## S7 Appendix. Balancing and manipulation check

## Survey Experiment

Participants were assigned to treatment groups randomly. Despite random assignment differences between groups may occur. We test for this possibility to see for which variables we should control in the estimations. As we do find differences in age, education, past vaccine denial, risk perception, and emotional response to COVID-19 across treatments we control for these variables in all estimations.

Table S4. Balancing across treatments: Survey experiment

| Variable | (1) <br> Control <br> Mean/SE | (2) <br> Debunk <br> Mean/SE | (3) <br> Benefits <br> Mean/SE | t-test Difference |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | (1)-(2) | (1)-(3) |
| Socio-economics |  |  |  |  |  |
| Female ( $=1$ ) | 0.520 | 0.503 | 0.502 | 0.017 | 0.019 |
|  | [0.019] | [0.028] | [0.028] |  |  |
| Age: 32-44 (=1) | 0.200 | 0.215 | 0.196 | -0.015 | 0.004 |
|  | [0.015] | [0.023] | [0.022] |  |  |
| Age: 32-44 (=1) | 0.128 | 0.123 | 0.131 | 0.005 | -0.003 |
|  | [0.013] | [0.018] | [0.019] |  |  |
| Age: 45-52 (=1) | 0.215 | 0.193 | 0.251 | 0.021 | -0.036 |
|  | [0.016] | [0.022] | [0.024] |  |  |
| Age: 53-58 (=1) | 0.380 | 0.356 | 0.367 | 0.024 | 0.013 |
|  | [0.019] | [0.027] | [0.027] |  |  |
| Age: 59-81 (=1) | 0.077 | 0.113 | 0.055 | -0.036* | 0.022 |
|  | [0.010] | [0.018] | [0.013] |  |  |
| Secondary school: | 0.133 | 0.098 | 0.089 | 0.034 | 0.044** |
| 'Hauptschulabschluss' (=1) | [0.013] | [0.017] | [0.016] |  |  |
| Secondary school: 'Realschuleabschluss' (=1) | 0.343 | 0.377 | 0.324 | -0.035 | 0.019 |
|  | [0.018] | [0.027] | [0.026] |  |  |
| High school (=1) | 0.273 | 0.282 | 0.309 | -0.009 | -0.036 |
|  | [0.017] | [0.025] | [0.026] |  |  |
| University degree (=1) | 0.252 | 0.242 | 0.278 | 0.010 | -0.026 |
|  | [0.017] | [0.024] | [0.025] |  |  |
| Adjusted HH income | 3.951 | 4.098 | 4.054 | -0.147 | -0.102 |
|  | [0.069] | [0.100] | [0.100] |  |  |
| Married (=1) | 0.434 | 0.390 | 0.388 | 0.044 | 0.045 |
|  | [0.019] | [0.027] | [0.027] |  |  |
| Explanatory variables |  |  |  |  |  |
| Baseline: Vaccination inaction (=1) | 0.516 | 0.537 | 0.532 | -0.021 | -0.016 |
|  | [0.019] | [0.028] | [0.028] |  |  |
| Denied other vaccine ( $=1$ ) | 0.154 | 0.113 | 0.144 | 0.040* | 0.010 |
|  | [0.014] | [0.018] | [0.019] |  |  |
| Index: COVID-19 risk perception | 41.171 | 37.523 | 37.674 | 3.648** | 3.497** |
|  | [0.900] | [1.202] | [1.171] |  |  |
| Index: Emotional response | 3.719 | 3.499 | 3.504 | 0.220** | 0.215** |
|  | [0.059] | [0.079] | [0.078] |  |  |
| Net anticipated regret (no vaccination vaccination) <br> Index: Dogmatism | 0.817 | 1.104 | 1.073 | -0.288 | -0.257 |
|  | [0.151] | [0.227] | [0.225] |  |  |
|  | 3.934 | 4.002 | 3.948 | -0.068 | -0.014 |
|  | [0.037] | [0.053] | [0.053] |  |  |
| Observations <br> F-test of joint significance (F-stat) <br> F-test, number of observations | 671 | 326 | 327 |  |  |
|  |  |  |  | 1.804** | 1.437 |
|  |  |  |  | 997 | 998 |

Note: The value displayed for t -tests are the differences in the means across the groups. ${ }^{* * *}$, ${ }^{* *}$, and ${ }^{*}$ indicate significance at the 1,5 , and 10 percent critical level.


Fig S4. Priming check: Variation in feeling informed. Bars show mean values for each treatment group and 95\% confidence intervals are indicated by lines. Panel A and B show the means towards the question "How informed do you feel about the safety and effectiveness of Corona vaccines?" and "How informed do you feel about the benefits for fully vaccinated individuals?" respectively. Answers were given on a 7-point Likert scale from 1 (not informed at all) to 7 (fully informed).

## Balanced Panel

Table S5. Balancing across treatments: Returners

| Variable | (1) <br> Control Mean/SE | (2)T1: DebunkMean/SE | (3) <br> T2: Benefits Mean/SE | (4) <br> T3: Facilitation Mean/SE | T-Test Differences |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | (1)-(2) | $(1)-(3)$ | (1)-(4) |
| Female (=1) | 0.482 | 0.473 | 0.527 | 0.513 | 0.009 | -0.045 | -0.031 |
|  | [0.034] | [0.035] | [0.035] | [0.036] |  |  |  |
| Age: 32-44 (=1) | 0.105 | 0.146 | 0.140 | 0.090 | -0.042 | -0.036 | 0.015 |
|  | [0.021] | [0.025] | [0.024] | [0.021] |  |  |  |
| Age: 32-44 (=1) | 0.109 | 0.107 | 0.097 | 0.122 | 0.002 | 0.012 | -0.013 |
|  | [0.021] | [0.022] | [0.021] | [0.024] |  |  |  |
| Age: 45-52 (=1) | 0.236 | 0.166 | 0.271 | 0.185 | 0.071* | -0.034 | 0.051 |
|  | [0.029] | [0.026] | [0.031] | [0.028] |  |  |  |
| Age: 53-58 (=1) | 0.432 | 0.449 | 0.430 | 0.513 | -0.017 | 0.002 | -0.081 |
|  | [0.033] | [0.035] | [0.034] | [0.036] |  |  |  |
| Age: 59-81 (=1) | 0.118 | 0.132 | 0.063 | 0.090 | -0.014 | 0.055** | 0.028 |
|  | [0.022] | [0.024] | [0.017] | [0.021] |  |  |  |
| Secondary school: | 0.127 | 0.112 | 0.077 | 0.169 | 0.015 | 0.050* | -0.042 |
| 'Hauptschulabschluss' (=1) | [0.023] | [0.022] | [0.019] | [0.027] |  |  |  |
| Secondary school: | 0.345 | 0.390 | 0.362 | 0.386 | -0.045 | -0.017 | -0.041 |
| 'Realschuleabschluss' (=1) | [0.032] | [0.034] | [0.033] | [0.036] |  |  |  |
| High school (=1) | 0.250 | 0.254 | 0.290 | 0.233 | -0.004 | -0.040 | 0.017 |
|  | [0.029] | [0.030] | [0.032] | [0.031] |  |  |  |
| University degree (=1) | 0.277 | 0.244 | 0.271 | 0.212 | 0.033 | 0.007 | 0.066 |
|  | [0.030] | [0.030] | [0.031] | [0.030] |  |  |  |
| Adjusted HH income | 3.972 | 4.015 | 4.109 | 4.034 | -0.042 | -0.137 | -0.062 |
|  | [0.120] | [0.119] | [0.120] | [0.137] |  |  |  |
| Married (=1) | 0.500 | 0.434 | 0.440 | 0.460 | 0.066 | 0.060 | 0.040 |
|  | [0.034] | [0.035] | [0.035] | [0.036] |  |  |  |
| Baseline: Vaccination inaction (=1) | 0.532 | 0.522 | 0.517 | 0.582 | 0.010 | 0.015 | -0.050 |
|  | [0.034] | [0.035] | [0.035] | [0.036] |  |  |  |
| Denied other vaccine ( $=1$ ) | 0.155 | 0.122 | 0.130 | 0.148 | 0.033 | 0.024 | 0.006 |
|  | [0.024] | [0.023] | [0.023] | [0.026] |  |  |  |
| Index: COVID-19 risk perception | 40.827 | 36.324 | 37.493 | 38.558 | 4.503* | 3.335 | 2.269 |
|  | [1.645] | [1.592] | [1.456] | [1.712] |  |  |  |
| Index: Emotional response | 3.599 | 3.460 | 3.524 | 3.617 | 0.139 | 0.075 | -0.018 |
|  | [0.109] | [0.104] | [0.101] | [0.114] |  |  |  |
| Net anticipated regret (no | 0.586 | 1.141 | 1.111 | 0.566 | $-0.555$ | -0.525 | 0.020 |
| vaccination - vaccination) | [0.271] | [0.310] | [0.279] | [0.300] |  |  |  |
| Index: Dogmatism | 3.912 | 4.068 | 3.989 | 4.051 | -0.157 | -0.078 | -0.140 |
|  | [0.066] | [0.072] | [0.067] | [0.072] |  |  |  |
| Observations | 220 | 205 | 207 | 189 |  |  |  |
| F-test of joint significance (F-stat) |  |  |  |  | 1.329 | 1.336 | 0.869 |
| F-test, number of observations |  |  |  |  | 425 | 427 | 409 |

