**APPENDIX**

Trüdinger E-M and Ziller C (2023) Setting limits to tolerance: An experimental investigation of individual reactions to extremism and violence.

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**Additional Information on the Survey Experiment**

*Study design*

In the survey experiment, respondents had to choose between allowing or restricting the freedom of expression of specific groups. They were randomly assigned to an “online” or an “offline condition”. All respondents were asked about three different groups as targets of tolerance (groups that are against foreigners in the country, groups that want to disown rich citizens, and groups supporting radical preachers). Codes for the binary outcome variable “tolerance” were 0 (restricting freedom of speech) or 1 (allowing freedom of speech in the offline and online conditions: the groups should be allowed to hold public meetings; government agencies should not be able to block websites of the group). To test individual reactions to extremism and violence, respondents were randomly assigned to one of three experimental conditions: T1: only group mentioned; T2: “extremist/radical”, T3: “violence”. The experimental design is shown in Figure 1. Random assignment of respondents was technically assured through the generation of random numbers and the attribution of these numbers to experimental groups. Table A1 shows balance tests of background variables in the experimental groups.

Table A1: Balance Tests of Background Variables

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Groups | % High education (SD)  | Mean (SD) ideological position | Mean (SD) age | % Female (SD) |
| Public meetings, initial | 61.45 (.49) | 4.69 (1.82) | 51.84 (17.38) | 48.20 (.50) |
| Public meetings, extremist | 56.66 (.50) | 4.66 (1.79) | 52.42 (16.28) | 53.70 (.50) |
| Public meetings, violence | 58.81 (.49) | 4.45 (1.71) | 52.10 (16.52) | 50.42 (.50) |
| Internet, initial | 51.48 (.50) | 4.65 (1.99) | 52.47 (16.53) | 46.49 (.50) |
| Internet, extremist | 52.49 (.50) | 4.58 (1.72) | 50.76 (16.95) | 51.14 (.50) |
| Internet, violence | 53.85 (.50) | 4.71 (1.87) | 51.89 (16.73) | 48.97 (.50) |
| F (not significant, p > .05) | 2.04 | 0.95 | 0.43 | 0.82 |

*Data collection and sample*

Data from 2,004 respondents was collected via CATI. Target population: adults living in private households in Germany. The telephone survey was fielded by the survey company forsa and conducted between April 12 and June 7, 2016. It was based on a dual frame design with a random selection of randomly generated and listed numbers from mobile phones and landline connections (selection of the target person in households with landline connections by means of the next-birthday method). The interviews were conducted by 88 interviewers who were trained for this study. The survey attained a response rate (RR1) of 22 percent.[[1]](#footnote-1) Information on the distribution of main independent variables and controls is shown in Table A2.

Table A2: Descriptive Information on Main Independent Variables and Controls

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Min; max | Mean/Proportion | SD | N (valid) |
| Age |  |  |  |  |
| Please tell me: How old are you? | 18; 96 | 51.92 | 16.73 | 1,987 |
| Female |  |  |  |  |
| Are you male (0)? Female (1)? % Female: | 0; 1 | 49.80 | 0.50 | 2,004 |
| Education levels |  |  |  |  |
| What is the highest level of education you have successfully completed?  | 0; 3 |  |  | 1,977 |
| *No or low formal education:* finished school without school leaving certificate, lowest formal qualification after 8 or 9 year of schooling |  | 13.66 | 0.34 |  |
| *Intermediary formal education*: intermediary secondary qualification after 10 years |  | 30.35 | 0.46 |  |
| *Abitur or similar:* certificate fulfilling entrance requirements to study at a university of applied science or at a university |  | 19.93 | 0.40 |  |
| *Tertiary education:* Degree from a university or university of applied sciences |  | 36.06 | 0.48 |  |
| Left-right self-placement |  |  |  |  |
| In politics people sometimes talk of "left" and "right". Where would you place yourself on this scale, where 0 means the left and 10 means the right? | 0; 10 | 4.62 | 1.82 | 1,952 |
| Internet use |  |  |  |  |
| Please think about your internet usage for private purposes. It does not matter, where, that means from which connection (i.e at home, work, University, internet-café) you use the internet. How often do you use the internet for private purposes?Several times a day, once a day (2), several times a week to once a month (1), less or not at all (0)? | 0; 2 | 1.58 | 0.69 | 1,994 |
| East Germany |  |  |  |  |
| Can you tell me what Land you live in? New Laender (1) vs. old Laender and Berlin (0) | 0; 1 | 15.27 | 0.36 | 1,997 |

With 2.004 respondents, 6 treatment conditions (offline only group mentioned, offline extremism mentioned, offline violence mentioned; online only group mentioned, online extremism mentioned, online violence mentioned), a moderate anticipated effect size of 0.2 (Cohen’s D), the analysis has a sufficient statistical power, even when including an interaction. This sample size calculation was based on a group comparison with an error probability of 0.05 (two-sided tests) and a power of 85%.

The following comparison between official statistics on the population in Germany and the distribution of corresponding variables in the data (Table A3) shows that the sample represents a good approximation of the population.

Table A3: Comparison between Official Statistics and Survey Variables

|  |  |  |  |
| --- | --- | --- | --- |
|  | Variables | Official statistics\* | Survey |
| Age groups in % | 18-25 | 9.2 | 6.3 |
|  | 25-40 | 21.8 | 18.7 |
|  | 40-60 | 36.6 | 41.4 |
|  | 60-65 | 7.5 | 10.2 |
|  | 65+ | 24.8 | 23.5 |
| Gender in % | male | 49.3 | 50.2 |
|  | female | 50.7 | 49.8 |
| Federal states | 1 Baden-Württemberg | 13.0 | 13.3 |
|  | 2 Bavaria | 15.5 | 16.4 |
|  | 3 Berlin | 4.3 | 5.1 |
|  | 4 Brandenburg | 3.1 | 3.2 |
|  | 5 Bremen | 0.8 | 0.8 |
|  | 6 Hamburg | 2.2 | 2.2 |
|  | 7 Hesse | 7.5 | 7.3 |
|  | 8 Mecklenburg-West Pomerania | 2.0 | 2 |
|  | 9 Lower Saxony | 9.6 | 9.8 |
|  | 10 North Rhine-Westphalia | 21.6 | 21.4 |
|  | 11 Rhineland-Palatinate | 4.9 | 4.5 |
|  | 12 Saarland | 1.3 | 1.2 |
|  | 13 Saxony | 5.1 | 5.1 |
|  | 14 Saxony-Anhalt | 2.9 | 2.7 |
|  | 15 Schleswig-Holstein | 3.5 | 3 |
|  | 16 Thuringia | 2.7 | 2.4 |

Official statistics from the Federal Statistical Office in Germany (destatis.de),
Statistical Yearbook 2015, see Trüdinger 2019.[[2]](#footnote-2)

*Questionnaire*

The telephone survey was designed in the context of a research project entitled “Conditional support for civil liberties and preferences for domestic security policies among citizens in Germany” (grant number 270157613). The experiment was placed in the first third of the questionnaire to avoid spillover effects of too many questions asked beforehand. The question on individual self-placement on the left-right scale was asked later in the questionnaire. It seems unlikely (and supported by the balance tests) that questions about attitudes towards civil liberties and security and about tolerance surveyed before, will affect respondents’ fundamental ideological orientations.

*Analysis*

We employ multilevel regression analysis to account for clustering at the respondent level (each respondent answered three vignettes). Table A4 shows the multilevel regression results of the basic model underlying Figure 3. The study relies on the standard p<0.05 criteria. The number of missing cases for particular variables is at a low level, missing data were excluded listwise in the analyses.

Table A4: Multilevel Regression Results Underlying Figure 3

|  |  |
| --- | --- |
|  | (1) |
|  | DV: Tolerance |
|  |  |
| Left-wing (ref.) |  |
|  |  |
| Right-wing | -0.153\*\* |
|  | (0.011) |
| Religious | -0.266\*\* |
|  | (0.011) |
| Only group mentioned (ref.) |  |
|  |  |
| Extremism mentioned | -0.053\*\* |
|  | (0.020) |
| Violence mentioned | -0.200\*\* |
|  | (0.018) |
| Offline (ref.) |  |
|  |  |
| Online | 0.052\*\* |
|  | (0.015) |
| Left-right self-placement | -0.009\* |
|  | (0.004) |
| No or low formal educ. (ref.) |  |
|  |  |
| Intermediary educ. | 0.041 |
|  | (0.022) |
| Abitur or similar | 0.069\*\* |
|  | (0.026) |
| Tertiary educ. | 0.171\*\* |
|  | (0.023) |
| Age | -0.001\* |
|  | (0.000) |
| Being female | -0.087\*\* |
|  | (0.015) |
| Internet use | 0.019 |
|  | (0.012) |
| East Germany | -0.018 |
|  | (0.020) |
| Constant | -0.018 |
|  | (0.020) |
| Random Effects |  |
| Random Intercept | 0.269\*\* |
| Residual | 0.327\*\* |
| N | 5674 |

Standard errors in parentheses; \* p < 0.05, \*\* p < 0.01

1. AAPOR – American Association for Public Opinion Research (2011). Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys (7th ed.). [↑](#footnote-ref-1)
2. Trüdinger, Eva-Maria. 2019. Perceptions of Threat and Policy Attitudes: The Case of Support for Anti-terrorism Policies in Germany. Stuttgart, Germany: University of Stuttgart. https://doi.org/10.18419/opus-10993. [↑](#footnote-ref-2)