in 2020, and the newly established COVID-only hospital in the capital, Médecins Sans Frontières described El-Salvador's health system as close to

collapse [14]. The country's health care system is considered critically understaffed and underfunded, which leads to a poor coverage density, especially for the poorer part of the population [15]. As in other LMICs where the response to the COVID-19 crisis involved severe restrictive measures, the measures taken by the El-Salvadoran government caused concern for the most vulnerable populations. Poorer segments of the population bear a high burden of noncommunicable diseases, which increase the risk of developing severe or very severe symptoms of COVID-19. The incidence of COVID-19 risk factors (eg cardiovascular diseases like hypertension, diabetes, and others) is higher, access to health care is lower, and people with lower socioeconomic status often live in crowded places with above average viral spread rates [16]. At the same time, harsh government-imposed sanctions create specific challenges and costs for the poorest. According to the International Labour Organisation (ILO), 68,9% of workers in 2020 were employed in informal labour [17]. As the sanctions forced many of these people out of work, this proportion of the population may no longer be able to earn income and therefore be of risk to fall even deeper into poverty. The study at hand seeks to investigate how this segment of the El-Salvadorian society formulates their economic as well as their health risk perceptions, how the two might interact and translate into policy preferences.

3. Conceptual framework

In this section, evidence on the relationship between information, individuals' risk perceptions and their policy preferences is reviewed to answer two questions: 1) How can information be used to update risk perception? 2) How is this risk perception linked to policy preferences?

3.1 Updating risk perception

To determine if and how the provision of health risk related information (risk feedback) affects an individual's risk perception, it is essential to first assess whether the information is accepted as relevant by its recipient. Hence, the framing of risk feedback is firstly considered by examining whether statistic "general", or individualised "tailored" risk feedback is more effective. Several systematic reviews and meta-analyses show that general information about health-related risk leads to incremental behavioural

adjustments from a public health perspective [18–20]. However, these effects are only inferable over long periods of time and thus far not confirmed for public health emergencies in LMICs. Consequentially, academics as well as policy makers have paid increasing attention to tailored risk feedback, i.e. risk information that is specific to the recipient by relating it to their pre-condition [21]. Secondly, especially in tailored risk communication, the effect of risk feedback might be influenced by the valence of the information. Some psychological scholars argue that negative risk feedback (i.e. threatening information) will increase risk perception, and positive feedback (i.e. reassuring information) will lead to a decrease in risk perception [22–24]. Other scholars show that this assumption does not hold in some public health scenarios [25,26]. They suggest that risk experience and expectations can mediate the reception of risk feedback into an asymmetric acceptance of different valences of risk, with reassuring feedback being more effective [22,24].

To investigate the effect of risk communication in both these dimensions, the first two assumptions of this study are posed:

A1: Tailored information is more effective than general information in changing people's risk perceptions.

A2: Reassuring information leads to a decrease in risk perception and threatening information to an increase in risk perception.

3.2 The role of risk perception in public health policy support

The assumption that reassuring risk feedback is more effective also echoes the scholarship on gain-loss framing, where studies have shown that gain-framed communication is most effective in shaping behaviour and policy preferences [27,28]. However, this introduces the notion of policy preferences resulting from a rational weighing between personal benefits in light of an individual's interests. This argument stems from political theory on pandemic policy support. Actors' different interests are either rooted in social cleavages (like poor vs. rich / liberal vs. conservative /etc. [29]), or adherence to group affiliations (like partisanship [30]) in this school of thought. Several studies about political determinants of risk perception and

compliance with pandemic regulations have been conducted in high income settings [31–34]. Allcott et al. highlight the role of the different media sources, that are consumed by democrats and republicans in the United States, in shaping different risk perceptions and policy preferences between the electorates [31]. Painter and Qiu further report strong differences in social distancing compliance between republicans and democrats [34]. Apart from partisanship, individual economic interests might also be used as explaining factors of policy preferences in political theory. Individuals who are more likely to suffer economically from COVID-19 policies, like lockdowns, could be expected to favour policies that are more risk averting relating to their economic risk and consequentially less risk averting relating to their medical risk. This might be especially relevant in LMIC settings where the population is at higher economic risk from both containment policies and potential infections.

To investigate the extent to which risk perceptions are linked with policy preferences in a low-income setting and the role of competing interests, two more assumptions will be tested:

A3: Individuals who update their health risk perception also update their policy preferences and economic risk perception.

A4: Economic risk perceptions moderate the relationship between health risk perceptions and policy preferences.

3.3 Information and public health policy support

So far, some experimental evidence on the interplay of risk perceptions and individual interests in the wake of public health emergency policy support in high income countries exists. Abel et al. examine the association between individual risk perception and compliance with public health regulation as well as voluntary asserted responsibility [35]. They report that perceptions are biased towards an underestimation of the mortality of COVID-19 for high risk patients and simultaneous overestimation of one own's risk of having severe symptoms. The authors find that a bias correction through the provision of expert information does not lead to a change in protective behaviour or policy preferences. Other studies also focus on individual behaviour and compliance rather than support for or opposition to policies and regulation [36–

38]. Only two experimental studies focus on policy preferences in the wake of COVID-19, one of which investigates the effect of the pandemic on broader political attitudes [39]. Fuest et al. investigate how expert information affects citizens attitudes toward federal COVID policies in Germany. [40]. They conclude that the provision of medical expert information increases support for isolation policies while information about economic risks decreases support. The effect varies between genders, age groups, and place of residence (east vs. west Germany). The key interest of the study at hand is to find out whether better information (provided by experts) does actually lead to more accurate risk perceptions in LMIC settings and whether this effect is strong enough to also produce changes in policy preferences. So far, no experimental evidence on these issues exists in wake of pandemics in LMICs. This study aids to fill this gap by examining the four assumptions with the following research question:

> *Does receiving information about COVID-19 risk factors change people's perceptions of health and economic risks, subsequent support for mitigation policies, and demand for further information?*

4. Methods

To do so, the assumptions are tested by looking at the impact of two approaches of risk communication on risk perception and policy preferences with data from a telephone-based experiment conducted with 1,504 economically disadvantaged people from two major cities in El Salvador.

4.1 Data

The study sample comes from two projects on the demand for cardiovascular disease (CVD) preventative services in El Salvador, which started before the pandemic. A total of n = 1629 individuals were enrolled in the study in Soyapango [41] and n = 974 individuals in a study in San Salvador [42]. During the baseline surveys of these studies, information was collected on participants' demographic characteristics, income, risk and time preferences, and health status. Next, in a telephonic interview conducted in March-April 2020, risk perceptions relating to COVID-19 were elicited. The principal investigators of these original studies decided to explore the impact of information provision on those with high and low health risk perceptions. To that end, they randomly sampled individuals who had taken part in the telephonic follow-up, selecting half with at least one risk factor related to COVID-19 and half with no known risk factor. Next, within each group, they randomly selected half who perceived themselves at high- and half who perceived themselves as low risk of COVID-19. Hence, the final sample consists of four equal groups, each with a combination of perceived vs actual risk (Appendix A provides an overview of the sampling process). The selected individuals were then contacted by phone and asked a series of questions that provided the data for this study. Out of the 1661 contacted individuals, 90.5% (1504) agreed to participate in the experiment (Appendix A).

4.2 Information experiment

The questionnaire consisted of 7 modules (knowledge about the virus, economic impact of the pandemic, health impact of the pandemic, information treatment for those in treatment groups, perception of health- and economic risks, attitude towards government response/ policy preferences, and further information

demand). To assess the effect of information about COVID-19 risk factors on risk perceptions and policy preferences, the individuals were randomised into one of three treatments:

- Generic information: Information about COVID-19 risk factors in the middle of the survey (before the risk perception and policy preference sections).
- Tailored information: Information about COVID-19 risk factors in the middle of the survey (before the risk perception and policy preference sections): Participants were told how many risk factors they have, based on information from the previous surveys.
- Control: Participants were offered to receive information about COVID-19 risk factors at the end of the interview.

The separated effect of the two information treatments will serve to test the assumption that tailored information is more effective than general information (A1). The information was given in plain language, highlighted the information provided by the WHO on the different health conditions that had been found to increase the risk of developing severe symptoms when contracting COVID-19 at the time of the survey. Figure 2 provides an overview over the survey modules.

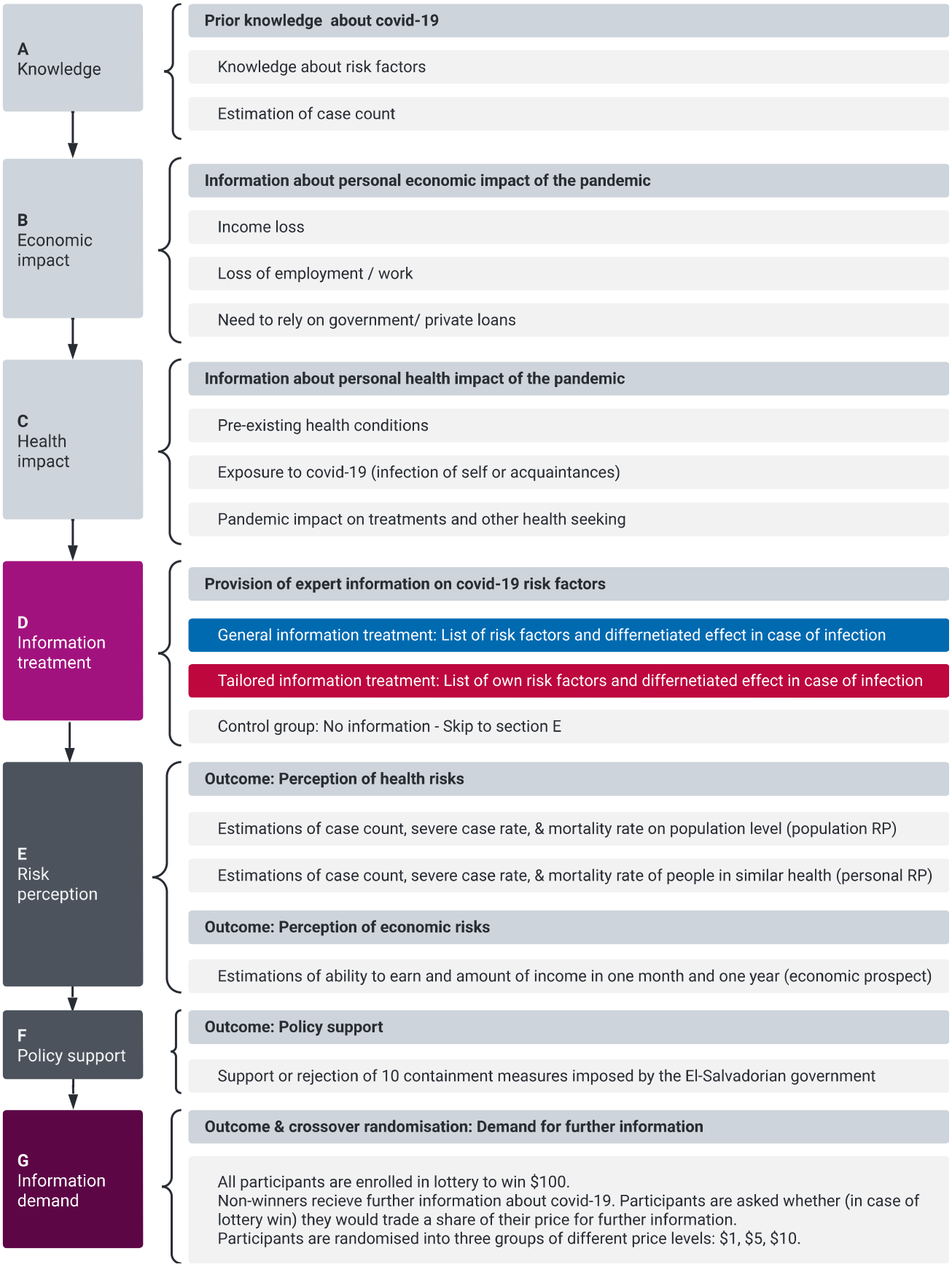

Figure 2: Flowchart of survey questionnaire
Notes: All items of the different questionnaire modules (A-G) can be found in Appendix A.

4.3 Descriptive statistics and randomisation balance

Table 1 presents the characteristics of individuals in the study and the balance tests across all treatment groups. Participants were predominantly female (84%), with an average age of 46 years old, with limited education (only 59% had completed basic education). The average number of COVID-19 risk factors is 0.8 per participant, 40% of participants report to either know someone who had or has COVID-19 or to have had or currently have the virus themselves. While around half of the participants were economically (50%) and medically (53%) impacted by the pandemic, 58% considered themselves of high risk in case of an infection before receiving expert information.

Table 1: Descriptive statistics and randomisation balance

	(1) Total		(2) Control		(3) Generic Information		(4) Individual Information		(5) Joint significance
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)	Prob > F
Male	0.16	(0.37)	0.16	(0.37)	0.15	(0.35)	0.17	(0.38)	0.559
Daily income before pandemic (USD)	43.03	(31.41)	43.2	(31.15)	43.41	(33.12)	42.48	(29.93)	0.876
Age	46.15	(12.34)	45.79	(12.09)	46.16	(12.25)	46.51	(12.68)	0.621
Completed basic education	0.59	(0.49)	0.59	(0.49)	0.6	(0.49)	0.57	(0.5)	0.588
Number of COVID-19 risk factors	0.80	(0.96)	0.79	(0.92)	0.8	(0.98)	0.8	(0.98)	0.996
Has/ had COVID or knows s/o who has/had	0.40	(0.49)	0.42	(0.49)	0.38	(0.49)	0.39	(0.49)	0.455
Risk aversion-Index[a]	0.00	(1)	-0.03	(0.99)	-0.01	(0.98)	0.03	(1.02)	0.632
Considered self of high risk from COVID	0.58	(0.49)	0.58	(0.49)	0.57	(0.5)	0.59	(0.49)	0.874
Economically vulnerable to pandemic[b]	0.50	(0.5)	0.49	(0.5)	0.52	(0.5)	0.5	(0.5)	0.682
Medically vulnerable to pandemic[c]	0.53	(0.5)	0.52	(0.5)	0.54	(0.5)	0.54	(0.5)	0.741

Notes: a: Risk aversion-Index is constructed from 17 risk aversion items (Appendix A) as a standardized index score of the mid-point between the lower and upper limits of risk preference in the sample where a participant switches to the safe option (from the next riskier one), based on Harrison et al., 2010. b: Economic vulnerability is a dummy variable constructed from an economic impact summary index consisting of income loss and poverty score (1 = observation scores higher than sample median). c: Medial vulnerability is a dummy variable that is set to 1 if the individual has stopped any medical treatments or was unable to obtain medication due to the pandemic.

Since the causal inference in this study is contingent on successful randomisation, the treatment groups are regressed on all characteristics to test the balance across groups. Column 5 provides the results of this balance test of the randomisation procedure. The column shows the p-value for joint significance of the treatment and control groups. Neither any of the joint significance tests, nor any of the coefficients individually (Appendix A) are significant at the 10 per cent level, signalling balance across the treatment

groups. Since the experiment in this study relies on only one survey round, there is no attrition issue to be considered.

4.4 Outcomes

To test the assumptions, the effect of information on five families of outcomes is considered. Within each family, the treatment effect will be examined on each outcome individually as well as in families via indices, incorporating all respective individual variables, as proposed by Anderson in 2008. The summary indices are mean values based on standardised versions of the different outcomes they incorporate, weighted by the inverse of the covariance matrix of all included variables (Appendix B) [44].

1) Population health risk perceptions – Health risk perceptions are obtained with questions that ask the participants to estimate the last 30-day case count, the total case count, the proportion of severe cases, and the number of fatalities.

2) Personal health risk perceptions - To separate population- and individual risk perception, all questions are asked and evaluated once regarding the total population and once regarding individuals in similar health as the respondent. Instead of following the standard approach towards survival probability estimation in surveys [45], respondents were asked to estimate the number of individuals in similar health as them per 1,000 in the population [46]. The variables for both the individual and the population health risk perception items are then recoded as estimated percentage (of the population) to increase interpretability.

3) Economic risk perceptions – Short-term and long-term economic risk perception are based on the survey questions on the likelihood of employment and an estimate of income in case of said employment, one month and one year from the survey. For both prospects (short – and long-term), a summary statistic variable is computed by multiplying the reported probability with the estimated income.

4) Policy preferences in response to the pandemic. Respondents were asked whether they support ten specific policies, that were in place in the country at the time or have been before, as yes or no questions. The items elicit opinions on whether the respondents support (1) school closures, (2) Market closures (essential), (3) Market closures (non-essential), (4) Public Transport Closures, (5) Bans of meetings of 5+

people, (6) Mandatory Home quarantine (everyone except essential workers), (7) Mandatory Home quarantine (people at risk), (8) Containment for non-compliers, (9) Fines for non-compliers, (10) Restricting weekly home departures.

5) Demand for further information. Finally, to investigate the perceived relevance of the expert information, the willingness to pay (WTP) for expert information is scrutinized. Hjort et al. propose to use WTP for information as a proxy to measure the relevance that respondents attribute to provided information [47]. All study participants were enrolled in a lottery to win $100 after the survey. Non-winners receive further information about COVID-19. Before the lottery started, participants are asked whether, in case of lottery win, they would trade a share of their price for further information. To examine the WTP as an inverse demand curve, three different price levels were elicited. All participants throughout treatment and control groups were cross randomised into three groups of different price levels: $1, $5, $10. The proportion of people willing to sacrifice some revenue to receive SMS about COVID-19 in the future will be reported per price level per treatment group. The effect of the information treatment on the demand for further information (as a proxy for the perceived relevance of the information to the treated) will be measured as the difference between the proportions of treatment and control groups.

4.5 Empirical Strategy

To evaluate the effect of information, the following equation is estimated:

$$Y_i = \alpha + \beta_1 Info_{gen_i} + \beta_2 Info_{tailored_i} + \gamma\, Z' + \varepsilon_i$$

Where Y_i is the outcome of interest for individual i, $Info_{gen_i}$ and $Info_{tailored_i}$ are dummy variables for the two treatment groups, Z' is a vector for individual level controls (CVD health risk score, age, gender, education, household income, health insurance, current/prior COVID-19 infection status, risk aversion, and municipality), and ε_i is the idiosyncratic error term. For all continuous Y_i (health risks, economic risks, and policy index), an ordinary least squares (OLS) model will be computed. For all Y_i with discrete distributions, logistic regression will be used. Marginal effects are reported to enable comparability. Huber-White robust

standard errors will be used in all models [48,49]. The control vector Z' will be omitted from all main estimations but included in robustness checks.

The combination of individual outcome items and summary indices across the two treatments produces a total of 111 hypothesis tests. To control the consequentially high natural false discovery rate (FDR) (the proportion of expected type 1 errors), Anderson's sharpened q values are reported in addition to regular p values as robustness checks [44,50,51]. While this procedure adds some confidence in the most significant results, the additional accepted null hypotheses (coefficients with significant p values but insignificant q values), are accepted on pure algebraical accounts [52]. The coefficients with high q values can hence neither be considered to represent a causal relationship with significant confidence, nor be completely discarded.

Additionally, the outcome index models are re-estimated with interaction terms to investigate whether the treatment effects vary between different subgroups of the study population and therein test the different assumptions of the conceptual framework:

$$Y_i = \alpha + \beta_0 SG_i + \beta_1 Info_{gen_i} + \beta_2 Info_{tailored_i} + \beta_{11} Info_{gen_i} \times SG_i + \beta_{21} Info_{tailored_i} \times SG_i + \gamma Z' + \varepsilon_i$$

Where SG_i is a dummy variable denoting the subgroups. Specifically, assumption 2 is tested by looking at whether prior risk perception on its own and in relation to participants' actual risk, risk preferences, and previous pandemic exposure and impact moderate the effects of information. These heterogeneous effects are only investigated for the summary indices to avoid over-testing.

5. Results

Table 2 displays the main results of the aggregated outcome family indices. The table shows the average marginal effects of the two treatments in terms of standard deviations (sd) from the control group means. The evidence from the full sample suggests that a general effect of expert information on risk perceptions and policy preferences is not detectable. While the overwhelming majority of estimations in this study suggest that expert information does not have an impact on the outcomes, the data reveals some conditions in which expert information does affect risk perceptions and policy preferences.

General expert information might increase personal health risk perceptions

One exception is the effect of general information on the respondents' personal risk perception, which is statistically significant and of high magnitude (however non-significant after FDR adjustments). The results indicate that on average, people who receive general information about populations at risk from COVID-19 might re-evaluate their own health risks. They report a higher combined risk of contracting the virus, having a severe case, and potentially even dying, on average across the items 0.13 sd higher than individuals in the control group ($p = 0.06$, $q = 0.40$).

Table 2: Main results: Outcome Indices

	Population Health RP Index	Personal Health RP Index	Economic RP index	Policy Support Index
	(1)	(2)	(3)	(4)
Generic Information	0.06	0.13*	-0.154*	0.08
	(-0.07)	(0.07)	(0.09)	(-0.06)
Tailored Information	0.00	0.04	-0.156*	0.04
	(-0.07)	(-0.07)	(0.09)	(-0.06)
Control Mean	0	0	0	0
Control SD	1	1	1	1
Controls	N	N	N	N
R2	0.0008	0.0025	0.005	0.0013
N	1,469	1,451	794	1,504

Notes: The indices are constructed as z-scores from all items in the respective outcome family and represent standard deviations from the control group mean (which is set to one with sd=1) of an observation in one of the treatment groups (Appendix B) [44]. Controls not included. Refer to Appendix C for sharpened q-values. as well as results from the re-estimations with included controls for robustness checks and visual presentation. Robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01

Looking at the treatment effect on the components of the health risk perception indices (Figure 3), it appears that the overall increase in personal risk perception is driven by an increase in perceived likelihood of having a severe case of COVID-19, as well as the likelihood of mortality in case of infection. Respondents in the control group report an average personal health risk perception of 51.9% likelihood for catching the virus, 29.0% for having a severe case when infected, and 20.5% of dying when infected (Appendix C). Compared to the control group, general information about COVID-19 risks leads to a 3.79 percentage point (pp) increase in respondents' perceived likelihood of severe cases ($p = 0.02$, $q = 0.20$), and 2.96 pp increase in their perceived risk of dying from an infection ($p = 0.05$, $q = 0.36$). Similarly, the perception of the population wide proportion of severe cases is also 3.03 pp higher than the control group mean ($p = 0.07$, $q = 0.40$).

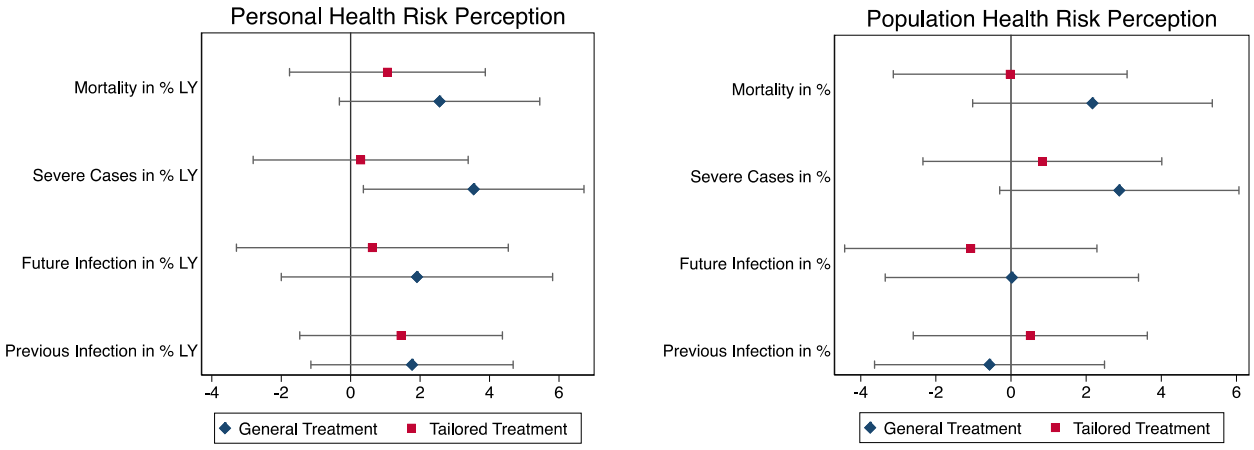

Figure 3: Health risk perception main results

Notes: Left panel: Personal risk perception, right panel: Population risk perception. Risk perception in per cent (Example: Mortality: average of the reported proportions in response to the question "What percentage of people /like you/ do you think will die from an infection with COVID-19"). LY = "Like You" denotes that the item refers to the personal risk perception. The dots represent the coefficients (average deviation from control group mean), the grey lines the associated 95% confidence intervals. Controls not included. Refer to Appendix C for control group means as well as results from the re-estimations with included controls for robustness checks, regression tables, and sharpened q values.

Interestingly, both information treatments produce a small decrease in overall economic risk perception (table 2), however the q values for both estimates ($q = 0.43$ for both) and sign of the effect suggest that this effect appears to be a false discovery. Looking at the items separately, there is no effect on economic risk perception in the one-month perspective, but a small effect in the one-year perspective (Appendix C). Thus,

assumption 3 (economic risk perception is affected if health risk perception is) can not be confirmed or denied in the full sample.

Baseline policy support is high, treatment effects on policy support are small

While there is no evidence that information changes support for all policies, there are two notable exceptions. Support for school - and non-essential market closures are higher among the treated individuals (Table 3). In these individuals, the general information increases support for school- and market closures. Individuals who receive it have a 2 pp higher probability of support for school closures on average than individuals in the control group ($p = 0.02$, $q = 0.20$) as well as a 2 pp higher likelihood of supporting the closure of non-essential markets compared to individuals in the control group ($p = 0.09$, $q = 0.43$). It must be noted however, that the control group means for support of these policies are 97.98 % (school closures) and 87.50% (closure of non-essential markets), and the q values indicate that the significance of both is a false discovery.

Table 3: Effect of Information on support for mitigation policies

	School closures	Market closures (essential)	Market closures (non-essential)	Public Transport Closure	Ban meetings of 5+ people	Mandatory Home quarantine (everyone exc. essential)	Mandatory Home quarantine (people at risk)	Containment for non-compliers	Fines for non-compliers	Restricting weekly home departures
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
General Information	0.02**	0.03*	0.02	0.03	0.00	-0.02	0.00	0.01	-0.02	-0.02
	(0.01)	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.02)
Tailored Information	0.01	0.01	0.00	0.03	-0.02	0.01	0.00	-0.01	-0.02	-0.02
	(0.01)	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)	(0.01)	(0.02)	(0.02)	(0.02)
Control Mean	0.97	0.88	0.39	0.60	0.90	0.89	0.98	0.81	0.86	0.93
Control SD	0.14	0.33	0.49	0.49	0.30	0.32	0.14	0.39	0.35	0.26
Controls	N	N	N	N	N	N	N	N	N	N
N	1504	1504	1504	1504	1504	1504	1504	1504	1504	1504
Pseudo R2	0.037	0.003	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.002

Notes: Marginal effects of the information treatments on the likelihood for policy support (compared against control group means), obtained from logistic regressions of each policy dummy on the treatment group inidcators. Controls not included. Refer to Appendix C for sharpened q-values. as well as results from the re-estimations with included controls for robustness checks and visual presentation. Robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

The treatments do not increase demand for further information

Finally, we look at whether receiving information affects individual's demand for further information, as measured by a willingness to sacrifice some revenue to receive SMS about COVID in the future. Reassuringly, there is an expected negative relationship between the level of demand for information and the price of receiving such information (Figure 4). However, after they are treated (received expert information in this experiment), individuals do not value receiving information about COVID more or less than individuals who did not receive any information. This lack of treatment effect on the WTP begs a question about the relevance and credibility of the provided information for the participants.

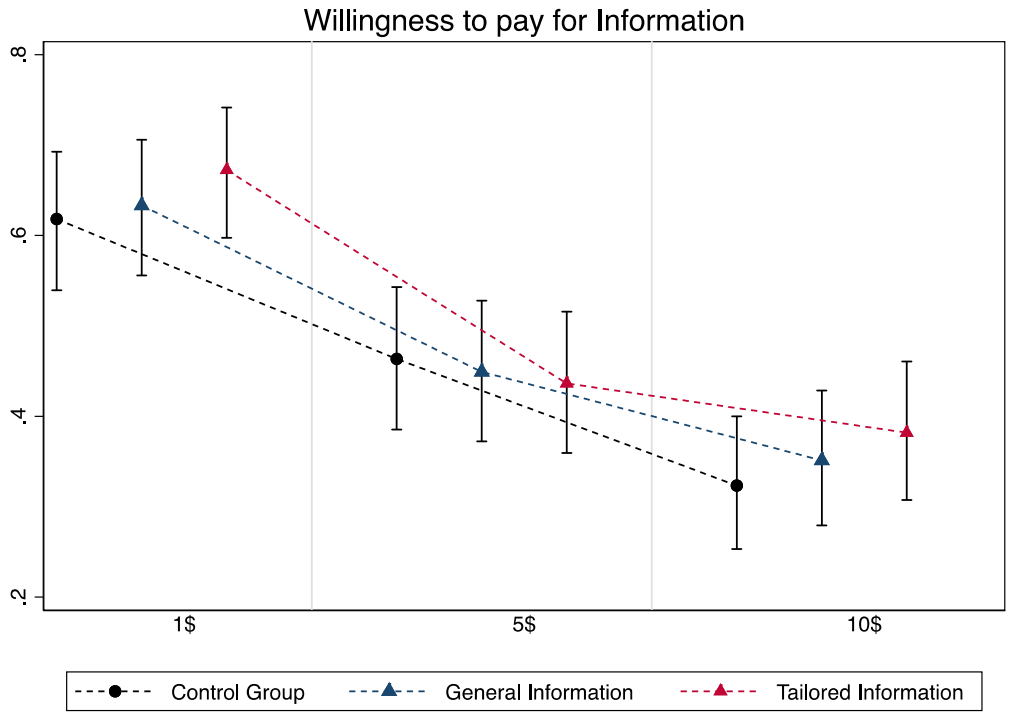

Figure 4: Willingness to pay for information

Notes: Graph shows three inverse demand curves as the proportion with associated 95% confidence intervals of people per treatment group who are willing to pay for further information. Proportions (demand) are on the Y-axis; price levels are on the X-axis. The proportions are not significantly different between groups (see Appendix C for Z test results).

5.1 Heterogeneous effects

The coronavirus pandemic as well as the policy measures implemented to contain it have highly diverging impacts on different population groups. This section presents treatment effects for subgroups of the population who would be expected to respond to information in a particular way. The figures and tables show the average marginal effects of the two treatments on the outcome indices in terms of standard deviations (sd) from the control group means, with associated 95% confidence intervals (in the figures).

5.1.1 The role of individuals' risk factors and prior risk perception

To determine whether the effect of information is mediated by the valence of the feedback (Assumption 2), and the prior beliefs about the own health risk (risk expectations), this section examines the interplay of the treatments with prior risks and risk perceptions. Table 4 shows the treatment effects differentiated by prevalence of COVID-19 risk factors (*At risk*), prior beliefs about personal risk (*High RP* denoting prior beliefs of being at high risk), the relationship between risk factors and prior beliefs (*Over-estimator* & *Under-estimator*), and general behavioural risk preferences (*Risk lover*).

Generally, individuals who have at least one COVID-19 risk factor increase their personal risk perception after treatments (0.249 sd, p = 0.01, q = 0.1, for general information & 0.20 sd, p = 0.03, q = 0.22, for tailored information). The same trend occurs in those who have a high personal risk perception before receiving the treatment; they increase their personal risk perception by 0.44 sd (p = 0.00, q = 0.00) after receiving general information and 0.29 sd after receiving tailored information (p = 0.00, q = 0.03)

Prior beliefs mediate the treatment effects

While the trends for the subgroup of people at risk all have the expected sign (increased risk perceptions) and reasonable magnitude, the trends within the prior beliefs subgroups (*Over-estimator, Under-estimator, High RP*) suggest that prior beliefs are essential in understanding the role of information in risk updating. Tailored information decreases population health risk perceptions for under-estimators by 0.26 sd (p = 0.03, q = 0.22).

Table 4: Heterogeneous treatment effects: Actual risk and prior risk perceptions.

	Interaction Variables				
	(2) High RP = 1	(3) Risk lover = 1	(4) Over-estimator = 1	(5) Under-estimator = 1	(6) At risk = 1
Population Health Risk Index					
General Information x interaction = 0	-0.112	0.0772	-0.0175	0.0966	0.0824
	(0.0985)	(0.0796)	(0.0776)	(0.0723)	(0.0887)
General Information x interaction = 1	0.327***	0.110	0.474***	-0.220*	-0.0608
	(0.0935)	(0.0986)	(0.0963)	(0.131)	(0.0978)
Tailored Information x interaction = 0	-0.0272	-0.00627	0.0129	0.0322	0.00975
	(0.101)	(0.0803)	(0.0769)	(0.0732)	(0.0929)
Tailored Information x interaction = 1	0.149	0.0810	0.152	-0.258**	-0.111
	(0.0934)	(0.0955)	(0.105)	(0.117)	(0.0928)
Personal Health Risk Index					
General Information x interaction = 0	-0.0368	0.120	0.0349	0.149**	0.165*
	(0.0953)	(0.0787)	(0.0767)	(0.0734)	(0.0906)
General Information x interaction = 1	0.443***	0.214**	0.404***	-0.00726	0.249***
	(0.0940)	(0.103)	(0.109)	(0.123)	(0.0939)
Tailored Information x interaction = 0	-0.0313	0.0809	0.0578	0.0909	0.0402
	(0.0940)	(0.0791)	(0.0770)	(0.0734)	(0.0886)
Tailored Information x interaction = 1	0.292***	0.0382	0.0414	-0.175*	0.201**
	(0.0933)	(0.0949)	(0.101)	(0.104)	(0.0922)
Economic Risk Index					
General Information x interaction = 0	-0.0990	-0.220**	-0.111	-0.132	-0.134
	(0.145)	(0.105)	(0.106)	(0.0992)	(0.130)
General Information x interaction = 1	-0.114	-0.205	-0.195	-0.0882	-0.0566
	(0.139)	(0.133)	(0.157)	(0.161)	(0.124)
Tailored Information x interaction = 0	-0.103	-0.0849	-0.0558	-0.148	-0.255*
	(0.152)	(0.105)	(0.109)	(0.100)	(0.131)
Tailored Information x interaction = 1	-0.115	-0.514***	-0.374**	-0.0382	0.0433
	(0.141)	(0.151)	(0.162)	(0.193)	(0.132)
Policy support Index					
General Information x interaction = 0	0.0552	0.0555	0.0337	0.0882	0.140*
	(0.0890)	(0.0657)	(0.0653)	(0.0604)	(0.0785)
General Information x interaction = 1	0.109	0.0851	0.102	-0.108	0.0248
	(0.0883)	(0.0749)	(0.0789)	(0.0952)	(0.0865)
Tailored Information x interaction = 0	0.0113	-0.0221	0.00631	0.0118	0.0215
	(0.0985)	(0.0717)	(0.0688)	(0.0647)	(0.0884)
Tailored Information x interaction = 1	0.0617	0.103	0.00946	-0.00418	0.0579
	(0.0896)	(0.0771)	(0.0907)	(0.102)	(0.0857)

Notes: Each panel presents estimates for the respective outcome indices. Each column represents one subgroup, operationalized through an interaction variable. All interaction variables are binary (1= Yes, 0 = No), for instance *High Risk Perception* refers to the questionnaire item from the follow up interviews of the two previous studies (Do you think you have a high risk of a severe case if you are infected with COVID-19 (1 = Yes; 0 = No); *Risk Lover* is a dummy variable denoting below average risk aversion (calculated from several items on risk and time preferences [53]); *At Risk* is a dummy variable that is set to one if the observation has at least one COVID-19 risk factor; *Over- & Under- estimates own risk* are dummy variables that are set to one if High RP = 1 & At Risk = 0 (Overestimates) / High RP = 0 & At Risk = 1 (Underestimates). The indices are constructed as z-scores from all items in the respective outcome family and represent standard deviations from the control group mean (which is set to one with sd=1) of an observation in one of the treatment groups (Appendix B) [44]. Coefficients represent average standard deviations from the control group means. See Appendix C for sharpened q-values as well as results from the re-estimations with included controls for robustness checks. Robust standard errors are in parenthesis. * p<0.10, ** p<0.05, *** p<0.01.

Under-estimators also decrease their personal health risk perception by 0.18 sd after receiving the tailored information (p = 0.09, q = 0.43). Opposite trends are exhibited for individuals who overestimated their personal risk before receiving information. General information significantly increases both population health risk perception of over-estimators by 0.47 sd (p = 0.00, q = 0.00) and personal health risk perception by 0.40 sd (p = 0.00, q = 0.00)

Information shows no effect on policy support

Similar to the full sample estimations, policy support is not significantly affected by either treatment in any of the subgroups. The lack of association between treatment and policy preference is particularly surprising for individuals who are risk lovers (column 2), as one would expect less risk averse individuals to be in stronger opposition to safety measures. This absence of effect is either indicative of a true lack of association or of a measurement error in risk aversion. The technique used in this trial has been critiqued for being too complicated and complex to capture actual risk and time preferences in survey experiments [54].

5.1.2 The role of exposure to the virus and pandemic impact

To test whether risk experiences (i.e., experienced consequences of the pandemic) and direct exposure to the coronavirus influence the effect of expert information, subgroups of individuals with previous COVID exposure as well as economically and medically vulnerable individuals will now be examined (figure 5).

Vulnerabilities increase the effect of general information

One would expect that individuals who are suffering economically from containment policies or those who are medically vulnerable to them (because of interrupted treatments or medication supply) would respond more to the treatments. Indeed, individuals who had treatment or medicine supply interruptions due to the pandemic increase their population risk perception by 0.17 sd (p = 0.06, q = 0.40) after receiving general information. Similarly, these medically vulnerable individuals also increase their personal health risk perception by 0.35 sd (p = 0.00, q = 0.00) in response to general information.

However, tailored information produces no significant change on any of the health risk perception outcomes in any of the subgroups. Those who suffered economic hardship from the pandemic report lower economic

risk perception after receiving the information treatments than those who did not receive information (however non-significant after FDR adjustment).

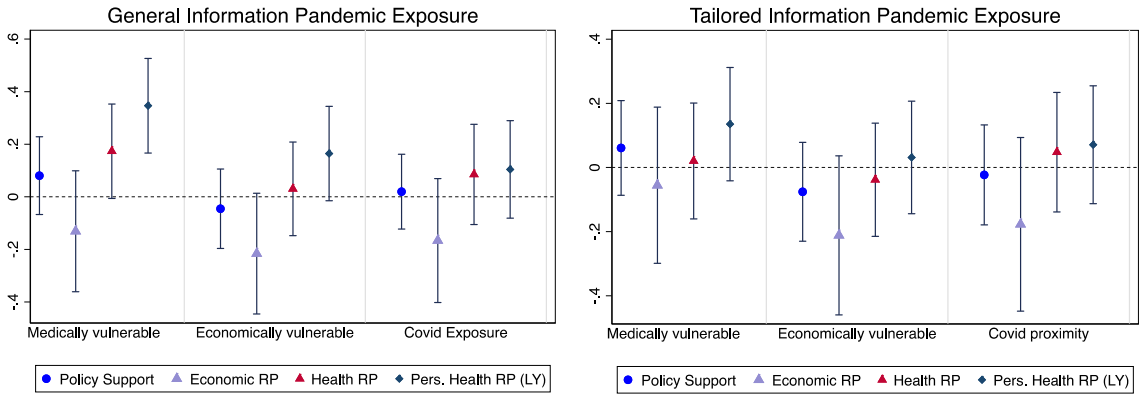

Figure 5: Pandemic exposure subgroup results

Notes: Left: Generic treatment: Right: Individualised Treatment. Each dot and line present estimates and confidence intervals for the respective outcome indices. Each column represents one subgroup, operationalized through an interaction variable. The indices are constructed from all items in the respective outcome family and represent standard deviations from the control group mean of an observation in one of the treatment groups (Appendix B). *Economic vulnerabil*ity is a dummy variable constructed from an economic impact summary index consisting of income loss and poverty score (1 = observation scores higher than sample median). c: *Medically vulnerable* is a dummy variable that is set to 1 if the individual has stopped any medical treatments or was unable to obtain medication due to the pandemic. Coefficients represent average standard deviations from the control group means. Controls not included. The dots represent the coefficients (average sd deviation from control group mean), the grey lines the associated 95% confidence intervals. Refer to Appendix C for re-estimations with controls for robustness checks and regression tables including p-values and sharpened q-values.

5.2 Robustness

All robustness estimations with included controls confirm the signs as well as levels of significance of their underlying models and report coefficients that deviate only very slightly ($\beta\Delta < 0.1$). Out of the 27 standard null-rejections, only 7 coefficients also have q values smaller than 0.1 (Appendix C). Specifically, the significant findings in the main results as well as all finding relating to economic risk perception are of high risk to be false discoveries (large q value) and should thus only be interpreted with caution. All coefficients from the robustness checks with p-values and Anderson's sharpened q-values are reported in Appendix C.

6. Discussion

This section starts by contextualising the results in light of existing literature followed by policy and research implications and methodological constraints. In synthesis of the findings laid out above, it is notable that:

1) **Tailored risk feedback has no effect in the full sample**.

In the full sample, there is no treatment effect on policy support, economic risk perception, and population health risk perception. Only general information might affect personal health risk perception. Tailored information is not correlated with personal health risk perception. Consequently, assumption 1 does not hold, as tailored information is not necessarily more effective than general information. One possible explanation for the lack of effect of this information, in contrast to general information, might be the wording of the two treatments (Appendix A). While the people in the general group were given a whole list of risk factors, those in the tailored group were only told their own risk factors (which were 0.80 on average). Since the people in the latter group were only confronted about the risk factors they had confirmed via diagnoses, the general information might have loomed larger for individuals who suspect to have further undiagnosed risk factors. Furthermore, while the common assumption is that personalised risk feedback is the most effective form of risk communication, a recent systematic review of nine previous systematic reviews on the matter echoes our finding in stating that "[p]resenting risk information on its own, even when highly personalised, does not produce strong effects on health-related behaviours […]" [21].

2) **The effect of the information treatments is highly varied across subgroups of the study population.**

While an influence by tailored information is not detectable in the full sample, results from the different subgroups of the study population provide further insights into the dynamics of risk feedback reception as a mediation of risk perception.

Since over-estimators reported even higher and under-estimators even lower risk perceptions (the latter albeit only of statistical significance for general information) after receiving the information, the two effects might have 'cancelled' each other out, and accordingly explain a 'muted' overall effect. Such an effect is described for many information experiments that provide risk feedback [55]. Future studies could control for it by eliciting prior beliefs with the same instrument as post-treatment and then control for them in their estimation. Nonetheless, it remains questionable whether such muting could solely account for the findings. Notwithstanding, the findings suggests that risk experience and risk feedback salience might be relevant

for the processing of the provided information. The direction of the effect suggests that assumption two must also be rebuked. Unlike assumed, reassuring risk feedback does not necessarily decrease (and threatening feedback does not necessarily increase) risk perceptions.

The difference between groups of opposite prior beliefs (under-estimators decreasing and over-estimators increasing their health risk perceptions) is indicative of cognitive biases [22]. Similar to studies on TAA deficiency [56], blood pressure and cholesterol test results [57,58], and hypothetical bacterial infections [59], previous expectations about risk seem to moderate the reception of new risk feedback. While people who have at least one risk factor generally update their personal health risk perception upwards after receiving the new information in this study, the effect might be driven mostly by those who did not previously underestimate their own risk (i.e., correctly perceived themselves at risk) before. Thus, it appears, as if participants did not necessarily consider the information as relevant if it was not consistent with their prior beliefs on their own risk. The result from the economic- and health pandemic impact subgroups furthermore echoes the account that "[…] individuals predominantly process and remember self-relevant information that is provided by the risk experience" [24].

3) **Across treatments and subgroups, economic risk perception and policy support are barely affected by the information treatments.**

Strikingly, economic risk perception appears to be unrelated to health risk perception. This disentanglement suggests that individuals do not connect their economic prospects (i.e., their ability to work), to their health. While some estimates showed a borderline significant association between economic risk perception and the information treatments before adjusting for false discoveries ($p < 0.1$, $q > 0.5$), they all had a negative sign, suggesting that economic risk perception actually decreases after receiving information (Appendix C). Similarly, policy support is unaffected by the information treatment and therefore appears to be unrelated to health risk perception as well. The enormously high support for almost all policies in the full sample is in line with presidential approval rates of over 90% at the time. These results suggest that trade-offs between economic and health prospects don't appear to be present for the study participants. Looking

at the (lack of) correlation between health- and economic risk perception, albeit not causal, further underlines this assumption (Figure 6).

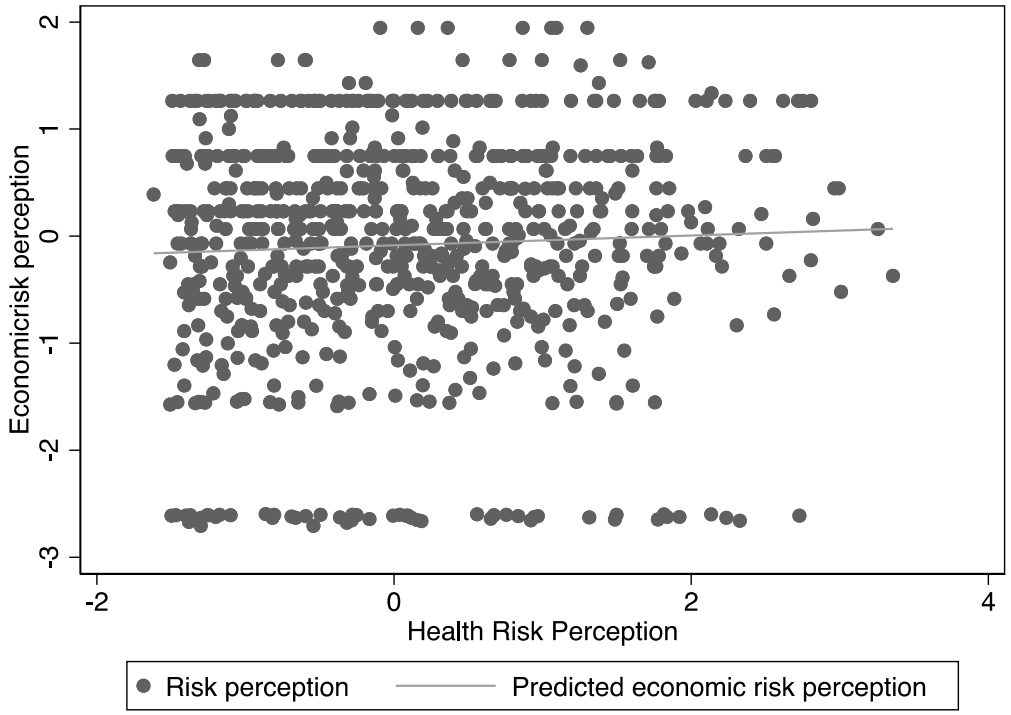

Figure 6: Association between Health Risk Perception and Economic Risk Perception

Notes: Fitted (predicted) economic risk perception values obtained from ordinary least squares regression.

4) The WTP for further information is not affected by the information treatments.

In addition to political bias, trust issues might be considered in the explanation of the lack of treatment influence in this study. Hjort et al. 2021 propose to use WTP for information as a proxy to measure the credibility and relevance that respondents attribute to provided information [47]. The WTP in this experiment is not significantly affected by the information treatments in the full sample or any subgroup (Appendix C). Following Hjort et al.'s argument, this suggests that participants of the study at hand do not value expert information more after receiving the information treatments. Whether this is due to trust issues or other reasons cannot be determined at this point.

Risk perception and policy preferences: Between cognitive and cultural bias

This is the first experimental study on the role of information in the formulation of risk perceptions and policy preferences in a LMIC setting during a highly uncertain public health emergency.

Drawing on the conceptual framework, the findings suggest two main conclusions on the role of information for the economically disadvantaged in El-Salvador in the wake of the onset of the COVID-19 pandemic. Firstly, expert information in itself does not produce updates of risk perception and policy preferences. Risk experiences as well as risk feedback valence appear to mediate the reception of the provided information. Secondly, this suggests that the political rational choice approach to the role of risk perceptions and preferences cannot explain policy preferences in our study population. A wider approach that allows for the incorporation of biases appears to be needed.

6.2 Limitations & future research

One limitation of our study is the availability of information on beliefs and attitudes prior to the treatment. The assumption of a potential muting effect of people with opposite previous perceptions cannot be causally tested without controlling for prior beliefs, elicited with the same instrument as post-treatment. Nonetheless, the subgroup analysis of over- and under-estimators still strongly suggests these differentiated treatment effects and therein echoes findings from similar information experiments [40].

Furthermore, the unintendedly different magnitudes of the two treatment wordings might have biased responses. Hence, inferences on the difference in effect between general and individualised risk feedback can only be drawn with caution.

Due to the very specific study population of poor people from urban areas in an LMIC, the generalisability of our conclusions is low. It should be investigated whether the role of expectations in risk updating and the lack of association between health and economic prospects are prevalent in other LMIC settings. Future research can thus investigate these dynamics and build upon the results of this study by applying similar frameworks to other geographical and demographic contexts. If future studies find a stronger effect of information in risk perceptions, instrumental variable approaches could be utilised to test the direct effect of the provided information on policy preferences.

7. Conclusion

This information experiment in El-Salvador asks whether increased knowledge about COVID-19 risk factors leads individuals to update their risk perceptions and consequentially influences their policy preferences. The results indicate that information, especially tailored information, alone does not lead to a general change of either risk perceptions or policy preferences. From a policy perspective, these findings suggest that fact-based, medical risk information provided by experts might not be sufficient to generate policy support in early phases of public health emergencies in LMICs; tailored information might not be more effective than general information; and other cultural and political biases must be considered. While the generalisability of this study is strongly limited, these findings still raise important concerns for policy makers and public health experts. Underlying all results in this study is the question about the trust that individuals place in the information. As other scholars have highlighted the role of the source of information [39,40] in high income settings, it should be investigated whether such dynamics are also at play in LMICs.

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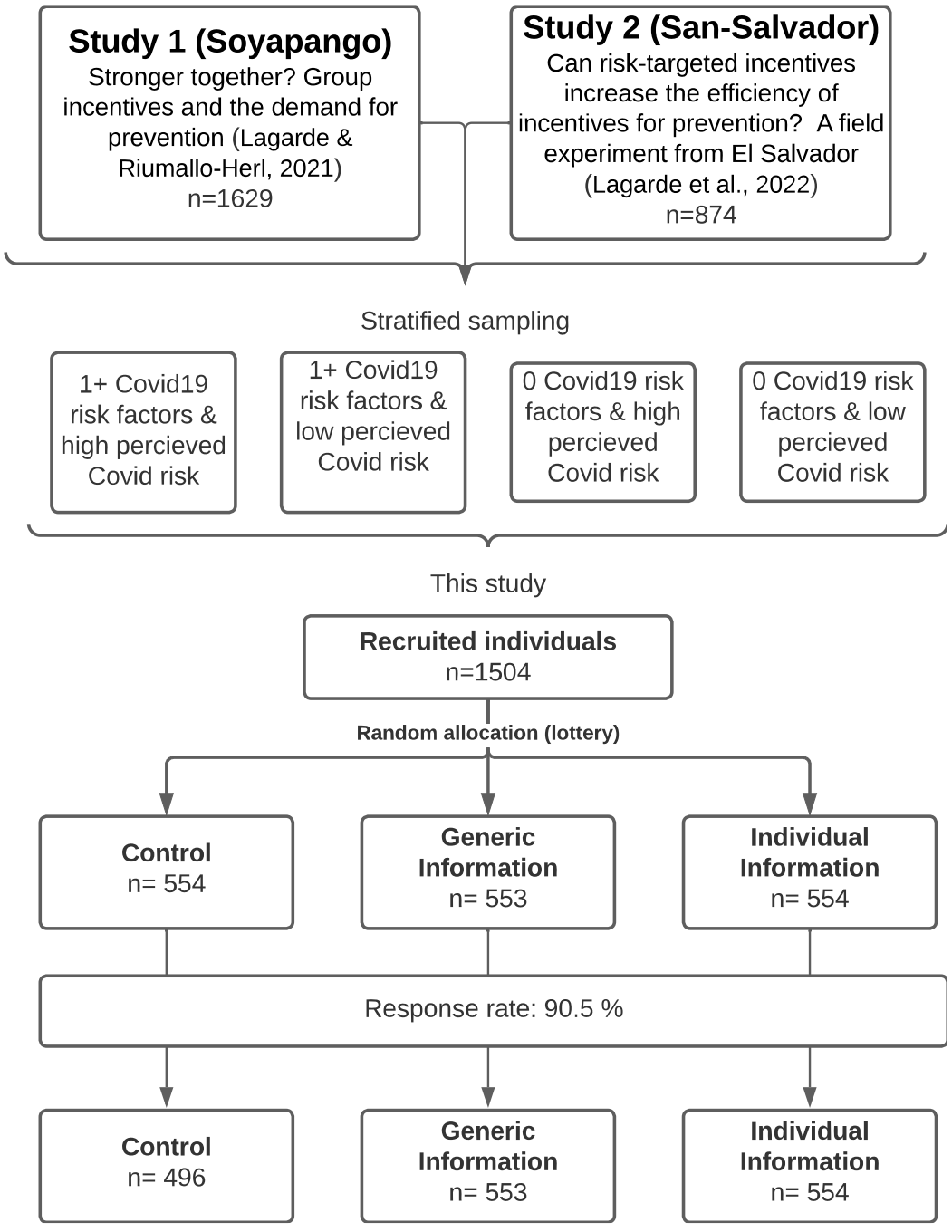
Appendix

Appendix A: Data

Appendix A1: Sampling Process



Appendix A2 Survey Questionnaire

This questionnaire was designed by Mylene Lagarde & Carlos Riumallo-Herl:

ODK printout of survey questionnaire:

Field	Question	Answer		
introduction	Con este formulario podrá desarrollar la encuesta de coronavirus			
dui (required)	Ingresar el número DUI del cliente sin incluir el guión. Hacer esto antes de comenzar la llamada. Response constrained to: ((string-length(.)>=9 and string-length(.)<=9) and not(regex(.,'^(.*)[\p{Alpha}](.*)$')) and not(regex(.,'^(.*)\s(.*)$')) and not(regex(.,'^(.*)[\p{Punct}](.*)$')))			
name_found (required)	El DUI ingresado no existe en la base de datos. Volver a ingresar el número nuevamente. Question relevant when: ${name} =null			
datos	La persona a la que se va a entrevistar es [name].			
contacto_telefonico (required)	Cual es el estado de la llamada teléfonica:		1	El cliente contesto
			2	Contestaron el telefono pero el cliente no estaba disponible
			3	Contestaron el teléfono pero el número esta equivocado
			4	No contestaron el telefono/La linea no esta disponible
Llamada Group relevant when: ${contacto_telefonico} =1				
confirm_dui (required)	Confirmar que el DUI de la persona es [dui]?		1	Si
			0	No
participar (required)	¿El cliente aceptó participar en la encuesta de coronavirus? Entrevistador: Las personas que acepten participar en la encuestas entraran en una loteria de $100.		1	Si
			0	No
Llamada > Encuesta Group relevant when: ${participar} =1 and ${confirm_dui} =1				
Llamada > Encuesta > Sección A: Conocimiento				
know1 (required)	Puede decirme usted ¿Cuáles son los síntomas del coronavirus? Entrevistador: No leer las respuestas y seleccionar todo lo mencionado.		1	Fiebre
			2	Escalofríos
			3	Tos
			4	Perdida de peso
			5	Tos con sangre
			6	Dificultad para respirar

			7	Fatiga o cansancio
			8	Perdida de olfato o gusto
			9	Dolor de estomago
			10	Dolor de cabeza
			11	No sabe
know2 (required)	¿Cree usted que hay personas que tienen el coronavirus, pero no tienen síntomas?		1	Si
			0	No
know3 (required)	¿Cree usted que las personas sin síntomas pueden transmitir el virus?		1	Si
			0	No
know4 (required)	Algunas personas tienen mayor riesgo de desarrollar síntomas graves de coronavirus, ¿Sabe cuales son esas personas? Entrevistador: No leer las respuestas y seleccionar todo lo mencionado.		1	Niños menores de 5 años
			2	Personas mayores de 60 años
			3	Mujeres embarazadas
			4	Personas con sida
			5	Personas que no tienen sus vacunas al día
			6	Personas que tienen tuberculosis
			7	Personas que tienen asma
			8	Personas que tienen cáncer
			9	Personas que fuman
			10	Personas con enfermedades cardiovasculares
			11	Personas que tienen diabetes
			12	Personas con problemas de riñon
			13	Nadie

Llamada > Encuesta > Sección B: Impacto Económico

Field	Question	Answer		
eco1 (required)	Desde el comienzo de la cuarentena domiciliar obligatoria (22 de Marzo), usted ha: Entrevistador: Seleccionar todas las que aplican.		1	Dejado de trabajar temporalmente
			2	Perdió su trabajo de manera permanente
			3	Reducido sus horas de trabajo
			4	Aumentado sus horas de trabajo
			5	Reducido sus ingresos

			6	Aumentado sus ingresos
			7	Despedido a gente que trabaja para usted
			8	Nada
eco2 (required)	La semana anterior ¿Realizó alguna actividad para obtener ingresos?		1	Si
			0	No
eco3 (required)	¿Aproximadamente cuál fue su ingreso en un día promedio durante la última semana? Question relevant when: ${eco2} =1 Response constrained to: .>=0 or .=-999 or .=-888			
eco4 (required)	Desde el comienzo de la cuarentena domiciliar obligatoria (22 de Marzo), ¿Cuál es aproximadamente el sueldo, ingreso o pago diario bruto por todas sus actividades (incluida venta de productos y/o servicios)? Question relevant when: ${eco3} =-999 or ${eco3} =-888		1	Menos de $10
			2	Entre $11 y $20
			3	Entre $21 y $30
			4	Entre $31 y $40
			5	Entre $41 y $50
			6	18038570
			7	Entre $76 y $100
			8	Más de $100
eco5 (required)	¿Antes del comienzo de la cuarentena domiciliar obligatoria tenía usted un crédito con un banco u organización de microcréditos?		1	Si
			0	No
eco6 (required)	Desde el comienzo de la cuarentena domiciliar obligatoria (22 de Marzo), ¿ha podido seguir pagando las cuotas del crédito que tiene? Question relevant when: ${eco5} =1		1	Si
			0	No
eco7 (required)	Desde el comienzo de la cuarentena domiciliar obligatoria (22 de Marzo), ¿Ha recibido algún apoyo del gobierno que no recibía antes? Si recibe, ¿Qué recibió? Entrevistador: Preguntar si o no y después evaluar por que si o no. Seleccionar las que aplican.		1	No recibí ningún apoyo
			2	No he escuchado sobre ningún apoyo
			3	Si, recibí $300
			4	Si, recibí canasta de alimentos y productos básicos
eco8 (required)	Desde el comienzo de la cuarentena domiciliar obligatoria (22 de Marzo), ¿Ha recibido comida, dinero, u otro apoyo de alguien que no le apoyaba habitualmente? Entrevistador: Si recibe preguntar de quien. Seleccionar las que aplican.		1	No recibí ningún apoyo
			2	Si, de familiares en el país
			3	Si, de familiares en el extranjero
			4	Si, de la iglesia
			5	Si, de una ONG
			6	Si, de la alcaldía

			7	Si, otro
Llamada > Encuesta > Sección B: Impacto Económico > dificultades				
label0	Desde el comienzo de la cuarentena domiciliar obligatoria (22 de Marzo), ha sufrido dificultades financieras que lo/la han obligado a:		1	Si
			0	No
eco9_1 (required)	Pedir un préstamo a familiares o amigos		1	Si
			0	No
eco9_2 (required)	Pedir un préstamo a un prestamista		1	Si
			0	No
eco9_3 (required)	Pedir un préstamo a un banco o organización de microcréditos		1	Si
			0	No
eco9_4 (required)	Vender alguna cosa o propiedad		1	Si
			0	No
eco10 (required)	En la última semana, ¿cuántos días han tenido que limitar las porciones de comida para usted o algún miembro de su hogar? Response constrained to: .>=0 and .<=7			
eco11 (required)	En la última semana, ¿cuántos días ha tenido que saltarse comidas usted o algún miembro de su hogar? Response constrained to: .>=0 and .<=7			
eco12 (required)	Cuan de acuerdo esta con la siguiente frase: "Las personas deberían poder seguir trabajando, aunque puedan contagiarse del coronavirus"		1	Muy de acuerdo
			2	De acuerdo
			3	En desacuerdo
			4	Muy en desacuerdo
Llamada > Encuesta > Sección C: Impacto en la salud				
Llamada > Encuesta > Sección C: Impacto en la salud > health1				

Field	Question	Answer		
label1	¿Padece usted de las siguientes condiciones?		1	Si
			0	No
health1_1 (required)	Asma		1	Si
			0	No
health1_2 (required)	Enfermedades renales		1	Si
			0	No
health1_3 (required)	Enfermedades del hígado		1	Si
			0	No

health1_4 (required)	Cáncer		1	Si
			0	No
health2 (required)	¿Ha tenido usted el coronavirus? Entrevistador: No leer las respuestas. Si responde si, preguntar si ha tenido un examen o los sintomas.		1	Si, confirmado con una prueba
			2	Si, tuve los sintomas
			3	No
			4	No se
health3 (required)	¿Conoce usted a alguien que haya tenido el coronavirus? Entrevistador: No leer las respuestas. Si dice que si, preguntar si se tomo un examen, y luego preguntar si esta vivo o no.		1	Si, confirmado con una prueba y se recuperó
			2	Si, confirmado con una prueba y murió
			3	Si, tenía síntomas y se recuperó
			4	Si, tenía síntomas y murió
			5	No
			6	No se
health4 (required)	Desde el comienzo de la cuarentena domiciliar obligatoria (22 de marzo), ¿ha dejado de ir a consulta o tratamiento?		1	Si
			0	No
health5 (required)	¿Por qué razones dejo de ir a consulta o tratamiento? Entrevistador: Seleccionar todas las que aplican sin leer la lista. Question relevant when: ${health4} =1		1	Por la cuarentena
			2	La clínica estaba cerrada
			3	La clínica/doctor le dijeron que no venga
			4	Decidió esperar y ver si se sentía mejor
			5	No podía pagar la consulta
			6	No podía pagar el transporte
			7	No quería saturar la clínica/hospital
			8	Los tiempos de espera eran muy grandes
			9	Tenía miedo de contraer el coronavirus
			10	Tenía miedo a ser llevado a un centro de confinamiento
			11	Otro
health6 (required)	Desde el comienzo de la cuarentena domiciliar obligatoria (22 de marzo), ¿ha interrumpido un tratamiento por que no pudo obtener los medicamentos necesarios?		1	Si
			0	No
health7 (required)	¿Para qué era el tratamiento? Entrevistador: No leer, seleccionar todas las que aplican. Question relevant when: ${health6} =1		1	Hipertensión
			2	Diabetes

		3 Colesterol 4 Enfermedades respiratorias 5 Enfermedades estomacales 6 Enfermedades renales 7 Otro
Llamada > Encuesta > Information Group relevant when: ${information} >=1		
information_e	Hay personas que tienen mayor riesgo de desarrollar síntomas graves del coronavirus como dificultades para respirar, neumonía y en casos más graves incluso morir. Las personas a mayor riesgo son: -Personas con diabetes -Personas con hipertensión o problemas de corazón -Personas con problemas de riñón o hígado -Personas con problemas respiratorios -Personas mayores a 60 años -Personas que sufren de obesidad -Personas con inmunodeficiencia	
note_risk_person	Según la información que nos ha entregado, usted tiene al menos [risk_factors] factores de riesgo. Usted podría tener otros factores de riesgo para los cuales no tenemos información. Question relevant when: ${information} =2	
information_f	Estas personas deben seguir estrictamente las reglas de distanciamiento social para protegerse.	
Llamada > Encuesta > Sección D: Percepción de riesgos de salud		

Field	Question	Answer
hrisk1_all (required)	¿Qué porcentaje de personas en el Salvador piensa usted que han tenido el coronavirus desde el comienzo de la epidemia? Entrevistador: Explicar que 0 implica que nadie en El Salvador ha tenido el coronavirus y que 100 implica que todos en El Salvador ya han tenido el coronavirus en El Salvador. En caso de dificultad formular la pregunta de la siguiente manera. De cada 100 personas en El Salvador, ¿Cuantas ya han tenido el coronavirus? Probar varias veces de hacer pensar a la persona antes de poner No se/No responde. Response constrained to: (.>=0 and .<=100) or .=-888 or .=-999	
hrisk2_all (required)	¿Qué porcentaje personas en El Salvador piensa usted que habrán tenido el coronavirus dentro de un mes (incluyendo las que ya lo han tenido)? Entrevistador: Explicar que 0 implica que nadie en El Salvador ha tenido el coronavirus y que 100 implica que todos en El Salvador ya han tenido el coronavirus en El Salvador. En caso de dificultad formular la pregunta de la siguiente manera. De cada 100 personas en El Salvador, ¿Cuantas piensa usted que habrán tenido el coronavirus dentro de un mes (incluyendo las que ya lo han tenido)? Probar varias veces de hacer pensar a la persona antes de poner No se/No responde. Response constrained to: (.>=0 and .<=100 and .>= ${hrisk1_all}) or .=-888 or .=-999	
hrisk3_all (required)	¿Qué porcentaje de personas en El Salvador, que hayan tenido el coronavirus, piensa usted que han tenido síntomas muy graves (por ejemplo, dificultad para respirar, insuficiencia pulmonar, etc.)? Entrevistador: Explicar que 0 implica que nadie en El Salvador ha tenido el coronavirus y que 100 implica que todos en El Salvador ya han tenido el coronavirus en El Salvador. En caso de dificultad formular la pregunta de la siguiente manera. De cada 100 personas que tuvieron el coronavirus en El Salvador, ¿Cuantas han tenido síntomas muy graves (por ejemplo, dificultad para respirar, insuficiencia pulmonar, etc.)? Probar varias veces de hacer pensar a la persona antes de poner No se/No responde. Response constrained to: (.>=0 and .<=100) or .=-888 or .=-999	
hrisk4_all (required)	¿Qué porcentaje de personas en El Salvador, que hayan tenido el coronavirus, piensa usted que han muerto? Entrevistador: Explicar que 0 implica que nadie en El Salvador ha tenido el coronavirus y que 100 implica que todos en El Salvador ya han tenido el coronavirus en El Salvador. En caso de dificultad formular la pregunta de la siguiente manera. De cada 100 personas que tuvieron el coronavirus en El Salvador, ¿Cuantas han tenido síntomas muy graves (por ejemplo, dificultad para respirar, insuficiencia pulmonar, etc.)? Probar varias veces de hacer pensar a la persona antes de poner No se/No responde. Response constrained to: (.>=0 and .<=100) or .=-888 or .=-999	
note_personal_des	Ahora quiero que piense en gente como usted: su edad, con su mismo estado de salud, que viven en lugares similares, con sus mismos hábitos, etc.	
hrisk1_you (required)	¿Qué porcentaje de personas como usted piensa que han tenido el coronavirus desde el comienzo de la epidemia? Entrevistador: Explicar que 0 implica que nadie en El Salvador ha tenido el coronavirus y que 100 implica que todos en El Salvador ya han tenido el coronavirus en El Salvador. En caso de dificultad formular la pregunta de la siguiente manera. De cada 100 personas en El Salvador, ¿Cuantas ya han tenido el coronavirus? Probar varias veces de hacer pensar a la persona antes de poner No se/No responde. La persona debe pensar en gente como ellos. Response constrained to: (.>=0 and .<=100) or .=-888 or .=-999	

hrisk2_you (required)	¿Qué porcentaje de personas como usted piensa que habrán tenido el coronavirus dentro de un mes (incluyendo las que ya lo han tenido)? Entrevistador: Explicar que 0 implica que nadie en El Salvador ha tenido el coronavirus y que 100 implica que todos en El Salvador ya han tenido el coronavirus en El Salvador. En caso de dificultad formular la pregunta de la siguiente manera. De cada 100 personas en El Salvador, ¿Cuantas piensa usted que habrán tenido el coronavirus dentro de un mes (incluyendo las que ya lo han tenido)? Probar varias veces de hacer pensar a la persona antes de poner No se/No responde. La persona debe pensar en gente como ellos. Response constrained to: (.>=0 and .<=100 and .>= ${hrisk1_you}) or .=-888 or .=-999	
hrisk3_you (required)	¿Qué porcentaje de personas como usted, que hayan tenido el coronavirus, piensa que han tenido síntomas muy graves (por ejemplo, dificultad para respirar, insuficiencia pulmonar, etc.)? Entrevistador: Explicar que 0 implica que nadie en El Salvador ha tenido el coronavirus y que 100 implica que todos en El Salvador ya han tenido el coronavirus en El Salvador. En caso de dificultad formular la pregunta de la siguiente manera. De cada 100 personas que tuvieron el coronavirus en El Salvador, ¿Cuantas han tenido síntomas muy graves (por ejemplo, dificultad para respirar, insuficiencia pulmonar, etc.)? Probar varias veces de hacer pensar a la persona antes de poner No se/No responde. La persona debe pensar en gente como ellos. Response constrained to: (.>=0 and .<=100) or .=-888 or .=-999	
hrisk4_you (required)	¿Qué porcentaje de personas como usted, que hayan tenido el coronavirus, piensa que han muerto? Entrevistador: Explicar que 0 implica que nadie en El Salvador ha tenido el coronavirus y que 100 implica que todos en El Salvador ya han tenido el coronavirus en El Salvador. En caso de dificultad formular la pregunta de la siguiente manera. De cada 100 personas que tuvieron el coronavirus en El Salvador, ¿Cuantas han tenido síntomas muy graves (por ejemplo, dificultad para respirar, insuficiencia pulmonar, etc.)? Probar varias veces de hacer pensar a la persona antes de poner No se/No responde. Response constrained to: (.>=0 and .<=100) or .=-888 or .=-999	
Llamada > Encuesta > Sección E: Percepción de riesgos económicos		
note_income	Ahora quiero que piense en su situación y la del país.	
ecrisk1 (required)	En una escala de 0 a 100, ¿Cuan seguro esta usted que estará trabajando dentro de un mes? Entrevistador: Explicar que 0 implica que es imposible que esté trabajando en un mes y 100 implica que es seguro que estará trabajando. Response constrained to: .>=0 and .<=100	
ecrisk2 (required)	Si usted logra trabajar dentro de un mes, ¿Cuál cree que será su ingreso promedio diario? Question relevant when: ${ecrisk1} >0 Response constrained to: .>0 or .=-888 or .=-999	
ecrisk3 (required)	Si usted logra trabajar dentro de un mes, ¿Cuál es aproximadamente el sueldo, ingreso o pago diario bruto por todas sus actividades (incluida venta de productos y/o servicios)? Question relevant when: ${ecrisk2} =-999 or ${ecrisk2} =-888	1 Menos de $10 2 Entre $11 y $20 3 Entre $21 y $30 4 Entre $31 y $40 5 Entre $41 y $50 6 18038570 7 Entre $76 y $100 8 Más de $100
ecrisk4 (required)	Si usted logra trabajar dentro de un año, ¿Cuál cree que será su ingreso promedio diario? Response constrained to: .>0 or .=-888 or .=-999	

Field	Question	Answer
ecrisk5 (required)	Si usted logra trabajar dentro de un año, ¿Cuál es aproximadamente el sueldo, ingreso o pago diario bruto por todas sus actividades (incluida venta de productos y/o servicios)? Question relevant when: ${ecrisk4} =-999 or ${ecrisk4} =-888	1 Menos de $10 2 Entre $11 y $20 3 Entre $21 y $30 4 Entre $31 y $40 5 Entre $41 y $50 6 18038570

			7	Entre $76 y $100
			8	Más de $100
ecrisk6 (required)	Cuál de las siguientes frases es una mejor representación de su situación personal:		1	Necesito salir a trabajar, aunque haya peligro de contagiarme de coronavirus
			2	Necesito quedarme en mi casa para no contagiarme de coronavirus, aunque reciba menos ingresos
Llamada > Encuesta > Sección F: Políticas de gobierno				
policy1 (required)	Usted piensa que las medidas de distanciamiento social impuestas por el gobierno (cuarentena y cierre de negocios) por la crisis del coronavirus son…		1	Muy excesivas
			2	Excesivas
			3	Adecuadas
			4	Insuficientes
			5	Muy insuficientes
Llamada > Encuesta > Sección F: Políticas de gobierno > Medidas del gobierno				
label2	Le leeré algunas medidas y usted me dice si piensa que deben incluirse en la respuesta a la crisis del COVID-19 en El Salvador:		1	Si
			0	No
policy2_1 (required)	Cierre de escuelas		1	Si
			0	No
policy2_2 (required)	Cierre de tiendas no esenciales como centros comerciales o tiendas de ropa		1	Si
			0	No
policy2_3 (required)	Cierre de mercados		1	Si
			0	No
policy2_4 (required)	Cierre del transporte público		1	Si
			0	No
policy2_5 (required)	Prohibir reuniones de más de 5 personas		1	Si
			0	No
policy2_6 (required)	Cuarentena domiciliara obligatoria con excepciones para empleos esenciales		1	Si
			0	No
policy2_7 (required)	Aislamiento para personas a riesgo		1	Si
			0	No
policy2_8 (required)	Enviar a centros de contención para aquellos que no cumplen las reglas		1	Si
			0	No

policy2_9 (required)	Multas para aquellos que no cumplen las reglas		1	Si
			0	No
policy2_10 (required)	Restricción al número de salidas semanales		1	Si
			0	No

Llamada > Encuesta > Sección F: Políticas de gobierno > Medidas del gobierno: Razones
Group relevant when: ${policy2_1} =0 or ${policy2_2} =0 or ${policy2_3} =0 or ${policy2_4} =0 or ${policy2_5} =0 or ${policy2_6} =0 or ${policy2_7} =0 or ${policy2_8} =0 or ${policy2_9} =0 or ${policy2_10} =0

label4	En El Salvador, ¿Por qué piensa usted que las siguientes medidas no deberían ser incluidos en la respuesta a la crisis del COVID19? Entrevistador: Seleccionar las que aplican.		1	No sirve para detener la propagación del virus
			2	Aunque es efectivo para detener la propagación, afecta demasiado la economía
			3	Aunque es efectivo para detener la propagación afecta demasiado a la vida social de la gente
policy3_1 (required)	Cierre de escuelas Question relevant when: ${policy2_1} =0		1	No sirve para detener la propagación del virus
			2	Aunque es efectivo para detener la propagación, afecta demasiado la economía
			3	Aunque es efectivo para detener la propagación afecta demasiado a la vida social de la gente

Field	Question	Answer		
policy3_2 (required)	Cierre de tiendas no esenciales como centros comerciales o tiendas de ropa Question relevant when: ${policy2_2} =0		1	No sirve para detener la propagación del virus
			2	Aunque es efectivo para detener la propagación, afecta demasiado la economía
			3	Aunque es efectivo para detener la propagación afecta demasiado a la vida social de la gente
policy3_3 (required)	Cierre de mercados Question relevant when: ${policy2_3} =0		1	No sirve para detener la propagación del virus
			2	Aunque es efectivo para detener la propagación, afecta demasiado la economía
			3	Aunque es efectivo para detener la propagación afecta demasiado a la vida social de la gente
policy3_4 (required)	Cierre del transporte público Question relevant when: ${policy2_4} =0		1	No sirve para detener la propagación del virus
			2	Aunque es efectivo para detener la propagación, afecta demasiado la economía
			3	Aunque es efectivo para detener la propagación afecta demasiado a la vida social de la gente

policy3_5 (required)	Prohibir reuniones de más de 5 personas Question relevant when: ${policy2_5} =0	1	No sirve para detener la propagación del virus
		2	Aunque es efectivo para detener la propagación, afecta demasiado la economía
		3	Aunque es efectivo para detener la propagación afecta demasiado a la vida social de la gente
policy3_6 (required)	Cuarentena domiciliara obligatoria con excepciones para empleos esenciales Question relevant when: ${policy2_6} =0	1	No sirve para detener la propagación del virus
		2	Aunque es efectivo para detener la propagación, afecta demasiado la economía
		3	Aunque es efectivo para detener la propagación afecta demasiado a la vida social de la gente
policy3_7 (required)	Aislamiento para personas a riesgo Question relevant when: ${policy2_7} =0	1	No sirve para detener la propagación del virus
		2	Aunque es efectivo para detener la propagación, afecta demasiado la economía
		3	Aunque es efectivo para detener la propagación afecta demasiado a la vida social de la gente
policy3_8 (required)	Enviar a centros de contención para aquellos que no cumplen las reglas Question relevant when: ${policy2_8} =0	1	No sirve para detener la propagación del virus
		2	Aunque es efectivo para detener la propagación, afecta demasiado la economía
		3	Aunque es efectivo para detener la propagación afecta demasiado a la vida social de la gente

Field	Question	Answer	
policy3_9 (required)	Multas para aquellos que no cumplen las reglas Question relevant when: ${policy2_9} =0	1	No sirve para detener la propagación del virus
		2	Aunque es efectivo para detener la propagación, afecta demasiado la economía
		3	Aunque es efectivo para detener la propagación afecta demasiado a la vida social de la gente
policy3_10 (required)	Restricción al número de salidas semanales Question relevant when: ${policy2_10} =0	1	No sirve para detener la propagación del virus
		2	Aunque es efectivo para detener la propagación, afecta demasiado la economía
		3	Aunque es efectivo para detener la propagación afecta demasiado a la vida social de la gente

policy4 (required)	Con cual de las siguientes frases esta usted más de acuerdo:		1	Mas gente morirá de coronavirus que de las medidas de protección actual
			2	Mas gente morirá de las consecuencias de las medidas de protección actual que del coronavirus
Llamada > Encuesta > Seccion G: Información Group relevant when: ${piloto} =0				
information_demand (required)	Como premio a su participación usted participará en una lotería para ganar $100. Queremos plantearle la siguiente posibilidad. Nosotros podemos mandarle información de algunas de las preguntas de este estudio. Esta información incluiría las respuestas a las preguntas que le hemos hecho y sus posibles factores de riesgo. Si usted gana la lotería estaría dispuesto a reducir su premio [precio_inf] para recibir esta información. Si gana la lotería entonces solo recibiría [loteria]. Si no gana, recibiría la información sin pagar nada. ¿Quiere recibir la información vía SMS en estas condiciones?		1	Si
			0	No
follow_up (required)	¿Aceptaría usted que lo contactasemos en el futuro con una encuesta automatica con pocas preguntas para saber como sigue su situación?		1	Si
			0	No
final	Muchas gracias por su tiempo y participación en este estudio.			
called (required)	¿Cuántas veces se le llamo a esta persona?			
observaciones (required)	Observaciones			
numero_telefono (required)	Cual es el número de teléfono en el que pudo contactar la persona Question relevant when: ${contacto_telefonico} =1			

Appendix A3: Balance Checks

Table: Balance Check regression results

	(1) Male	(2) Daily income before pandemic (USD)	(3) Age	(4) Completed basic education	(5) Number of COVID-19 risk factors	(6) Has/ had COVID or knows s/o who has/had	(7) Has Health Insurance	(8) Risk aversion-Index[a]	(9) Considered self of high risk from COVID	(10) Economically vulnerable to pandemic[b]	(11) Medically vulnerable to pandemic[c]
Control	0.02	-0.21	-0.37	-0.01	-0.01	0.02	-0.02	-0.02	-0.01	-0.03	-0.02
	-0.02	-1.89	-0.74	-0.03	-0.06	-0.03	-0.03	-0.06	-0.03	-0.03	-0.03
General Information	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	-0.02	0.00	0.01
	(.)	(.)	(.)	(.)	-0.06	-0.03	(.)	(.)	-0.03	(.)	-0.03
Tailored Information	0.02	-0.93	0.36	-0.03	0.00	0.00	0.00	0.04	0.00	-0.02	0.00
	-0.02	-1.89	-0.74	-0.03	(.)	(.)	-0.03	-0.06	(.)	-0.03	(.)
N	1504.00	1504.00	1504.00	1504.00	1504.00	1504.00	1504.00	1504.00	1504.00	1504.00	1504.00
R2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes: Table shows regression results for the balance checks. All models use ordinary least squares. Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

a: Risk aversion-Index is constructed from 17 risk aversion items (cf. Appendix A) as a standardized index score of the mid-point between the lower and upper limits of risk preference in the sample where a participant switches to the safe option (from the next riskier one), based on Harrison et al., 2010. b: Economic vulnerability is a dummy variable constructed from an economic impact summary index consisting of income loss and poverty score (1 = observation scores higher than sample median). c: Medial vulnerability is a dummy variable that is set to 1 if the ^^idual has stopped any medical treatments or was unable to obtain medication due to the pandemic.

Appendix B: Elaborations

Appendix B1: Inverse-Covariance weighted indices

The summary indices are weighted mean values based on standardized versions of the different outcomes they incorporate. After recoding all *k* variables Y_{kj} of one outcome family *j* in the same direction, each variable *Y* is divided by the standard deviation of the observations in the control group, creating a standardized variable $\hat{Y}_{kj}$. Afterwards, the new index variable *s* is computed as a weighted mean of all $\hat{Y}_{kj}$ for observation *i*. $\sum^{-1}$, the inverse of the covariance matrix of all $\hat{Y}_{kj}$ is used to do the weighting via generalised least squares:

1) The weight *w* of every $\hat{Y}_{kj}$ is set to the sum of its row in $\sum^{-1}$ to offset outcome variables that are highly correlated with smaller weights.
2) The weighted average of $\hat{Y}_{kj}$ is calculated for all observations *i*.
3) The weighted average index $\widehat{s_i}$ is calculated as:

$$\widehat{s_i} = \left(1` \widehat{\sum}^{-1} 1\right)^{-1} \times \left(1` \widehat{\sum}^{-1} \widehat{y_i}\right)$$

- - where 1 is a vector of ones per column in $\sum^{-1}$,
- - where $\widehat{y_i}$ is a vector for all columns of observation *i*.

4) $\widehat{s_i}$ is normalized by subtracting the control group mean of $\widehat{s_i}$ and then dividing over the control group standard deviation of $\widehat{s_i}$.

This produces a mean of 0 and sd of 1 for $\widehat{s_i}$ in the control group and effect size differences in the treatment groups. The procedure has two major advantages for intervention testing. Firstly, efficiency is increased because of the down weighting of more correlated variables and thus counters potential p-hacking. Secondly, because of step 3, variables with missing values are also down weighted while still using all available data. Therefore, every observation *i* can be assigned a value of $\widehat{s_i}$, even if some indicators are missing for this *i*.

The calculation was proposed by [44] and elaborated by [50].

Appendix C Estimation Tables & Figures

Appendix C1 Demand for information (full sample and subgroups):

Table: Information effect of demand for information: Full Sample and Subgroups | Controls Omitted

		Full Sample	High RP = 1	Risk lover = 1	Over-estimator = 1	Under-estimator = 1	At risk = 1	Medically vulnerable = 1	Medically vulnerable = 1	COVID Exposure = 1
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
General Information										
	Marginal Effects	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	HW Robust SE	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	Z	0.31	0.29	0.32	0.35	0.36	0.30	0.29	0.35	0.38
	P > z	0.76	0.77	0.75	0.73	0.72	0.76	0.78	0.73	0.71
Tailored Information										
	Marginal Effects	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	HW Robust SE	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	Z	0.95	0.94	0.97	0.98	0.97	0.96	0.93	0.98	1.02
	P > z	0.34	0.35	0.33	0.33	0.33	0.34	0.35	0.33	0.31
Controls		N	N	N	N	N	N	N	N	N

Notes: Table presents marginal effects of the information treatments on the demand for further information. Marginal effects represent the increase in probability of willingness to sacrifice a part of potential lottery winnings for further information, after receiving the treatment in comparison to the control group, averaged across price (proportions of winnings) levels. The upper panel shows results for general information, the lower panel shows results for tailored information. Column (1) shows the full sample estimates, each column in columns (2) – (9) represents one subgroup, operationalized through an interaction variable. All interaction variables are binary (1= Yes, 0 = No), for instance *High RP (Risk Perception)* refers to the questionnaire item from the follow up interviews of the two previous studies (Do you think you have a high risk of a severe case if you are infected with COVID-19 (1 = Yes; 0 = No); *Risk Lover* is a dummy variable denoting below average risk aversion (calculated from several items on risk and time preferences [53]); *At Risk* is a dummy variable that is set to one if the observation has at least one COVID-19 risk factor; *Over- & Under- estimates own risk* are dummy variables that are set to one if High RP = 1 & At Risk = 0 (Overestimates) / High RP = 0 & At Risk = 1 (Underestimates); *Economic vulnerabil*ity is a dummy variable constructed from an economic impact summary index consisting of income loss and poverty score (1 = observation scores higher than sample median); *Health vulnerability* is a dummy variable that is set to 1 if the individual has stopped any medical treatments or was unable to obtain medication due to the pandemic. Huber-White Robust standard errors beneath marginal effects. * p<0.10, ** p<0.05, *** p<0.01.

Table: Information effect of demand for information: Full Sample and Subgroups | Controls Included

		Full Sample	High RP = 1	Risk lover = 1	Over-estimator = 1	Under-estimator = 1	At risk = 1	Medically vulnerable = 1	Medically vulnerable = 1	COVID Exposure = 1
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
General Information										
	Marginal Effects	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	SE	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	Z	0.42	0.37	0.42	0.44	0.45	0.39	0.40	0.47	0.43
	P > z	0.68	0.71	0.67	0.66	0.65	0.70	0.69	0.64	0.66
Tailored Information										
	ME	0.03	0.03	0.04	0.03	0.04	0.03	0.03	0.03	0.03
	SE	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	Z	1.10	1.10	1.15	1.14	1.15	1.13	1.13	1.14	1.14
	P > z	0.27	0.27	0.25	0.25	0.25	0.26	0.26	0.25	0.25
Controls		Y	Y	Y	Y	Y	Y	Y	Y	Y

Notes: Table presents marginal effects of the information treatments on the demand for further information. Marginal effects represent the increase in probability of willingness to sacrifice a part of potential lottery winnings for further information, after receiving the treatment in comparison to the control group, averaged across price (proportions of winnings) levels. The upper panel shows results for general information, the lower panel shows results for tailored information. Column (1) shows the full sample estimates, each column in columns (2) – (9) represents one subgroup, operationalized through an interaction variable. All interaction variables are binary (1= Yes, 0 = No), for instance *High RP (Risk Perception)* refers to the questionnaire item from the follow up interviews of the two previous studies (Do you think you have a high risk of a severe case if you are infected with COVID-19 (1 = Yes; 0 = No); *Risk Lover* is a dummy variable denoting below average risk aversion (calculated from several items on risk and time preferences [53]); *At Risk* is a dummy variable that is set to one if the observation has at least one COVID-19 risk factor; *Over- & Under- estimates own risk* are dummy variables that are set to one if High RP = 1 & At Risk = 0 (Overestimates) / High RP = 0 & At Risk = 1 (Underestimates); *Economic vulnerabil*ity is a dummy variable constructed from an economic impact summary index consisting of income loss and poverty score (1 = observation scores higher than sample median); *Health vulnerability* is a dummy variable that is set to 1 if the individual has stopped any medical treatments or was unable to obtain medication due to the pandemic. Huber-White Robust standard errors beneath marginal effects. * p<0.10, ** p<0.05, *** p<0.01.

Appendix C2 Policy preference items Full sample

Table: Effect of Information on support for mitigation policies | Controls Included

	School closures	Market closures (essential)	Market closures (non-essential)	Public Transport Closure	Ban meetings of 5+ people	Mandatory Home quarantine (everyone exc. essential)	Mandatory Home quarantine (people at risk)	Containment for non-compliers	Fines for non-compliers	Restricting weekly home departures
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
General Information	0.017**	0.035*	0.014	0.036	-0.006	-0.015	0.004	0.008	-0.015	-0.018
	(0.771)	(0.209)	(0.130)	(0.131)	(0.214)	(0.194)	(0.480)	(0.167)	(0.180)	(0.232)
Tailored Information	0.01	0.01	0.00	0.03	-0.02	0.01	0.00	-0.01	-0.01	-0.02
	(0.607)	(0.198)	(0.131)	(0.132)	(0.211)	(0.203)	(0.476)	(0.164)	(0.184)	(0.238)
Control Mean	0.980	0.875	0.393	0.601	0.903	0.885	0.980	0.815	0.861	0.927
Control SD	0.141	0.331	0.489	0.490	0.296	0.319	0.141	0.389	0.346	0.260
Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
N	1423	1504	1504	1504	1504	1504	1504	1504	1504	1504
Pseudo R2	0.096	0.033	0.009	0.011	0.024	0.012	0.042	0.039	0.031	0.035

Notes: Table presents marginal effects of the information treatments on the likelihood for policy support (compared against control group means), obtained from logistic regressions of each policy dummy on the treatment group inidcators. Controls included. Refer to Appendix C for sharpened q-values. Refer to table 3 in the main text for results with omitted controls ($\beta\Delta < 0.1$). Huber-White robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

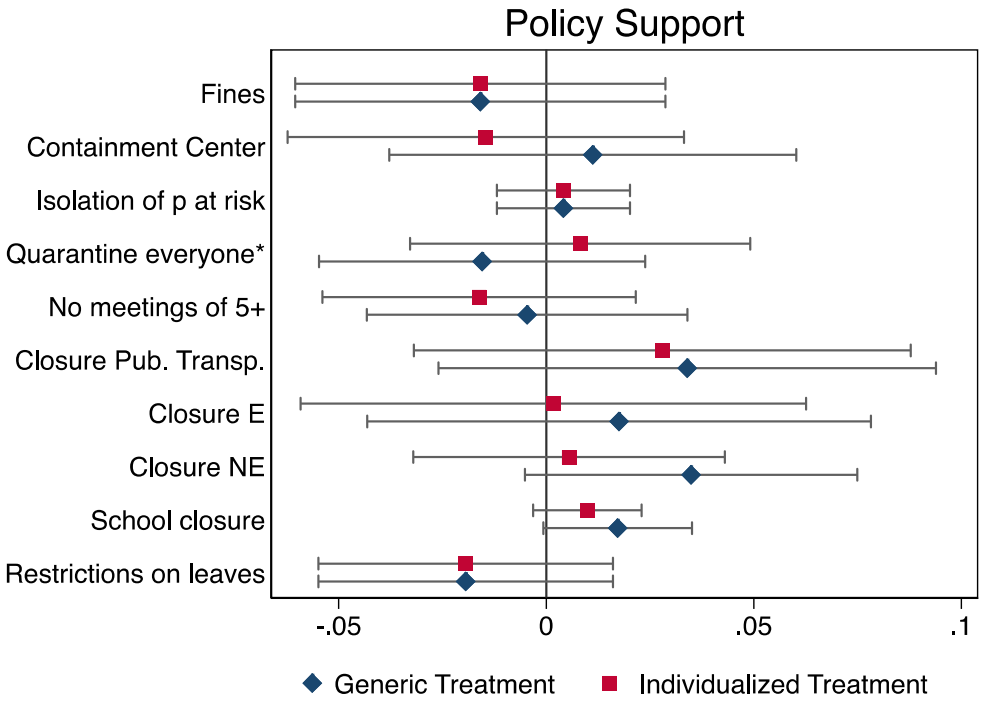


Figure: Policy support items

Notes: Graph shows marginal effects of the information treatments on the likelihood for policy support (compared against control group means), obtained from logistic regressions of each policy dummy on the treatment group inidcators. Controls not included.

Appendix C3 risk perception items full sample:

Table: Effect of Information on risk perceptions | Controls Omitted

	Population health risk perception				Personal health risk perception				Economic risk perception	
	Previous Infections	Future Infection	Proportion of severe Cases	Proportion of cases with fatal outcome	Previous Infections	Future Infection	Proportion of severe Cases	Proportion of cases with fatal outcome	1 month perspective	1 year perspective
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
General Information	-0.461	0.148	3.030*	2.495	1.984	2.163	3.788**	2.957*	0.611	0.253*
	(1.594)	(1.775)	(1.642)	(1.655)	(1.509)	(2.031)	(1.656)	(1.511)	(0.739)	(0.138)
Tailored Information	0.307	-1.219	0.742	-0.0201	1.595	0.635	0.506	1.256	0.630	0.229
	(1.601)	(1.744)	(1.620)	(1.588)	(1.487)	(2.006)	(1.587)	(1.448)	(0.773)	(0.139)
Control Mean	46.28	71.71	38.17	28.72	31.22	52.85	30.40	21.94	9.78	3.57
Control SD	24.56	26.91	25.16	24.95	23.53	31.31	24.76	22.88	2.66	1.60
Controls	N	N	N	N	N	N	N	N	N	N
N	1425	1415	1401	1398	1433	1417	1400	1394	84	783
R2	0.000	0.001	0.003	0.002	0.001	0.001	0.005	0.003	0.012	0.005

Notes: Table presents coefficients of OLS regressions of the items on the two treatment dummies. Health risk perception in per cent (Example: Mortality: average of the reported proportions in response to the question "What percentage of people /like you/ do you think will die from an infection with COVID-19"). Economic risk perceptions are based on the survey questions on the likelihood of employment and an estimate of income in case of said employment, one month and one year from the survey. For both prospects (short – and long-term), the reported variables are summary statistics, computed by multiplying the reported probability with the estimated income. Controls not included. Refer to Appendix C for results from the re-estimations with included controls for robustness checks,, and sharpened q values. Huber-White robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table: Effect of Information on risk perceptions | Controls Included

	Population health risk perception				Personal health risk perception				Economic risk perception	
	Previous Infections	Future Infection	Proportion of severe Cases	Proportion of cases with fatal outcome	Previous Infections	Future Infection	Proportion of severe Cases	Proportion of cases with fatal outcome	1 month perspective	1 year perspective
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
General Information	-0.572	0.0228	2.883*	2.168	1.768	1.910	3.544**	2.562*	0.380	0.277**
	(1.560)	(1.718)	(1.624)	(1.626)	(1.485)	(1.992)	(1.621)	(1.471)	(0.727)	(0.133)
Tailored Information	0.307	-1.219	0.742	-0.0201	1.595	0.635	0.506	1.256	0.630	0.229
	(1.601)	(1.744)	(1.620)	(1.588)	(1.487)	(2.006)	(1.587)	(1.448)	(0.773)	(0.139)
Control Mean	46.28	71.71	38.17	28.72	31.22	52.85	30.40	21.94	9.78	3.57
Control SD	24.56	26.91	25.16	24.95	23.53	31.31	24.76	22.88	2.66	1.60
Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
N	1425	1415	1401	1398	1433	1417	1400	1394	84	783
R2	0.043	0.071	0.039	0.049	0.034	0.040	0.043	0.054	0.264	0.091

Notes: Table presents coefficients of OLS regressions of the items on the two treatment dummies. Health risk perception in per cent (Example: Mortality: average of the reported proportions in response to the question "What percentage of people /like you/ do you think will die from an infection with COVID-19"). Economic risk perceptions are based on the survey questions on the likelihood of employment and an estimate of income in case of said employment, one month and one year from the survey. For both prospects (short – and long-term), the reported variables are summary statistics, computed by multiplying the reported probability with the estimated income. Controls not included. Refer to Appendix C for results from the re-estimations with included controls for robustness checks,, and sharpened q values. Huber-White robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Appendix C4 Outcome indices (full sample and subgroups)

Table: Information effect on population health risk perception index: Full Sample and Subgroups | Controls Omitted

		Interaction variables							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Full Sample	High RP = 1	Risk lover = 1	Over-estimator = 1	Under-estimator = 1	At risk = 1	Medically vulnerable = 1	Medically vulnerable = 1	COVID Exposure = 1
General Information									
Full sample	0.0596								
	(0.0659)								
x interaction = 0		-0.112	0.0772	-0.0175	0.0966	0.0824	0.0133	-0.0298	0.0980
		(0.0985)	(0.0796)	(0.0776)	(0.0723)	(0.0887)	(0.0995)	(0.0903)	(0.0864)
x interaction = 1		0.327***	0.110	0.474***	-0.220*	-0.0608	0.173*	0.0303	0.0852
		(0.0935)	(0.0986)	(0.0963)	(0.131)	(0.0978)	(0.0915)	(0.0908)	(0.0972)
Tailored Information									
Full sample	-0.00472								
	(0.0659)								
x interaction = 0		-0.0272	-0.00627	0.0129	0.0322	0.00975	0.0537	-0.0883	0.0151
		(0.101)	(0.0803)	(0.0769)	(0.0732)	(0.0929)	(0.0986)	(0.0907)	(0.0873)
x interaction = 1		0.149	0.0810	0.152	-0.258**	-0.111	0.0204	-0.0383	0.0478
		(0.0934)	(0.0955)	(0.105)	(0.117)	(0.0928)	(0.0922)	(0.0900)	(0.0949)
Controls	N	N	N	N	N	N	N	N	N
N	1469	1469	1469	1469	1469	1469	1469	1469	1469
R2	0.001	0.071	0.066	0.069	0.067	0.067	0.066	0.068	0.068

Notes: Each column represents one subgroup, operationalized through an interaction variable. All interaction variables are binary (1= Yes, 0 = No), for instance *High Risk Perception* refers to the questionnaire item from the follow up interviews of the two previous studies (Do you think you have a high risk of a severe case if you are infected with COVID-19 (1 = Yes; 0 = No); *Risk Lover* is a dummy variable denoting below average risk aversion (calculated from several items on risk and time preferences [53]); *At Risk* is a dummy variable that is set to one if the observation has at least one COVID-19 risk factor; *Over- & Under-estimates own risk* are dummy variables that are set to one if High RP = 1 & At Risk = 0 (Overestimates) / High RP = 0 & At Risk = 1 (Underestimates). Population health risk perception index is constructed as z-score from all items in the outcome family and represents standard deviations from the control group mean (which is set to one with sd=1) of an observation in one of the treatment groups (Appendix B) [44]. Coefficients represent average standard deviations from the control group means. Controls omitted. See Appendix C for sharpened q-values. Robust standard errors in parenthesies. * p<0.10, ** p<0.05, *** p<0.01.

Table: Information effect on population health risk perception index: Full Sample and Subgroups | Controls Included

		Interaction variables							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Full Sample	High RP = 1	Risk lover = 1	Over-estimator = 1	Under-estimator = 1	At risk = 1	Medically vulnerable = 1	Medically vulnerable = 1	COVID Exposure = 1
General Information									
Full sample	0.0528								
	(0.0641)								
x interaction = 0		-0.117	0.0702	-0.0185	0.0914	0.0755	0.0255	-0.0485	0.0797
		(0.0963)	(0.0779)	(0.0761)	(0.0704)	(0.0850)	(0.0953)	(0.0872)	(0.0842)
x interaction = 1		0.190*	-0.00340	0.267**	0.0363	0.187*	0.118	0.0879	0.496*
		(0.113)	(0.109)	(0.120)	(0.156)	(0.113)	(0.0858)	(0.0983)	(0.255)
Tailored Information									
Full sample	0.00248								
	(0.0641)								
x interaction = 0		-0.0224	-0.00605	0.0127	0.0395	0.0221	0.0539	-0.0727	0.0175
		(0.0989)	(0.0795)	(0.0759)	(0.0726)	(0.0925)	(0.0957)	(0.0900)	(0.0867)
x interaction = 1		0.0312	0	0	0	0.136	0	0.0175	0.467*
		(0.111)	(.)	(.)	(.)	(0.109)	(.)	(0.0999)	(0.262)
Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y
N	1469	1469	1469	1469	1469	1469	1469	1469	1469
R2	0.066	0.071	0.066	0.069	0.067	0.067	0.066	0.068	0.068

Notes: Each column represents one subgroup, operationalized through an interaction variable. All interaction variables are binary (1= Yes, 0 = No), for instance *High Risk Perception* refers to the questionnaire item from the follow up interviews of the two previous studies (Do you think you have a high risk of a severe case if you are infected with COVID-19 (1 = Yes; 0 = No); *Risk Lover* is a dummy variable denoting below average risk aversion (calculated from several items on risk and time preferences [53]); *At Risk* is a dummy variable that is set to one if the observation has at least one COVID-19 risk factor; *Over- & Under-estimates own risk* are dummy variables that are set to one if High RP = 1 & At Risk = 0 (Overestimates) / High RP = 0 & At Risk = 1 (Underestimates). Population health risk perception index is constructed as z-score from all items in the outcome family and represents standard deviations from the control group mean (which is set to one with sd=1) of an observation in one of the treatment groups (Appendix B) [44]. Coefficients represent average standard deviations from the control group means. Controls included. See Appendix C for sharpened q-values. Robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table: Information effect on personal health risk perception index: Full Sample and Subgroups | Controls Omitted

		Interaction variables							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Full Sample	High RP = 1	Risk lover = 1	Over-estimator = 1	Under-estimator = 1	At risk = 1	Medically vulnerable = 1	Medically vulnerable = 1	COVID Exposure = 1
General Information									
Full sample	0.125*								
	(0.0663)								
x interaction = 0		-0.0368	0.120	0.0349	0.149**	0.165*	0.00984	0.0133	0.176**
		(0.0953)	(0.0787)	(0.0767)	(0.0734)	(0.0906)	(0.0962)	(0.0911)	(0.0888)
x interaction = 1		0.443***	0.214**	0.404***	-0.00726	0.249***	0.346***	0.165*	0.104
		(0.0940)	(0.103)	(0.109)	(0.123)	(0.0939)	(0.0917)	(0.0915)	(0.0945)
Tailored Information									
Full sample	0.0415								
	(0.0663)								
x interaction = 0		-0.0313	0.0809	0.0578	0.0909	0.0402	0.0784	-0.0180	0.0580
		(0.0940)	(0.0791)	(0.0770)	(0.0734)	(0.0886)	(0.0962)	(0.0901)	(0.0870)
x interaction = 1		0.292***	0.0382	0.0414	-0.175*	0.201**	0.135	0.0313	0.0709
		(0.0933)	(0.0949)	(0.101)	(0.104)	(0.0922)	(0.0900)	(0.0895)	(0.0938)
Controls	N	N	N	N	N	N	N	N	N
N	1451	1451	1451	1451	1451	1451	1451	1451	1451
R2	0.003	0.031	0.004	0.011	0.007	0.007	0.013	0.005	0.003

Notes: Each column represents one subgroup, operationalized through an interaction variable. All interaction variables are binary (1= Yes, 0 = No), for instance *High Risk Perception* refers to the questionnaire item from the follow up interviews of the two previous studies (Do you think you have a high risk of a severe case if you are infected with COVID-19 (1 = Yes; 0 = No); *Risk Lover* is a dummy variable denoting below average risk aversion (calculated from several items on risk and time preferences [53]); *At Risk* is a dummy variable that is set to one if the observation has at least one COVID-19 risk factor; *Over- & Under-estimates own risk* are dummy variables that are set to one if High RP = 1 & At Risk = 0 (Overestimates) / High RP = 0 & At Risk = 1 (Underestimates). Personal health risk perception index is constructed as z-score from all items in the outcome family and represents standard deviations from the control group mean (which is set to one with sd=1) of an observation in one of the treatment groups (Appendix B) [44]. Coefficients represent average standard deviations from the control group means. Controls omitted. See Appendix C for sharpened q-values. Robust standard errors in parenthesies. * p<0.10, ** p<0.05, *** p<0.01.

Table: Information effect on personal health risk perception index: Full Sample and Subgroups | Controls Included

		Interaction variables							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Full Sample	High RP = 1	Risk lover = 1	Over-estimator = 1	Under-estimator = 1	At risk = 1	Medically vulnerable = 1	Medically vulnerable = 1	COVID Exposure = 1
General Information									
Full Sample	0.112*								
	(0.0650)								
x interaction = 0		-0.0299	0.107	0.0303	0.139*	0.153*	0.0173	-0.00547	0.156*
		(0.0910)	(0.0767)	(0.0738)	(0.0720)	(0.0882)	(0.0937)	(0.0882)	(0.0866)
x interaction = 1		0.413***	0.158	0.302**	0.197	0.433***	0.197**	0.109	0.340
		(0.107)	(0.116)	(0.128)	(0.137)	(0.107)	(0.0894)	(0.0999)	(0.242)
Tailored Information									
Full Sample	0.0343								
	(0.0650)								
x interaction = 0		-0.0473	0.0697	0.0377	0.0908	0.0424	0.0801	-0.0322	0.0533
		(0.0920)	(0.0790)	(0.0758)	(0.0735)	(0.0886)	(0.0939)	(0.0910)	(0.0862)
x interaction = 1		0.282***	0	0	0	0.377***	0	-0.0171	0.302
		(0.108)	(.)	(.)	(.)	(0.109)	(.)	(0.101)	(0.246)
Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y
N	1451	1451	1451	1451	1451	1451	1451	1451	1451
R2	0.054	0.068	0.055	0.058	0.056	0.065	0.057	0.056	0.055

Notes: Each column represents one subgroup, operationalized through an interaction variable. All interaction variables are binary (1= Yes, 0 = No), for instance *High Risk Perception* refers to the questionnaire item from the follow up interviews of the two previous studies (Do you think you have a high risk of a severe case if you are infected with COVID-19 (1 = Yes; 0 = No); *Risk Lover* is a dummy variable denoting below average risk aversion (calculated from several items on risk and time preferences [53]); *At Risk* is a dummy variable that is set to one if the observation has at least one COVID-19 risk factor; *Over- & Under-estimates own risk* are dummy variables that are set to one if High RP = 1 & At Risk = 0 (Overestimates) / High RP = 0 & At Risk = 1 (Underestimates). Personal health risk perception index is constructed as z-score from all items in the outcome family and represents standard deviations from the control group mean (which is set to one with sd=1) of an observation in one of the treatment groups (Appendix B) [44]. Coefficients represent average standard deviations from the control group means. Controls included. See Appendix C for sharpened q-values. Robust standard errors in parenthesies. * p<0.10, ** p<0.05, *** p<0.01.

Table: Information effect on economic risk perception index: Full Sample and Subgroups | Controls Omitted

		Interaction variables							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Full Sample	High RP = 1	Risk lover = 1	Over-estimator = 1	Under-estimator = 1	At risk = 1	Medically vulnerable = 1	Medically vulnerable = 1	COVID Exposure = 1
General Information									
Full sample	-0.154*								
	(0.0912)								
x interaction = 0		-0.0990	-0.220**	-0.111	-0.132	-0.134	-0.157	-0.148	-0.253**
		(0.145)	(0.105)	(0.106)	(0.0992)	(0.130)	(0.129)	(0.121)	(0.115)
x interaction = 1		-0.114	-0.205	-0.195	-0.0882	-0.0566	-0.131	-0.216*	-0.166
		(0.139)	(0.133)	(0.157)	(0.161)	(0.124)	(0.117)	(0.117)	(0.120)
Tailored Information									
Full sample	-0.156*								
	(0.0921)								
x interaction = 0		-0.103	-0.0849	-0.0558	-0.148	-0.255*	-0.254*	-0.158	-0.251**
		(0.152)	(0.105)	(0.109)	(0.100)	(0.131)	(0.130)	(0.122)	(0.115)
x interaction = 1		-0.115	-0.514***	-0.374**	-0.0382	0.0433	-0.0554	-0.212*	-0.177
		(0.141)	(0.151)	(0.162)	(0.193)	(0.132)	(0.124)	(0.126)	(0.138)
Controls	N	N	N	N	N	N	N	N	N
N	794	794	794	794	794	794	794	794	794
R2	0.005	0.005	0.019	0.011	0.007	0.013	0.008	0.006	0.007

Notes: Each column represents one subgroup, operationalized through an interaction variable. All interaction variables are binary (1= Yes, 0 = No), for instance *High Risk Perception* refers to the questionnaire item from the follow up interviews of the two previous studies (Do you think you have a high risk of a severe case if you are infected with COVID-19 (1 = Yes; 0 = No); *Risk Lover* is a dummy variable denoting below average risk aversion (calculated from several items on risk and time preferences [53]); *At Risk* is a dummy variable that is set to one if the observation has at least one COVID-19 risk factor; *Over- & Under-estimates own risk* are dummy variables that are set to one if High RP = 1 & At Risk = 0 (Overestimates) / High RP = 0 & At Risk = 1 (Underestimates). Economic risk perception index is constructed as z-score from all items in the outcome family and represents standard deviations from the control group mean (which is set to one with sd=1) of an observation in one of the treatment groups (Appendix B) [44]. Coefficients represent average standard deviations from the control group means. Controls omitted. See Appendix C for sharpened q-values. Robust standard errors in parenthesies. * p<0.10, ** p<0.05, *** p<0.01.

Table: Information effect on economic risk perception index: Full Sample and Subgroups | Controls Included

		Interaction variables							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Full Sample	High RP = 1	Risk lover = 1	Over-estimator = 1	Under-estimator = 1	At risk = 1	Medically vulnerable = 1	Medically vulnerable = 1	COVID Exposure = 1
General Information									
Full sample	-0.164*								
	(0.0876)								
x interaction = 0		-0.0979	-0.219**	-0.117	-0.151	-0.151	-0.176	-0.172	-0.267**
		(0.134)	(0.103)	(0.0995)	(0.0965)	(0.126)	(0.125)	(0.115)	(0.110)
x interaction = 1		0.0688	0.322*	0.214	0.0506	-0.0184	-0.0342	-0.210	-1.036**
		(0.167)	(0.172)	(0.202)	(0.214)	(0.159)	(0.120)	(0.132)	(0.446)
Tailored Information									
Full sample	-0.161*								
	(0.0882)								
x interaction = 0		-0.0791	-0.0770	-0.0538	-0.147	-0.230*	-0.234*	-0.142	-0.286***
		(0.140)	(0.0964)	(0.103)	(0.0960)	(0.127)	(0.123)	(0.112)	(0.109)
x interaction = 1		0.0318	0	0	0	0.0317	0	-0.258*	-1.053
		(0.161)	(.)	(.)	(.)	(0.160)	(.)	(0.141)	(0.471)
Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y
N	794	794	794	794	794	794	794	794	794
R2	0.110	0.114	0.117	0.115	0.110	0.114	0.110	0.111	0.118

Notes: Each column represents one subgroup, operationalized through an interaction variable. All interaction variables are binary (1= Yes, 0 = No), for instance *High Risk Perception* refers to the questionnaire item from the follow up interviews of the two previous studies (Do you think you have a high risk of a severe case if you are infected with COVID-19 (1 = Yes; 0 = No); *Risk Lover* is a dummy variable denoting below average risk aversion (calculated from several items on risk and time preferences [53]); *At Risk* is a dummy variable that is set to one if the observation has at least one COVID-19 risk factor; *Over- & Under-estimates own risk* are dummy variables that are set to one if High RP = 1 & At Risk = 0 (Overestimates) / High RP = 0 & At Risk = 1 (Underestimates). Economic risk perception index is constructed as z-score from all items in the outcome family and represents standard deviations from the control group mean (which is set to one with sd=1) of an observation in one of the treatment groups (Appendix B) [44]. Coefficients represent average standard deviations from the control group means. Controls included. See Appendix C for sharpened q-values. Robust standard errors in parenthesies. * p<0.10, ** p<0.05, *** p<0.01.

Table: Information effect on policy support index: Full Sample and Subgroups | Controls Omitted

		Interaction variables							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Full Sample	High RP = 1	Risk lover = 1	Over-estimator = 1	Under-estimator = 1	At risk = 1	Medically vulnerable = 1	Medically vulnerable = 1	COVID Exposure = 1
General Information									
Full sample	0.0802								
	(0.0574)								
x interaction = 0		0.0552	0.0555	0.0337	0.0882	0.140*	-0.0253	0.0612	-0.0272
		(0.0890)	(0.0657)	(0.0653)	(0.0604)	(0.0785)	(0.0770)	(0.0693)	(0.0677)
x interaction = 1		0.109	0.0851	0.102	-0.108	0.0248	0.0805	-0.0452	0.0196
		(0.0883)	(0.0749)	(0.0789)	(0.0952)	(0.0865)	(0.0754)	(0.0770)	(0.0725)
Tailored Information									
Full sample	0.0354								
	(0.0574)								
x interaction = 0		0.0113	-0.0221	0.00631	0.0118	0.0215	-0.0980	-0.000325	-0.0740
		(0.0985)	(0.0717)	(0.0688)	(0.0647)	(0.0884)	(0.0880)	(0.0787)	(0.0722)
x interaction = 1		0.0617	0.103	0.00946	-0.00418	0.0579	0.0610	-0.0758	-0.0231
		(0.0896)	(0.0771)	(0.0907)	(0.102)	(0.0857)	(0.0752)	(0.0786)	(0.0795)
Controls	N	N	N	N	N	N	N	N	N
N	1504	1504	1504	1504	1504	1504	1504	1504	1504
R2	0.001	0.002	0.003	0.003	0.005	0.003	0.006	0.005	0.006

Notes: Each column represents one subgroup, operationalized through an interaction variable. All interaction variables are binary (1= Yes, 0 = No), for instance *High Risk Perception* refers to the questionnaire item from the follow up interviews of the two previous studies (Do you think you have a high risk of a severe case if you are infected with COVID-19 (1 = Yes; 0 = No); *Risk Lover* is a dummy variable denoting below average risk aversion (calculated from several items on risk and time preferences [53]); *At Risk* is a dummy variable that is set to one if the observation has at least one COVID-19 risk factor; *Over- & Under-estimates own risk* are dummy variables that are set to one if High RP = 1 & At Risk = 0 (Overestimates) / High RP = 0 & At Risk = 1 (Underestimates). Policy support risk perception index is constructed as z-score from all items in the outcome family and represents standard deviations from the control group mean (which is set to one with sd=1) of an observation in one of the treatment groups (Appendix B) [44]. Coefficients represent average standard deviations from the control group means. Controls omitted. See Appendix C for sharpened q-values. Robust standard errors in parenthesies. * p<0.10, ** p<0.05, *** p<0.01.

Table: Information effect on policy support index: Full Sample and Subgroups | Controls Included

		Interaction variables							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Full Sample	High RP = 1	Risk lover = 1	Over-estimator = 1	Under-estimator = 1	At risk = 1	Medically vulnerable = 1	Medically vulnerable = 1	COVID Exposure = 1
General Information									
Full sample	0.0768								
	(0.0571)								
x interaction = 0		0.0507	0.0526	0.0305	0.0823	0.132*	-0.0150	0.0634	-0.0318
		(0.0856)	(0.0650)	(0.0637)	(0.0597)	(0.0768)	(0.0761)	(0.0696)	(0.0668)
x interaction = 1		0.129	-0.0254	0.0808	-0.107	0.108	0.00236	-0.126	0.118
		(0.0984)	(0.0825)	(0.0983)	(0.122)	(0.0971)	(0.0698)	(0.0817)	(0.184)
Tailored Information									
Full sample	0.0389								
	(0.0571)								
x interaction = 0		0.0153	-0.0174	0.00808	0.0115	0.0192	-0.0935	0.00785	-0.0710
		(0.0987)	(0.0722)	(0.0694)	(0.0650)	(0.0879)	(0.0880)	(0.0780)	(0.0717)
x interaction = 1		0.0867	0	0	0	0.145	0	-0.159	0.0810
		(0.0951)	(.)	(.)	(.)	(0.0943)	(.)	(0.0820)	(0.184)
Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y
N	1504	1504	1504	1504	1504	1504	1504	1504	1504
R2	0.024	0.024	0.025	0.025	0.025	0.025	0.027	0.031	0.028

Notes: Each column represents one subgroup, operationalized through an interaction variable. All interaction variables are binary (1= Yes, 0 = No), for instance *High Risk Perception* refers to the questionnaire item from the follow up interviews of the two previous studies (Do you think you have a high risk of a severe case if you are infected with COVID-19 (1 = Yes; 0 = No); *Risk Lover* is a dummy variable denoting below average risk aversion (calculated from several items on risk and time preferences [53]); *At Risk* is a dummy variable that is set to one if the observation has at least one COVID-19 risk factor; *Over- & Under-estimates own risk* are dummy variables that are set to one if High RP = 1 & At Risk = 0 (Overestimates) / High RP = 0 & At Risk = 1 (Underestimates). Policy support perception index is constructed as z-score from all items in the outcome family and represents standard deviations from the control group mean (which is set to one with sd=1) of an observation in one of the treatment groups (Appendix B) [44]. Coefficients represent average standard deviations from the control group means. Controls included. See Appendix C for sharpened q-values. Robust standard errors in parenthesies. * p<0.10, ** p<0.05, *** p<0.01.

Appendix C5 Q Values

Table: sharpened q-values

Outcoome (*Y*)	Treatment	Interaction	Effect	Q Value	P Value
Economic Rp Index	General Information	/	-0.09	0.432	0.084
Economic Rp Index	Tailored Information	/	-0.06	0.432	0.091
Economic Rp 1 Mo.	General Information	/	0.09	0.862	0.411
Economic Rp 1 Mo.	Tailored Information	/	0.75	0.862	0.417
Economic Rp 1 Year	General Information	/	0.06	0.401	0.067
Economic Rp 1 Year	Tailored Information	/	0.04	0.439	0.100
Personal Health Rp-Index	General Information	/	0.13	0.399	0.060
Personal Health Rp-Index	Tailored Information	/	0.04	1.000	0.524
Personal Health Rp-Cases	General Information	/	1.98	0.624	0.189
Personal Health Rp-Cases	Tailored Information	/	1.6	0.695	0.283
Personal Health Rp-Cases2	General Information	/	2.16	0.695	0.287
Personal Health Rp-Cases2	Tailored Information	/	0.64	1.000	0.751
Personal Health Rp-Severe	General Information	/	3.79	0.197	0.022
Personal Health Rp-Severe	Tailored Information	/	0.51	1.000	0.750
Personal Health Rp-Mort	General Information	/	2.96	0.360	0.051
Personal Health Rp-Mort	Tailored Information	/	1.26	0.862	0.386
General Health Rp-Index	General Information	/	0.06	0.845	0.363
General Health Rp-Index	Tailored Information	/	0	1.000	0.942
General Health Rp-Cases	General Information	/	-0.46	1.000	0.772

General Health Rp-Cases	Tailored Information	/	0.31	1.000	0.848
General Health Rp-Cases2	General Information	/	0.15	1.000	0.934
General Health Rp-Cases2	Tailored Information	/	-1.22	0.968	0.485
General Health Rp-Severe	General Information	/	3.03	0.401	0.065
General Health Rp-Severe	Tailored Information	/	0.74	1.000	0.647
General Health Rp-Mort	General Information	/	2.5	0.514	0.132
General Health Rp-Mort	Tailored Information	/	-0.02	1.000	0.990
Policy Support Index	General Information	/	0.08	0.562	0.162
Policy Support Index	Tailored Information	/	0.04	1.000	0.560
Policy1	General Information	/	0.02	0.197	0.019
Policy1	Tailored Information	/	-0.02	0.439	0.101
Policy2	General Information	/	0.02	0.432	0.086
Policy2	Tailored Information	/	0.01	1.000	0.774
Policy3	General Information	/	0.03	1.000	0.571
Policy3	Tailored Information	/	0.01	1.000	0.956
Policy4	General Information	/	0.02	0.695	0.267
Policy4	Tailored Information	/	0	0.845	0.360
Policy5	General Information	/	0.03	1.000	0.815
Policy5	Tailored Information	/	0.03	0.862	0.400
Policy6	General Information	/	0	0.931	0.440
Policy6	Tailored Information	/	-0.02	1.000	0.696
Policy7	General Information	/	-0.02	1.000	0.610
Policy7	Tailored Information	/	0.01	1.000	0.610

Policy8	General Information	/	0	1.000	0.654
Policy8	Tailored Information	/	0	1.000	0.550
Policy9	General Information	/	0.01	0.968	0.485
Policy9	Tailored Information	/	-0.01	0.968	0.485
Policy10	General Information	/	-0.02	0.695	0.281
Policy10	Tailored Information	/	-0.02	0.695	0.281
Policy Support Index	General Information	High Rp	0.11	0.631	0.219
Policy Support Index	Tailored Information	High Rp	0.06	0.968	0.491
Economic Rp Index	General Information	High Rp	-0.18	0.862	0.413
Economic Rp Index	Tailored Information	High Rp	-0.12	0.862	0.414
General Health Rp-Index	General Information	High Rp	0.33	0.011	0.000
General Health Rp-Index	Tailored Information	High Rp	0.15	0.479	0.111
Personal Health Rp-Index	General Information	High Rp	0.44	0.001	0.000
Personal Health Rp-Index	Tailored Information	High Rp	0.29	0.026	0.002
Policy Support Index	General Information	Risk Lover	0.09	0.695	0.256
Policy Support Index	Tailored Information	Risk Lover	0.1	0.616	0.183
Economic Rp Index	General Information	Risk Lover	-0.14	0.511	0.123
Economic Rp Index	Tailored Information	Risk Lover	-0.21	0.012	0.001
General Health Rp-Index	General Information	Risk Lover	0.11	0.695	0.265
General Health Rp-Index	Tailored Information	Risk Lover	0.08	0.862	0.396
Personal Health Rp-Index	General Information	Risk Lover	0.21	0.262	0.037
Personal Health Rp-Index	Tailored Information	Risk Lover	0.04	1.000	0.687
Policy Support Index	General Information	Over-Estimator	0.1	0.624	0.196
Policy Support Index	Tailored Information	Over-Estimator	0.01	1.000	0.917
Economic Rp Index	General Information	Over-Estimator	-0.08	0.631	0.215

Economic Rp Index	Tailored Information	Over-Estimator	-0.23	0.197	0.022
General Health Rp-Index	General Information	Over-Estimator	0.47	0.001	0.000
General Health Rp-Index	Tailored Information	Over-Estimator	0.15	0.554	0.148
Personal Health Rp-Index	General Information	Over-Estimator	0.4	0.006	0.000
Personal Health Rp-Index	Tailored Information	Over-Estimator	0.04	1.000	0.683
Policy Support Index	General Information	Under-Estimator	-0.11	0.695	0.258
Policy Support Index	Tailored Information	Under-Estimator	0	1.000	0.967
Economic Rp Index	General Information	Under-Estimator	-0.01	1.000	0.583
Economic Rp Index	Tailored Information	Under-Estimator	0.33	1.000	0.843
General Health Rp-Index	General Information	Under-Estimator	-0.22	0.432	0.092
General Health Rp-Index	Tailored Information	Under-Estimator	-0.26	0.218	0.027
Personal Health Rp-Index	General Information	Under-Estimator	-0.01	1.000	0.953
Personal Health Rp-Index	Tailored Information	Under-Estimator	-0.18	0.432	0.092
Policy Support Index	General Information	At risk	0.02	1.000	0.775
Policy Support Index	Tailored Information	At risk	0.06	0.977	0.499
Economic Rp Index	General Information	At risk	-0.09	1.000	0.649
Economic Rp Index	Tailored Information	At risk	0.15	1.000	0.743
General Health Rp-Index	General Information	At risk	-0.06	1.000	0.534
General Health Rp-Index	Tailored Information	At risk	-0.11	0.677	0.233
Personal Health Rp-Index	General Information	At risk	0.25	0.101	0.008
Personal Health Rp-Index	Tailored Information	At risk	0.2	0.220	0.029
Policy Support Index	General Information	Medically Vulnerable	0.08	0.695	0.285
Policy Support Index	Tailored Information	Medically Vulnerable	0.06	0.862	0.417
Economic Rp Index	General Information	Medically Vulnerable	-0.03	0.695	0.264
Economic Rp Index	Tailored Information	Medically Vulnerable	0.07	1.000	0.655

General Health Rp-Index	General Information	Medically Vulnerable	0.17	0.399	0.058
General Health Rp-Index	Tailored Information	Medically Vulnerable	0.02	1.000	0.825
Personal Health Rp-Index	General Information	Medically Vulnerable	0.35	0.006	0.000
Personal Health Rp-Index	Tailored Information	Medically Vulnerable	0.14	0.514	0.133
Policy Support Index	General Information	Economically Vulnerable	-0.05	1.000	0.557
Policy Support Index	Tailored Information	Medically Vulnerable	-0.08	0.796	0.335
Economic Rp Index	General Information	Medically Vulnerable	-0.11	0.401	0.065
Economic Rp Index	Tailored Information	Medically Vulnerable	-0.02	0.432	0.094
General Health Rp-Index	General Information	Medically Vulnerable	0.03	1.000	0.739
General Health Rp-Index	Tailored Information	Medically Vulnerable	-0.04	1.000	0.670
Personal Health Rp-Index	General Information	Medically Vulnerable	0.16	0.402	0.072
Personal Health Rp-Index	Tailored Information	Medically Vulnerable	0.03	1.000	0.726
Policy Support Index	General Information	Proximity	0.02	1.000	0.787
Policy Support Index	Tailored Information	Proximity	-0.02	1.000	0.771
Economic Rp Index	General Information	Proximity	-0.19	0.565	0.166
Economic Rp Index	Tailored Information	Proximity	-0.05	0.624	0.199
General Health Rp-Index	General Information	Proximity	0.09	0.862	0.381
General Health Rp-Index	Tailored Information	Proximity	0.05	1.000	0.615
Personal Health Rp-Index	General Information	Proximity	0.1	0.695	0.271
Personal Health Rp-Index	Tailored Information	Proximity	0.07	0.948	0.450

Notes: Q-Values are FDR adjusted p-values for statistical significance, obtained from adaptive linear computation based on [52].All interaction variables are binary (1= Yes, 0 = No), for instance *High Risk Perception* refers to the questionnaire item from the follow up interviews of the two previous studies (Do you think you have a high risk of a severe case if you are infected with COVID-19 (1 = Yes; 0 = No); *Risk Lover* is a dummy variable denoting below average risk aversion (calculated from several items on risk and time preferences [53]); *At Risk* is a dummy variable that is set to one if the observation has at least one COVID-19 risk factor; *Over- & Under- estimates own risk* are dummy variables that are set to one if High RP = 1 & At Risk = 0 (Overestimates) / High RP = 0 & At Risk = 1 (Underestimates). Policy support perception index is constructed as z-score from all items in the outcome family and represents standard deviations from the control group mean (which is set to one with sd=1) of an observation in one of the treatment groups (Appendix B) [44]. Coefficients represent average standard deviations from the control group means.