Supplementary Online Materials (SOM)

# SOM A – Additional Information on Methods

## A.1. Selection of Targets

***Study 1***

Each participant in Study 1 was presented with one randomly selected target. To ensure variance across targets, one bracket (caring level 1-20; 21-40, 41-60, 61-80, 81-100) was randomly chosen for each participant with the experimental software Qualtrics. From this bracket, a random number (i.e., level of caring) and one opinion (legal vs. illegal) were randomly chosen for the presentation of a target.

***Study 2***

In Study 2, participants were presented with five different issues in randomized order (abortion was always presented first). Each of the targets was selected in the same manner as in Study 1.

***Study 3***

The five issues used in Study 3 were presented in randomized order. Each of the five targets was selected in the same manner as in Study 1.

***Study 4***

In Study 4, participants were presented with actual targets (i.e., other participants of the study), which meant that the possible caring\*opinion\*issue combinations were restricted to combinations that we had actually observed in Part 1 of the study. Specifically, the following five combinations were not observed and were therefore not presented in Part 2 of Study 4: being against freedom of speech and caring moderately (3) about it, being against freedom of speech and caring very much (5) about it, supporting cloning and caring very much (5) about this issue, being against hand washing and caring little (2) as well as very much (5) about this issue. From the available pool of caring\*opinion\*issue combinations, the presented targets were selected as follows: each caring level and each issue was presented at least once to ensure variation across targets. The pairing of caring\*opinion\*issue was otherwise randomly determined via Qualtrics.

**A.2. Selection of Issues**

***Study 1***

For Study 1 which was a direct replication of Study 2 by Zlatev (2019), we used the issue of abortion instead of capital punishment, since the latter is no longer applied in Germany and thus has no relevance to German participants. The issue of abortion was used in Study 1 by Zlatev and produced similar findings.

***Study 2***

For Study 2 we used social issues with divided social opinion taken from previous research by Simons and Green (2016, Table 1).

***Study 3***

For Studies 3 and 4, pretests were conducted to select the social issues. In the pretest of Study 3, participants assessed 19 different COVID-19 related social issues regarding controversy and opinion (being for vs. against the issue). Subsequently, the assessments of perceived controversy were averaged for each issue; and the variance of agreement was determined respectively. Considering these measures, we computed a ranking in relation to perceived controversy. Based on pretest results, we selected the five social issues that differed the most: “regular and thorough handwashing”, “closing borders”, “restrictions on visits to hospitals and nursing homes”, “digitalization of teaching at universities in the upcoming winter semester”, and “smartphone app for tracking chains of infection” (listed from lowest to highest degree of perceived controversy).

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## *Study 4*

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## Due to the time sensitivity of the COVID-19 related issues and to make sure that the issues varied concerning perceived controversy and personal involvement in the general public, we also pretested the issues for Study 4 instead of reusing the ones from Studies 2 and 3. We pre-tested 17 issues (i.e., abortion, freedom of speech, human cloning, legalization of marijuana, euthanasia, compulsory military service, installation of wind turbines in the North Sea, replacement of gasoline and diesel cars with electric vehicles, privileges for vaccinated people, digitalization of school and university teaching in the COVID-19 pandemic, home office due to the COVID-19 pandemic, free COVID-19-tests, closing gyms in the COVID-19 pandemic, COVID-19 vaccination strategy of the federal government, hand washing in the COVID-19 pandemic, closing national borders in the COVID-19 pandemic, and restrictions on visiting senior residences and hospitals). Based on the pre-test results, we selected a set of 10 (five general and 10 COVID-19 related) issues that varied sufficiently with regard to mean perceived controversy and perceived familiarity: general issues: Abortion (“An abortion is a targeted termination of pregnancy.”), freedom of speech (“Freedom of speech means the right to freedom of expression.”), human cloning (“Human cloning is the creation of genetically identical copies of humans through artificially induced asexual reproduction.”), euthanasia (“Euthanasia is the intentional bringing about death in terminally ill patients through medication or by discontinuing treatment.”), installation of wind turbines in the North Sea (“The installation of wind turbines in the North Sea means the construction of wind farms at least 12 nautical miles from the German coast.”); COVID-19 issues: privileges for vaccinated people, digitalization of school and university teaching in the COVID-19 pandemic, home office due to the COVID-19 pandemic, hand washing in the COVID-19 pandemic, and restrictions on visiting senior residences and hospitals.

Table S1 displays the perceived and actual controversy for all issues and main studies.

**Table S1.** Perceived controversy and participant stance by study and issue

|  |  |  |  |
| --- | --- | --- | --- |
| Study | Issue | Perceived controversy*M* (*SD*) | % in favor of social issue |
| 1 | Abortion | 7.20 (2.13) | 95 |
| 2 | Abortion | 6.67 (2.46) | 95 |
| 2 | Marijuana | 6.23 (2.12) | 71 |
| 2 | Free Speech | 4.44 (3.02) | 100 |
| 2 | Euthanasia | 7.46 (2.16) | 93 |
| 2 | Human Cloning | 7.36 (2.72) | 10 |
| 3 | Hand Washing | 2.30 (1.84) | 99 |
| 3 | Closing Borders | 6.19 (2.22) | 57 |
| 3 | Restrictions on Visits | 5.82 (2.24) | 73 |
| 3 | Digital Teaching | 4.95 (2.35) | 65 |
| 3 | Smartphone App | 6.46 (2.69) | 70 |
| 4 | Free Speech | 4.44 (2.92) | 100 |
| 4 | Abortion | 6.21 (2.48) | 90 |
| 4 | Wind Turbines | 5.40 (2.25) | 90 |
| 4 | Euthanasia | 7.26 (2.13) | 89 |
| 4 | Human Cloning | 7.29 (2.69) | 12 |
| 4 | Hand Washing | 3.44 (2.65) | 97 |
| 4 | Digital Teaching | 5.01 (2.44) | 83 |
| 4 | Home Office | 4.86 (2.49) | 90 |
| 4 | Restrictions on Visits | 5.97 (2.43) | 58 |
| 4 | Privileges | 7.00 (2.35) | 47 |

*Note.*This table shows summary statistics for perceived controversy (1-10) and participant opinion (legal vs. illegal for general social issues / for vs. against for COVID-19 issues) by study and issue. Several issues are abbreviated in the table: legalization of marijuana, freedom of speech, thorough and regular hand washing (Study 3) / hand washing in the COVID-19 pandemic (Study 4), restrictions on visiting senior residences and hospitals (Study 3) /restrictions on visiting senior residences and hospitals (Study 4), Smartphone app for tracking chains of infection, installation of wind turbines in the North Sea, privileges for vaccinated people.

**A.3. Incentivization of the Trust Game / Bonus Calculation**

For the trust game, thirteen participants were assigned the role of the trustee in order to allow us to present all other participants (i.e., the trustors) with an actual target (i.e., another participant). After termination of the study, we matched every trustor with one randomly chosen trustee. For trustors the bonus calculation depended on the actual transfer for that trustee as well as the back-transfer that the respective trustee indicated for that transfer. For example, if a trustee who was against the installation of wind turbines in the North Sea and who cared very much was randomly chosen as the relevant counterpart for a participant, the participant’s transfer for this trustee was chosen as a basis for the bonus payment. If that transfer was 1 Taler, for example, the respective trustee’s back-transfer for 1 Taler (\*3) was used for the bonus calculation. In this example, the trustor received a bonus of 2 Talers in case of a back-transfer of 0, a bonus of 3 Talers for a back-transfer of 1, a bonus of 4 Talers for a back-transfer of 2 and a bonus of 5 Talers for a back-transfer of 3. Since the trustees have been matched with multiple trustors, one of these trustors was randomly chosen to determine the bonus payment of the trustee.

# SOM B – Additional Analyses

In the pre-registration of Study 4, we specified an additional hypothesis regarding trust game beliefs which is not reported in the main paper. This hypothesis and the respective results will be reported in the following. Furthermore, robustness checks for our main analyses a well as further exploratory analyses will be part of this subchapter.

**B.1. Robustness Checks**

***Models Including Covariates***

As pre-registered, we reran all models presented in the main article additionally controlling for participant age and gender as well as issue (where applicable). These results are reported in Table S2.

**Table S2.** Effects of Target Caring on Dependent Measures in Studies 1 to 4

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Dependent measure* and predictor  | Study 1*N* = 513 | Study 2*N* = 283 | Study 3*N* = 291 | Study 4*N* = 210 (ratings)*N* = 197 (trust game) |
| *Integrity-based trustworthiness* |   |   |   |   |
| Target caring | *r* = 0.34, *p* < .001 | *r* = 0.19, *p* < .001 | *r* = 0.20, *p* < .001 | *r* = 0.16, *p* < .001 |
| Target caring (rc) | *r* = 0.33, *p* < .001 | *r* = 0.19, *p* < .001 | *r* = 0.20, *p* < .001 | *r* = 0.16, *p* < .001 |
| *Benevolence-based trustworthiness* |   |   |   |   |
| Target caring | *r* = 0.22, *p* < .001 | *r* = 0.12, *p* < .001 | *r* = 0.22, *p* < .001 | *r* = 0.14, *p* < .001 |
| Target caring (rc) | *r* = 0.21, *p* < .001 | *r* = 0.13, *p* < .001 | *r* = 0.23, *p* < .001 | *r* = 0.14, *p* < .001 |
| *Behavioral trust* |   |   |   |   |
| Target caring |   |   |   | *r* = 0.17, *p* < .001 |
| Target caring (rc) |   |   |   | *r* = 0.18, *p* < .001 |

*Note.* This table reports effect sizes of all studies resulting from models predicting trustworthiness by target caring and participant-target agreement. Furthermore, this table presents robustness checks (rc) as a rerun of the models additionally controlling for age and gender (all studies) and social issue (Studies 2-4). Participants with a gender other than male or female were excluded from the robustness check (*n* = 6 for Study 1; *n* = 3 for Study 3). One participant from Study 3 was excluded from the robustness check due to missing age information.

***Models Excluding Participants Based on Their Code***

We pre-registered that we would exclude participants who participated in more than one of our studies. Whereas in Study 4 this does not apply due to recruitment via a panel provider, we had some double participation mainly in Study 3. This was due to the fact that the social issues were very time-sensitive and we were not able to attract a sufficient number of participants in Study 3. Furthermore, some participants (Studies 1-3) used the sample code as their participant code or indicated an implausible code consisting only of numbers or letters, potentially suggesting careless responding. Excluding all such participants (Study 1: 2%; Study 2: 2%, Study 3: 10%) did not alter the conclusions reported in the main article concerning the effects of target caring on perceived integrity-based and perceived benevolence-based trustworthiness (all *p* < .001).

***Models Excluding Participants Who Saw “Legal” Rather than “Support”***

Due to a programming error in Part 2 of Study 4, the target’s opinion on hand washing was in some cases presented as “legal/illegal” rather than “for/against”. When excluding this issue from our analyses, conclusions concerning the effects of target caring on perceived integrity-based and perceived benevolence-based trustworthiness remain unchanged (both *p* < .001).

## B.2. Trust Game Beliefs

In the pre-registration of Study 4, we specified an additional hypothesis for trust game beliefs – namely, that the expected returns in a trust game increase with the target’s level of caring about a social issue. Since the size of the trust game belief was dependent on the amount transferred, we used the expected return as the percentage of the amount received by the trustee (transfer\*3) as pre-registered (for a similar procedure see Buchan et al., 2008). As expected, trust game beliefs increase with a trustee’s level of caring about the issue of wind turbines, *ß* = 0.14, *t*(197) = 6.27, *p* < .001, 95% CI = [0.09, 0.18]. Since other researchers excluded transfers of zero (e.g., Kugler et al., 2007) and/or ran their analyses with absolute values instead of or in addition to proportions (e.g., Kugler et al., 2009), we reran the analyses excluding transfers of zero (26% of the cases) and/or using absolute values. All these analyses lead to the same conclusion (all *ß* > 0.09, all *p* < .001). As for the other dependent variables, we did not observe the hypothesized interaction with perceived controversy (*ß* = 0.01, *p* = .710 in the pre-registered model).

**SOM C – Details on Mini Meta-analysis**

## To provide best estimates for the effects, we conducted three mini meta-analyses combining the original data with our data (see main article). To do so, we re-analyzed the original data provided on the OSF by the original author. Specifically, as for our studies, we ran OLS regression analyses predicting perceived integrity-based trustworthiness and perceived benevolence-based trustworthiness (all studies included in the original article) by a target’s level of caring about a social issue and participant-target agreement on the social issue. Furthermore, we included two behavioral effects of Studies 3a/b (i.e., trusting behavior in the rely-or verify game) and Study 4 (trust in a hypothetical trust game) reported in the original article. We transformed all effect sizes to Pearson’s *r* and calculated the overall effect following the procedure by Goh and colleagues (2016). Specifically, the effect sizes were calculated as follows:

Weighted effect size for integrity-based trustworthiness: ((1007-3)\*0.271+(996-3)\*0.201+(842-3)\*0.282+(596-3)\*0.231+(513-3)\*0.336 +(283-3)\*0.185+(291-3)\* 0.196+(210-3)\*0.162)/ (1007+996+842+596+513+283+291+210) = *r* = .24

Weighted effect size for benevolence-based trustworthiness: ((1007-3)\*0.280+(996-3)\*0.111+(842-3)\*0.249+(596-3)\*0.201+(513-3)\*0.216+(283-3)\*0.123+(291-3)\*0.217+(210-3)\*0.135)/ (1007+996+842+596+513+283+291+210) = *r* = .20

Weighted effect size for behavioral trust: ((842-3)\*0.116+(596-3)\*0.219+(197-3)\*0.173)/(842+596+197) = *r* = .16

A Stouffer’s Z test (see Goh et al., 2016) results in a summary *p*-value of *p* < .001 for all effects.

**References**

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