# Pre-Analysis Plan: Give a Little, Take a Little. Political Parties' Reputational Cost of Compromise

# 16 October, 2021 - 11:51:17 (CEST)

# Contents

1	Expectations	2
2	Research Desing and Protocol 2.1 Sample	2
3	Measures3.1 Dependent Variables3.2 Control Variables3.3 Attention Checks3.4 Post-Treatment Variables3.5 Exclusion Criteria	4 6 8
4	Analysis         4.1 Balance Checks          4.2 Hypothesis 1          4.3 Hypothesis 2          4.4 Hypothesis 3          4.5 Hypothesis 4          4.6 Hypothesis 5          4.7 Pooled Data          4.8 Statistical Significance	10 10 11 11 12 13
5 R	Stimulus Material	13 14

# 1 Expectations

**Steadfast hypothesis** (H1): All else equal, in-partisans view their party more positively when a party remains steadfast in coalition talks, compared to accepting a compromise.

Outcome hypothesis (H2): All else equal, in-partisans view their party more positively when coalition talks continue compared to stalling of the coalition talks.

Compromise hypothesis (H3): All else equal, in-partisans view their party that accepts a compromise more positively when coalition talks continue compared to stalling of the coalition talks.

**Principled hypothesis** ( $H_4$ ): All else equal, the more principled a respondent is, the higher the evaluation of a steadfast party.

Mutual Trust hypothesis (H5): All else equal, the more distrusting a respondent is, the higher the evaluation of a steadfast party.

# 2 Research Desing and Protocol

## 2.1 Sample

We will conduct the survey experiment in Germany in October 2021 – approximately three weeks after the general elections of 26 September 2021. The sample, recruited through Respondi, will consist of 8,000 participants (based on the power analysis presented in Figure 2) of 18 years and older. Respondi works with opt-in respondents, so we have implemented quota on age, gender, and education. Moreover, we measure some more demographic background variables (see Section 3.2). Balance checks will be conducted to demonstrate whether certain categories are over represented in a certain experimental group. The study has been approved by the Research Ethics Review Committee of the *Vrije Universiteit Amsterdam* (see the approval here). To ensure good quality of our data, two attention checks (discussed in more detail in Section 3.3) are included. Each respondent failing the attention check will be excluded and replaced with another 'good' response.

I will conduct this survey experiment in the Netherlands in April 2021. The sample, recruited through KiesKompas, will consist of 2,000 participants (based on the power analysis presented in Figure 2) of 18 years and older. Kieskompas works with non-random opt-in respondents. Therefore, I measure many demographic background variables (see Section 3.2). Balance checks will be conducted to demonstrate whether certain categories are over represented in a certain experimental group. The study has been approved by the Research Ethics Review Committee of the *Vrije Universiteit Amsterdam* (see the approval here). To ensure good quality of our data, two attention checks (discussed in more detail in Section 3.3) are included. Each respondent failing the attention check will be excluded and replaced with another 'good' response.

#### 2.2 Experimental Protocol

The study is conducted online and in German Participants are told that they are taking part in a survey to get an overview of how German people form their views on politics. After reading an informed consent message participants are forwarded to the main questionnaire (or the survey will be terminated if they do not agree to the consent form).

First, participants complete a set of demographic variables (i.e. income, employment, and degree of urbanization). This block ends with one of the two attention checks included in this survey. When participants fail this attention check, a warning appears asking them to read the question again carefully and to answer again. Thereafter, a set of background variables are asked on their stances on the political issues, some are used in the experiment (i.e. top tax, speed limit, education, legalization of Cannabis), their political interest and knowledge, as well as on their ideological position – the full codeboek can be viewed here. Next, participants are forced to choose between one of four parties – CDU, SPD, Greens, or FDP – as their in-party. To account for variation of in-party strength, respondents are surveyed on this too. Before entering the experimental condition, respondents get a second attention check. Only when they have answered it correctly, they enter the first round of the experiment – if they fail to answer the question correctly, they are thrown out of the

survey. After the experimental treatment, the heterogeneous treatments (principledness and mutual trust) and a post-treatment question (populist attitudes) are asked.

The stimuli in the experiment are Instagram-posts in the same style as the German political parties: CDU, Greens, FDP, SPD. We follow Munger et al. [CITE]'s reasoning: Given that people are more used to receiving political information from social media, these short messages are more common and capture people's attention better. However, to account for age differences, we have put a press release message on the site of the post (see Figure 1). In these messages, we manipulate: a) the potential coalition parter of the party (SPD and the Greens for CDU or FDP, CDU and FDP for SPD and the Greens); b) whether or not a party is steadfast or willing to compromise; and c) whether the coalition talks are stalled or continue. This creates a full 2\*2\*2 factorial experiment – whereas the first manipulation is in-build to mimic reality, and will be controlled for in the analyses, but does not play a role in the hypotheses testing. For an illustration of the stimulus material, see Figure 1.



Figure 1: Example of Stimulus Material

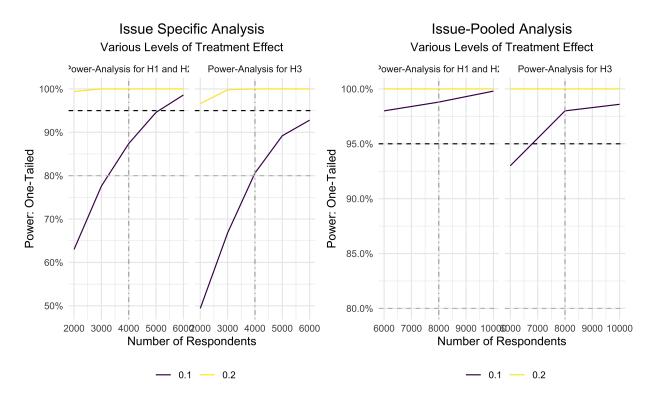
## 2.3 Power Analysis

As detailed in Section 4, we conduct an OLS regression for each of the dependent variables: a) trust in the party; b) sincerity of the party; and c) representation of the party, and the three manipulations (potential coalition partner, being steadfast, and the outcome) as independent variables. Each hypothesis is tested separately for the two issues. To calculate power for the hypotheses, the R package DeclareDesign is used (Blair et al. 2019). Based on the study of Bauer, Yong, and Krupnikov (2017), the effect sizes are between b = 0.2 and b = 0.1 – i.e. a small effect visualized by the purple and blue lines in Figure 2. The hypothesis are directional, Figure 2 therefore displays one-tailed tests with  $\alpha$  = 0.05. The power analysis shows that testing hypotheses 1 and 2 requires a sample size of 4,000 participants (x-axis) to reach 95% power (black dashed line, in the left-panel of Figure 2). Note that if the effect size is bigger then 0.2, smaller sample sizes are sufficient to reach 95\% power. To test H3, the combination of steadfast and outcome, we can detect an effect  $\beta$  = 0.1 (purple line) with reasonable levels of power (80%, as indicated by the gray dotted line) and a one-tailed test of significance at  $\alpha$  = 0.05 with a sample of 4,000 participants (Middle Left-Panel of Figure 2). A probability of approximately 20% remains for a Type II error remains when testing Hypotheses 3. We will therefore test all hypotheses first by issue and second, by pooling our data across issues. As the right-hand

panel of Figure 2 demonstrates, this will give sufficient power – yellow and purple lines are approximating 100% with  $8{,}000$  respondents.

source(here::here("docs/pre-analysis-plan/poweranalysis.R"))

Figure 2: Power Analysis



## 3 Measures

#### 3.1 Dependent Variables

We rely on three measures reflecting different aspects of how people evaluate parties as trustworthy. Measure 1 is used to test the hypothesis, measure 2 and 3 are used exploratively.

- 1. General trust This measure exists of a statement on whether or not you trust a party see Table 1 DV1. The statement is measured on a 10-point scale: From do not trust at all to trust completely.
- 2. Sincerity In this measure respondents are asked to rank the party from very insincere (value of 0) to very sincere (value of 10) for the decision to (not) strike a compromise on the issue at stake. See Table 1 DV2 for the exact phrasing of the question.
- 3. Representation In this measure, respondents are surveyed on how well the party is a good representative of the voters. The party can be evaluated on an 11-point scale from very poorly (value of 0) till very well (value of 10). See Table 1 DV3 for the exact phrasing of the question.

## 3.2 Control Variables

As control variables, the following *demographics* are measured: gender, age, education, geographical region, level of urbanness, vote choice in the 2021 parliamentary elections, employment, and income. For the analysis,

Table 1: Survey Questions - DV

Variable	Wording ENG	Wording DE
trust (DV1)	Based on the Instagram post, to what extent do you trust [PARTY]	Der Instagram-Nachricht nach zu urteilen, wie sehr würden Sie [PARTY] vertrauen?
sincere (DV2)	Based on the Instagram post, to what extent do you think [PARTY] is sincere?	Und inwieweit denken Sie, dass [PARTY] der Instagram-Nachricht nach aufrichtig gehandelt hat?
representation (DV3)	Based on the Instagram post, to what extent do you think [PARTY] does a good job in representing its voters?	Und inwiefern denken Sie, dass [PARTY] ihre Wähler gut vertritt in Anbetracht der Instagram-Nachricht?

only variables that are unbalanced over the experimental conditions will be included. Table 2 gives an overview of the questions asked in the survey as well as their English translations.

- Gender is measured as sex based on the advice of Kieskompas. The answer categories are Male (value of 1), Female (value of 0), and No answer (value of 999).
- Age is measured using 6 categories: 17 or younger, 18--29, 30--39, 40--49, 50--59, 60--74.
- Education is measured as the highest successfully completed level of education, recoded into four categories: low, middle, high, and none. I create dummy variables for each level of education with the lowest category as base category.
- Urbanness Respondents are asked for what the type of location they live: big city, suburb of a large city, middle-szed or small city, rural village, detached house in the countryside, don't know/won't say.
- Vote Recall Respondents were asked which party they voted for in the last election with their second vote. Answering categories were: CDU/CSU, SPD, AfD, FDP, DIE LINKE, BÜNDNIS 90/DIE GRÜNEN, Other party:, I didn't vote/wasn't eligble to vote, Don't know/won't say.
- Employment Respondents were asked which category of employment Full-time employed, Part-time employed, Entrepreneur, Unemployed and searching for a job, Unemployed and not searching for a job or incapacitated, Housewife/Househusband or else, Retired, Student or full-time education applied most to them.
- *Income* Respondents were questioned on their monthly income in bins of €500 €500 or less, €501-€1000, €1001-€1500, €1501-€2000, €2001-€2500, €2501-€3000, €3001-€3500, €3501-€4000, €4501-€7500, €7501 or more as well as giving them the options of won't say and don't know.
- Geographical region is measured using the same questions as the German Longitudinal Election Study, asking respondents where they are born and currently live, differentiating between the different German provinces (Bundesl{"a}nder): Baden-W{"u}rtemberg, Bavaria, Berlin, Brandenburg, Bremen, Hamburg, Hessen, Lower Saxony, Mecklenburg-Western Pomerania, North Rhine-Westphalia, Rhineland-Palatinate, Saarland, Saxony, Saxony-Anholt, Schleswig-Holstein, and Thuringia.

In addition, pre-treatment, respondents' ideological position, position on and salience of the issues speed limit, top tax, and Cannabis legalization, political knowledge and interest are measured (see Tables 3 and 4). Those variables will only be included in the analyses if balance checks indicate they are necessary. Moreover, the variables will be used to explore heterogeneous relationships.

- Ideological position is measured using an 11-point scale ranging from left (0) to right (10).
- Position on issues is measured by forcing participants to choose whether or not the government should implement a policy: implement speed limit, increase of top tax, legalize cannabis.
- Salience of issues is measured using an 11-point scale ranging from not at all important (0) to very important (10).

Table 2: Survey Questions - Demographics

Variable	Wording ENG	Wording DE
gender (D1)	Which gender do you feel you belong to?	Welchem Geschlecht fühlen Sie sich zugehörig?
age (D2)	To which of the following age groups do you belong?	Zu welcher der nachfolgenden Altersgruppen gehören Sie?
education (D3)	What is your highest educational qualification?	Was ist Ihr höchster Bildungsabschluss?
geographical-region (D4)	Which of the following categories best describes where you live?	Welche der folgenden Kategorien beschreibt am besten, wo Sie wohnen?
vote-recall2 (D6)	Which party did you vote for with your second vote in the last federal election in September 2021?	Welche Partei haben Sie bei der letzten Bundestagswahl im September 2021 mit Ihrer Zweitstimme gewählt?
employment (D7)	Now we would like to ask you something about your employment. Which of this list applies to you?	Nun möchten wir Sie gerne etwas zu Ihrer Erwerbstätigkeit fragen. Was von dieser Liste trifft auf Sie zu?
income (D8)	What is the total monthly net income of your household? This refers to the sum that remains after deducting taxes and social security contributions.	Wie hoch ist das monatliche Netto-Einkommen Ihres Haushaltes insgesamt? Gemeint ist die Summe, die nach Abzug von Steuern und Sozialversicherungsbeiträgen übrig bleibt.
living-place (D9)	In which federal state or on the territory of which present federal state do you currently live?	Im welchen Bundesland bzw. auf dem Gebiet welches heutigen Bundeslandes wohnen Sie derzeit?
birth-place (D10)	And in which federal state or on the territory of which present federal state were you born?	Und in welchem Bundesland bzw. auf dem Gebiet welches heutigen Bundeslandes wurden Sie geboren?

- Political knowledge is measured with three items. First, respondents are asked which of the two votes is determinative for the seat distribution in parliament: first vote, second vote, both, don't know. Secondly, respondents are asked about the electoral threshold. Last, respondents are asked whether or not the unemployment rate is over ten procent.
- Political interest is measured by asking people how strongly they are interested in politics using a 5-point Likert-scale (very strong, strong, medium, less strong, not at all) and a don't know/won't say option.
- In-party is measured by forcing people to choose beween the four parties of the experiment (CDU, die Grünen, FDP, and SPD) to determine which treatment they will be shown.
- *In-party strength* is measured by asking people how strongly they identify with the party uing a 5-point Likert-scale: very strong, strong, medium, less strong, not at all

#### 3.3 Attention Checks

We include two attention checks in the survey. The first one is after the demographic covariates, the second one is asked just before respondents enter the round of the experimental treatments. The attention checks are taken from Berinsky, Margolis, and Sances (2014) and adapted to the German context by the authors. If a respondents fails the first attention check, a warning appears and the respondent can only continue with the survey once the respondent has correctly answered the question correctly. The second attention check also has a warning – meaning that respondents have to select two options – but if they fail to correctly pass the check, they are excluded. Each excluded respondent due to failing an attention check is replaced with another "good respondent".

Table 3: Survey Questions - PreTreatment Questions (1)

Variable	Wording ENG	Wording DE
issue-pref-forced (PT1)	In your opinion, should the federal government implement the following policy proposals? Please select the response option that most closely matches your opinion.	Sollte die Bundesregierung Ihrer Meinung nach die folgenden politischen Vorschläge umsetzen? Bitte wählen Sie die Antwortoption, die Ihrer Meinung am ehesten entspricht.
general speed limit (PT1-1)	General speed limit.	Generelles Tempolimit
increase of top tax (PT1-2)	Increase the top tax rate	Erhöhung des Spitzensteuersatzes
legalization of cannabis (PT1-3)	Cannabis Legalization.	Cannabis-Legalisierung
issue-importance (PT3)	How important are the following issues to you?	Wie wichtig sind die folgenden Themen für Sie?
general speed limit (PT3-1)	General speed limit	Generelles Tempolimit
increase of top tax (PT3-2)	Increasing the top tax rate	Erhöhung des Spitzensteuersatzes
legalization of cannabis (PT3-3)	Cannabis legalization	Cannabis-Legalisierung
political- knowledge1 (PT4)	In the federal election, you have two votes, a first vote and a second vote. How is that actually, which of the two votes is decisive for the distribution of seats in the Bundestag?	Bei der Bundestagswahl haben Sie ja zwei Stimmen, eine Erststimme und eine Zweitstimme. Wie ist das eigentlich, welche der beiden Stimmen ist ausschlaggebend für die Sitzverteilung im Bundestag?
$\begin{array}{c} \text{political-} \\ \text{knowledge2} \\ \text{(PT5)} \end{array}$	Now we would like to know from you, from what percentage of the second votes a party can send deputies in any case in the Bundestag?	Jetzt möchten wir gerne von Ihnen wissen, ab wie viel Prozent der Zweitstimmen eine Partei auf jeden Fall Abgeordnete in den Bundestag entsenden kann?
political- knowledge3 (PT6)	And can you say approximately what the current unemployment rate is in Germany? Is it lower or higher than 10 percent?	Und können Sie ungefähr sagen, wie hoch die derzeitige Arbeitslosenquote in Deutschland ist? Ist sie niedriger oder höher als 10 Prozent?

Attention Check 1 When a big news story breaks people often go online to get up-to-the-minute details on what is going on. We want to know which websites people trust to get this information. We also want to know if people are paying attention to the question. To show that you have read this much, please ignore the question and select BILD-Zeitung and Süddeutsche Zeitung as your two answers. When there is a big news story, which is the one news website you would visit first? (Please only choose one). Eight (German) news outlets are provided to choose from. Respondents pass the attention check if they select BILD-Zeitung and Süddeutsche Zeitung.

Attention Check 2: We would like to get a sense of your general preferences. Most modern theories of decision making recognize that decisions do not take place in a vacuum. Individual preferences and knowledge, along with situational variables can greatly impact the decision process. To demonstrate that you've read this much, just go ahead and select both red and green among the alternatives below, no matter what your favourite color is. Yes, ignore the question below and select both of those options. What is your favourite color? Six colors are provided to choose from, respondents pass the attention check if they select red and green.

Table 4: Survey Questions - PreTreatment Questions (2)

Variable	Wording ENG	Wording DE
political-interest (PT7)	Once speaking in general terms: How interested are you in politics - very strongly, strongly, moderately, less strongly, or not at all?	Einmal ganz allgemein gesprochen: Wie stark interessieren Sie sich für Politik – sehr stark, stark, mittelmäßig, weniger stark oder überhaupt nicht?
RILE (PT8)	In politics, people often talk about 'left' and 'right.' Where would you classify yourself?	In der Politik reden die Leute häufig von 'links' und 'rechts'. Wo würden Sie sich selbst einordnen?
in-party (S1)	If you had to choose, which of the following parties would you be most likely to vote for in the next federal election?	Wenn Sie sich entscheiden müssten, welche der folgenden Parteien würden Sie bei der nächsten Bundestagswahl am ehesten wählen?
in-party-strength (S2)	How strongly or how weakly do you identify with this party: very strongly, fairly strongly, moderately, fairly weakly, or very weakly?	Wie stark oder wie schwach indentifizieren Sie sich mit dieser Partei: sehr stark, ziemlich stark, mäßig, ziemlich schwach, oder sehr schwach?

#### 3.4 Post-Treatment Variables

Post-treatment, the heterogeneous treatments (H4 and H5), manipulation checks, cultural position, and populist attitudes are surveyed.

- Principledness This is measured in two different ways. First, following Arceneaux (2019), , we measure principledness with using the Ethical Positions Questionnaire using a 7-point Likert scale (Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree nor Disagree, Somewhat Agree, Agree, Strongly Agre). We reduce the initial 20 statements to 12 based on this analysis, where statements 1–6 measure idealism and statements 7–12 measure relativism; absolutism is the combination of idealism with the rejection of relativism. If Cronbach's  $\alpha$  =>0.8, we will construct an additive scale for this measure. When Cronbach's  $\alpha$  <0.8, we will add the statement as seperate dependent variables in the multiverse analysis. Secondly, we use Ryan (2017)'s measure of Willingness to Accept (WtA) Benefits, where participants imagine to receive money ( $\epsilon$ 0,  $\epsilon$ 1,  $\epsilon$ 2,  $\epsilon$ 3,  $\epsilon$ 4) but donate the same amount of money to an organization that is against their preferred policy position.
- Mutual trust is measured using three items from the European Social Survey using an 11-point scale, where 0 is the most negative answer, and 10 the most positive one. Respondents are asked whether they think most people can be trusted, most people try to take advantage of you, and most people are willing to help others. If Cronbach's  $\alpha$  =>0.8, we will construct an additive scale for this measure. When Cronbach's  $\alpha$  <0.8, we will add the statement as separate dependent variables in the multiverse analysis.
- Cultural position is measured by asking if people find it important if people are born in Germany, have German ancestors, are able to speak German, and conform to the German norms and values using a 5-point Likert-scale (Very important, Important, Neutral, Unimportant, Very unimportant).
- Populism attitudes We measure populist attitudes with the scale developed by Akkerman, Mudde, and Zaslove (2014) with a 5-point Likert-scale ranging (Very much disagree, Disagree, Neutral, Agree, Very much agree). For the statements, see Table XX.
- Manipulation checks

#### 3.5 Exclusion Criteria

Participants are required to respond to each question. Participants who fail the second attention check will be excluded but replaced by another participant.

Table 5: Survey Questions - PostTreatment Questions (1)

Variable	Wording ENG	Wording DE
princpledness2 (HT1a)	Below you will find a selection of general statements. We are interested in the extent to which you agree or disagree with the individual statements.	Im Folgenden finden Sie eine Auswahl an allgemeinen Aussagen. Uns interessiert, inwieweit Sie den einzelnen Aussagen zustimmen oder nicht zustimmen.
princpledness2 (HT1a-1)	A person should be careful that their actions never intentionally cause harm to another person, even in a small way.	Eine Person sollte darauf achten, dass ihre Handlungen niemals absichtlich einen anderen Menschen Schaden zufügen, auch nicht in geringem Maße.
princpledness2 (HT1a-2)	Putting others at risk should never be tolerated, no matter how small the risks.	Die Gefährdung anderer sollte niemals toleriert werden, unabhängig davon, wie gering die Risiken auch sein mögen.
princpledness2 (HT1a-3)	The occurrence of potential harm to others is always wrong, regardless of the benefits.	Das Eintreten eines potenziellen Schadens für andere ist immer falsch, unabhängig von den Vorteilen, die sich daraus ergeben.
princpledness2 (HT1a-4)	One should never hurt another person psychologically or physically.	Man sollte eine andere Person niemals psychisch oder physisch verletzen.
princpledness2 (HT1a-5)	One should not take any action that could in any way threaten the dignity and well-being of another person.	Man sollte keine Handlung vornehmen, die in irgendeiner Weise die Würde und das Wohlbefinden eines anderen Menschen bedrohen könnte.
princpledness2 (HT1a-6)	If an act could harm an innocent third party, it should not be done.	Wenn eine Handlung einem unschuldigen Dritten schaden könnte, sollte sie nicht vorgenommen werden.
princpledness2b (HT1b)	Im Folgenden finden Sie eine Auswahl an allgemeinen Aussagen. Uns interessiert, inwieweit Sie den einzelnen Aussagen zustimmen oder nicht zustimmen.	Im Folgenden finden Sie eine Auswahl an allgemeinen Aussagen. Uns interessiert, inwieweit Sie den einzelnen Aussagen zustimmen oder nicht zustimmen.
princpledness2 (HT1b-1)	There are no ethical principles that are so important that everyone must follow them.	Es gibt keine ethischen Grundsätze, die so wichtig sind, dass jeder sie befolgen muss.
princpledness2 (HT1b-2)	What is ethical varies from situation to situation and from society to society.	Was ethisch ist, variiert von Situation zu Situation und von Gesellschaft zu Gesellschaft.
princpledness2 (HT1b-3)	You cannot say that a certain kind of morality is more correct than another.	Man kann nicht sagen, dass eine bestimmte Art von Moral richtiger ist als eine andere.

# 4 Analysis

We test the hypotheses formulated in Section 1 by fitting linear multivariate regressions separately for the two issues. In each model, we will estimate the coefficient for whether the party compromised or remained steadfast (H1), whether or not the coalition talks continued (H2), and the interaction of compromise and the outcome (H3). We will only add control variables in the analyses that are unbalanced, as explained in Section 4.1.

# 4.1 Balance Checks

We will conduct a balance test based on demographics (age, gender, education, geographical region, level of urbanness, employment, and income), vote choice in the 2021 parliamentary elections, ideological self-placement, political knowledge, political interest, party identity strength, and positions on and salience of the three issues, using the cobalt R package (Greifer 2021). If the groups are unbalanced on one of these

variables – i.e. standardized mean differences <0.05 – I will add the covariates to the analyses. I will use the code below to conduct the balance tests (see here for the R script).

# 4.2 Hypothesis 1

We test the *steadfast hypothesis* using Equation 2 and the code chunk below. The coefficient of  $\beta_1$  denotes the difference in the evaluation of steadfast and compromising parties If the effect of  $\beta_1$  is positive and statistically significant, the *steadfast hypothesis* will be confirmed.

```
\hat{Y}_{Party\ Evaluation} = \beta_0 + \beta_1 Steadfast + \beta_2 Outcome + \beta_4 Party\ ID + \beta_5 Party\ ID\ Strength + \beta_5 Unbalanced\ Covariates + \varepsilon 
(1)
```

#### 4.3 Hypothesis 2

We test the responsibility hypothesis using Equation ?? and the code chunk below. The coefficient of  $\beta_2$  denotes the difference in the evaluation of parties negotiating for coalition government and those who stop talking to potential coalition partners. If the effect of  $\beta_2$  is positive and statistically significant, the responsibility hypothesis will be confirmed.

 $\hat{Y}_{Party\ Evaluation} = \beta_0 + \beta_1 Compromise + \beta_2 Outcome + \beta_3 Party\ ID + \beta_4 Party\ ID\ Strength + \beta_5 Unbalanced\ Covariates + \varepsilon$ (2)

## 4.4 Hypothesis 3

We test the compromise hypothesis using Equation 3 and the code chunk below. The coefficient of  $\beta_1$  denotes the difference in the evaluation of steadfast and compromising parties. The coefficient of  $\beta_2$  denotes the difference in the evaluation of parties negotiating for coalition government and those who stop talking to potential coalition partners. The coefficient of  $\beta_3$  is the interaction of the  $\beta_1$  and  $\beta_2$ . If the Average Marginal Effect of  $\beta_1$  is positive and statistically significant when  $\beta_2 = 1$  (i.e. congruence), then H3 will be confirmed.

 $\hat{Y}_{Party\ Evaluation} = \beta_0 + \beta_1 Compromise + \beta_2 Outcome + \beta_3 Compromise *Outcome + \beta_4 Party\ ID + \beta_5 Party\ ID\ Strength + \beta_6 Union (3)$ 

#### 4.5 Hypothesis 4

We test the *principled hypothesis* using Equation 4 and the code chunk below. The coefficient of  $\beta_1$  denotes the difference in the evaluation of steadfast and compromising parties. The coefficient of  $\beta_3$  denotes the difference in the evaluation of parties for people with different levels of principledness. The coefficient of  $\beta_4$ 

is the interaction of the  $\beta_1$  and  $\beta_3$ . When the Average Marginal Effect of  $\beta_1$  is negative and statistically significant for higher values of  $\beta_3 =>$  (i.e. principledness), H4 will be confirmed.

 $\hat{Y}_{Party\ Evaluation} = \beta_0 + \beta_1 Compromise + \beta_2 Outcome + \beta_3 Principled + \beta_4 Outcoume *Principled + \beta_5 Party\ ID + \beta_6 Party\ ID\ S$  (4)

```
source(here::here("src/lib/functions.R"))
df <- d %>%
  mutate(steadfast == if_else(compromise=="yes", 1, 0),
         negotiation = if_else(outcome=="negotiation", 1, 0)) %>%
  filter(issue == "SpeedLimit") %>%
  select(DV1, negotiation, compromise, HT1, S1, S2) %>%
h4_1a <- lm(DV1 ~ compromise + negotiation*HT1 +
                      factor(S1) + S2,
                    data = df
df <- d %>%
  mutate(steadfast == if_else(compromise=="yes", 1, 0),
         negotiation = if_else(outcome=="negotiation", 1, 0)) %>%
  filter(issue == "SpeedLimit") %>%
  select(DV1, negotiation, compromise, HT2, S1, S2) %>%
h4_1b <- lm(DV1 ~ compromise + negotiation*HT2 +
                      factor(S1) + S2,
                    data = df)
df <- d %>%
  mutate(steadfast == if_else(compromise=="yes", 1, 0),
         negotiation = if_else(outcome=="negotiation", 1, 0)) %>%
  filter(issue == "topTax") %>%
  select(DV1, negotiation, compromise, HT1, S1, S2) %>%
h4_2a <- lm(DV1 ~ compromise + negotiation*HT1 +
                      factor(S1) + S2,
                    data = df)
df <- d %>%
  mutate(steadfast == if_else(compromise=="yes", 1, 0),
         negotiation = if_else(outcome=="negotiation", 1, 0)) %>%
  filter(issue == "topTax") %>%
  select(DV1, negotiation, compromise, HT2, S1, S2) %>%
h4_2b <- lm(DV1 ~ compromise + negotiation*HT2 +
                      factor(S1) + S2,
                    data = df
```

# 4.6 Hypothesis 5

We test the distrust hypothesis using Equation 5 and the code chunk below. The coefficient of  $\beta_1$  denotes the difference in the evaluation of steadfast and compromising parties. The coefficient of  $\beta_3$  denotes the difference in the evaluation of parties for people with different levels of distrust. The coefficient of  $\beta_4$  is the interaction of the  $\beta_1$  and  $\beta_3$ . When the Average Marginal Effect of  $\beta_1$  is negative and statistically significant for higher values of  $\beta_3 = >$  (i.e. distrust), H5 will be confirmed.

 $\hat{Y}_{Party\ Evaluation} = \beta_0 + \beta_1 Compromise + \beta_2 Outcome + \beta_3 Mutual\ Trust + \beta_4 Outcoume * Mutual\ Trust + \beta_5 Party\ ID + \beta_6 Party$ 

```
source(here::here("src/lib/functions.R"))
df <- d %>%
  mutate(steadfast == if_else(compromise=="yes", 1, 0),
         negotiation = if_else(outcome=="negotiation", 1, 0)) %>%
  filter(issue == "SpeedLimit") %>%
  select(DV1, negotiation, compromise, HT3, S1, S2) %>%
h5_1 <- lm(DV1 ~ compromise + negotiation*HT3 +
                      factor(S1) + S2,
                    data = df
df <- d %>%
  mutate(steadfast == if_else(compromise=="yes", 1, 0),
         negotiation = if_else(outcome=="negotiation", 1, 0)) %>%
  filter(issue == "topTax") %>%
  select(DV1, negotiation, compromise, HT3, S1, S2) %>%
h5_2 <- lm(DV1 ~ compromise + negotiation*HT3 +
                      factor(S1) + S2,
                    data = df
```

#### 4.7 Pooled Data

Using the pooled data, we will estimate a within groups fixed effects model.  $\hat{Y}_{r,i}$  in Equation 6 denotes the evaluation of a party of respondent r, during issue i.  $\alpha_i$  is the issue specific intercept.

The standard errors are clustered at the individual level.

If the Average Marginal Effect of  $\beta_2$  is negative and statistically significant when  $\beta_3 = 1$  (i.e. parties continue to negotiate), the *compromise hypothesis* will be confirmed.

```
\hat{Y}_{r,i} = \beta_0 + \beta_1 Intersection_{r,i} + \beta_2 Compromise + \beta_3 Compromise * Intersection + \alpha_i + \varepsilon_{r,i}  (6)
```

#### 4.8 Statistical Significance

All the hypotheses are directional, and therefore all of the tests will be one-tailed. We will use an  $\alpha$ -value of 0.05 as the value for statistical significance in all models above.

#### 5 Stimulus Material

Table 8 show the manipulations of the 2\*2 experimental design, for two issues for four different in-partiies and two different potential coalition partners leading to 64 experimental treatments. All stimulus material is developed by the Network Institute of the *Vrije Universiteit Amsterdam* and can be accessed here. The treatment's texts are in German.

# References

Akkerman, Agnes, Cas Mudde, and Andrej Zaslove. 2014. "How Populist Are the People? Measuring Populist Attitudes in Voters." *Comparative Political Studies* 47 (9). SAGE Publications Sage CA: Los Angeles, CA: 1324–53. https://doi.org/10.1177/0010414013512600.

Arceneaux, Kevin. 2019. "The Roots of Intolerance and Opposition to Compromise: The Effects of Absolutism on Political Attitudes." *Personality and Individual Differences* 151. Elsevier: 109498. https://doi.org/10.1016/j.paid.2019.07.008.

Bauer, Nichole M, Laurel Harbridge Yong, and Yanna Krupnikov. 2017. "Who Is Punished? Conditions Affecting Voter Evaluations of Legislators Who Do Not Compromise." *Political Behavior* 39 (2). Springer: 279–300. https://doi.org/10.1007/s11109-016-9356-6.

Berinsky, Adam J, Michele F Margolis, and Michael W Sances. 2014. "Separating the Shirkers from the Workers? Making Sure Respondents Pay Attention on Self-Administered Surveys." *American Journal of Political Science* 58 (3). Wiley Online Library: 739–53. https://doi.org/10.1111/ajps.12081.

Blair, Graeme, Jasper Cooper, Alexander Coppock, and Macartan Humphreys. 2019. "Declaring and Diagnosing Research Designs." *American Political Science Review* 113 (3). Cambridge University Press: 838–59. https://doi.org/10.1017/S0003055419000194.

Greifer, Noah. 2021. "Cobalt: Covariate Balance Tables and Plots. R Package Version 4.3.1." https://cran.r-project.org/web/packages/cobalt/index.html.

Ryan, Timothy J. 2017. "No Compromise: Political Consequences of Moralized Attitudes." *American Journal of Political Science* 61 (2). Wiley Online Library: 409–23. https://doi.org/10.1111/ajps.12248.

Table 6: Survey Questions - PostTreatment Questions (2)

Variable	Wording ENG	Wording DE
princpledness2 (HT1b-4)	The question of what is ethical for all can never be settled, for what is moral or immoral should be left to the individual.	Die Frage, was für alle ethisch ist, kann nie geklärt werden, denn was moralisch oder unmoralisch ist, sollte dem Einzelnen überlassen werden.
princpledness2 (HT1b-5)	Moral values are simply personal rules that indicate how a person should behave and should not be used to judge others.	Moralische Werte sind einfach persönliche Regeln, die angeben, wie sich eine Person verhalten sollte, und sollten nicht dazu dienen, über andere zu urteilen.
princpledness2 (HT1b-6) princpledness1 (HT2)	Whether something is considered moral or immoral depends on the circumstances.  Imagine being able to choose an amount from the list below, and the amount you choose will be credited to your account. The catch is that the amount you choose will also be	Ob etwas als moralisch oder unmoralisch eingestuft wird, hängt von den Umständen ab. Stellen Sie sich vor, Sie können einen Betrag aus der unten stehenden Liste auswählen, und der von Ihnen gewählte Betrag wird Ihrem Konto gutgeschrieben. Der Haken an der
	donated to an association that vehemently for/against the introduction of a top tax/speed limit. What amount would you choose?	Sache ist, dass der von Ihnen gewählte Betrag auch an einen Verband gespendet wird, der sich vehement gegen/für die Einführung eines Spitzensteuersatzes/Generellen Tempolimits einsetzt. Welchen Betrag würden Sie auswählen?
mutual-trust1 (HT3a)	Do you think that most people can be trusted, or that you can't be careful enough when dealing with other people? Please tell us using this scale from 0 to 10. 0 means that you can't be careful enough, and 10 means that you can trust most people.	Glauben Sie, dass man den meisten Menschen vertrauen kann, oder dass man im Umgang mit anderen Menschen nicht vorsichtig genug sein kann? Bitte sagen Sie es uns anhand dieser Skala von 0 bis 10. 0 bedeutet, dass man nicht vorsichtig genug sein kann, und 10 bedeutet, dass man den meisten Menschen vertrauen kann.
mutual-trust2 (HT3b)	Do you think most people try to take advantage of you when they have the opportunity, or do most people try to be fair?	Glauben Sie, dass die meisten Menschen versuchen, Sie auszunutzen, wenn sie die Gelegenheit dazu haben, oder versuchen die meisten Menschen, sich fair zu verhalten?
mutual-trust3 (HT3c)	And do you think that people are mostly trying to be helpful, or that people are mostly looking out for their own advantage?	Und glauben Sie, dass die Menschen meistens versuchen, hilfsbereit zu sein, oder dass die Menschen meistens auf den eigenen Vorteil bedacht sind?
cultural-position (HT4)	Some people think that the following points are important to be truly German. Others do not think they are important. How important do you think the following points are to being German?	Manche Leute meinen, dass die folgenden Punkte wichtig sind, um wirklich deutsch zu sein. Andere halten diese nicht für wichtig. Für wie wichtig halten Sie die folgenden Punkte, um deutsch zu sein?
cultural-position (HT4-1)	To be born in Germany	in Deutschland geboren sein
cultural-position (HT4-2)	to have German ancestors	deutsche Vorfahren haben
cultural-position (HT4-3)	to be able to speak German	deutsch sprechen können
cultural-position (HT4-4)	to adhere to German traditions and customs	sich an deutsche Traditionen und Gepflogenheiten halten

Table 7: Survey Questions - PostTreatment Questions (3)

Variable	Wording ENG	Wording DE
populist-attitudes (POST1)	Now we would like to know your opinion on some general statements about politics. For each of the following statements, please indicate the extent to which you agree or disagree with it.	Jetzt möchten wir gerne Ihre Meinung zu einigen allgemeinen Aussagen zur Politik wissen. Bitte geben Sie zu jeder der folgenden Aussagen an, inwieweit Sie dieser zustimmen oder diese ablehnen.
populist-attitudes (POST1-1)	What is called compromise in politics is really just a betrayal of principles.	Was in der Politik Kompromiss genannt wird, ist in Wirklichkeit nur ein Verrat von Prinzipien.
populist-attitudes (POST1-2)	Citizens, not politicians, should make the most important policy decisions.	Die Bürger, und nicht die Politiker, sollten die wichtigsten politischen Entscheidungen treffen.
populist-attitudes (POST1-3)	The members of the German Bundestag must follow the will of the citizens.	Die Abgeordneten des Deutschen Bundestags müssen dem Willen der Bürger Folge leisten.
populist-attitudes (POST1-4)	The political differences between elites and citizens are greater than the differences between citizens.	Die politischen Unterschiede zwischen den Eliten und den Bürgern sind größer als die Unterschiede zwischen Bürgern.
populist-attitudes (POST1-5)	Elected officials talk too much and take too little action	Die Politiker reden zu viel und machen zu wenig.
populist-attitudes (POST1-6)	A citizen would better represent my interests than a professional politician.	Ein Bürger würde besser meine Interessen vertreten als ein Berufspolitiker.
populist-attitudes (POST1-7)	In a democracy, it is important to compromise between different points of view.	In einer Demokratie ist es wichtig, Kompromisse zwischen unterschiedlichen Standpunkten zu schließen.
populist-attitudes (POST1-8)	It is important to listen to the opinions of other groups.	Es ist wichtig, die Meinung anderer Gruppen anzuhören.
manipulation- check1 (MC1)	Can you please tell us if [PARTY] would compromise(s) according to the Instagram message?	Können Sie uns bitte sagen, ob [PARTY] der Instagram-Nachricht zufolge einen Kompromiss eingehen würde(n)?
manipulation- check2 (MC2)	Can you please tell us if the two parties have agreed to start coalition talks according to the Instagram message?	Können Sie uns bitte sagen, ob die beide Parteien der Instagram-Nachricht zufolge sich geinigt haben, Koalitionsverhandlungen aufzunehmen?
reality-check (MC3)	The Instagram message you just saw represented a fictional scenario of coalition talks. Do you know which parties are currently holding exploratory talks in reality? Please select all applicable parties.	Die Instagram-Nachricht, die Sie gerade gesehen haben, stellte ein fiktives Szenario der Koalitionsverhandlungen dar. Wissen Sie, welche Parteien derzeit in der Wirklichkeit Sondierungsgespräche führen? Bitte wählen Sie alle zutreffenden Parteien aus.

Table 8: Experimental Conditions

	In-Party	Partner	Compromise	Outcome	Issue
1	CDU	SPD	Yes	Stalled	TopTax
2	CDU	$\operatorname{SPD}$	Yes	Negotation	TopTax
3	CDU	SPD	No	Stalled	TopTax
4	CDU	$\operatorname{SPD}$	No	Negotation	TopTax
5	CDU	SPD	Yes	Stalled	SpeedLimit
6	CDU	$\operatorname{SPD}$	Yes	Negotation	SpeedLimit
7	CDU	SPD	No	Stalled	SpeedLimit
8	CDU	SPD	No	Negotation	SpeedLimit
9	CDU	die Grünen	Yes	Stalled	TopTax
10	CDU	die Grünen	Yes	Negotation	TopTax
11	CDU	die Grünen	No	Stalled	ТорТах
12	CDU	die Grünen	No	Negotation	TopTax
13	CDU	die Grünen	Yes	Stalled	SpeedLimit
14	CDU	die Grünen	Yes	Negotation	SpeedLimit
15	CDU	die Grünen	No	Stalled	SpeedLimit
16	CDU	die Grünen	No	Negotation	SpeedLimit
17	die Grünen	SPD	Yes	Stalled	TopTax
18	die Grünen	SPD	Yes	Negotation	TopTax
19	die Grünen	SPD	No	Stalled	TopTax
20	die Grünen	SPD	No	Negotation	TopTax
21	die Grünen	$\operatorname{SPD}$	Yes	Stalled	SpeedLimit
22	die Grünen	$\operatorname{SPD}$	Yes	Negotation	SpeedLimit
23	die Grünen	SPD	No	Stalled	SpeedLimit
24	die Grünen	$\operatorname{SPD}$	No	Negotation	SpeedLimit
25	die Grünen	die Grünen	Yes	Stalled	TopTax
26	die Grünen	die Grünen	Yes	Negotation	TopTax
27	die Grünen	die Grünen	No	Stalled	TopTax
28	die Grünen	die Grünen	No	Negotation	TopTax
29	die Grünen	die Grünen	Yes	Stalled	SpeedLimit
30	die Grünen	die Grünen	Yes	Negotation	SpeedLimit
31	die Grünen	die Grünen	No	Stalled	SpeedLimit
32	die Grünen die Grünen	die Grünen	No	Negotation	SpeedLimit
33	FDP	CDU	Yes	Stalled	TopTax
34	FDP	CDU	Yes	Negotation	ТорТах
35	FDP	CDU	No	Stalled	TopTax
36	FDP	CDU	No	Negotation	TopTax
37	FDP	CDU	Yes	Stalled	SpeedLimit
38	FDP	CDU	Yes	Negotation	SpeedLimit
39	FDP	CDU	No	Stalled	SpeedLimit
40	FDP	CDU	No	Negotation	SpeedLimit
41	FDP	FDP	Yes	Stalled	TopTax
42	FDP	$\operatorname{FDP}$	Yes	Negotation	TopTax
43	FDP	FDP	No	Stalled	TopTax
44	FDP	$\operatorname{FDP}$	No	Negotation	TopTax
45	FDP	FDP	Yes	Stalled	SpeedLimit
46	FDP	FDP	Yes	Negotation	SpeedLimit
47	FDP	FDP	No	Stalled	SpeedLimit
48	FDP	FDP	No	Negotation	SpeedLimit
49	SPD	CDU	Yes	Stalled	TopTax
50	SPD	CDU	17 Yes	Negotation	TopTax
				_	
51 52	SPD SPD	CDU CDU	No No	Stalled Negotation	TopTax
52 53	SPD SPD			~	TopTax SpeedLimit
ეკ	SED	CDU	Yes	Stalled	SpeedLimit