

# Pre-Analysis Plan

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## Contents

<b>1 Hypothesis</b>	<b>2</b>
<b>2 Research Desing and Protocol</b>	<b>2</b>
2.1 Sample . . . . .	2
2.2 Experimental Protocol . . . . .	2
2.3 Power Analysis . . . . .	4
<b>3 Measures</b>	<b>4</b>
3.1 Dependent Variables . . . . .	4
3.2 Control Variables . . . . .	4
3.3 Attention Checks . . . . .	4
3.4 Exclusion Criteria . . . . .	4
<b>4 Analysis</b>	<b>4</b>
4.1 Hypothesis 1 . . . . .	4
4.2 Hypothesis 2 . . . . .	4
4.3 Hypothesis 3 . . . . .	4
<b>Stimulus Material</b>	<b>4</b>

# 1 Hypothesis

## 2 Research Design and Protocol

### 2.1 Sample

I will conduct this survey experiment in the Netherlands in April 2021. Our sample, recruited through KiesKompas, will consist of 2,000 participants (based on the power analysis presented below) of 18 years and older. 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 below) 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 Dutch. Participants are told that they are taking part in a survey to get an overview of how Dutch 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 background variables on their stances on the political issues used in the experiment (i.e. corona-measures, defense, education, immigration) and on their attitude towards women in politics – the full codebook can be viewed here. The pre-treatment 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. Only when they have answered it correctly, they enter the first round of the experiment. After each round of the experiment, some filler questions are asked about the respondents demographics. The stimuli in the experiment are news messages in the same style as the Dutch news website nu.nl. In these news messages, we manipulate: a) the *gender* of the politician (male vs. female); b) the *migration background* of the politician (based on a Arabic sounding name (Rachid(a) Amezian) or a native Dutch sounding name (Karel/Karin van der Kleijn)); and c) whether the politician *struck a compromise or not*. This creates a full 2\*2\*2 factorial experiment with four rounds. Every round, the news message covers a new issue. The issues are: “defense” (increase cooperation of the defense units), “immigration” (immigration stop in western countries), “education” (expansion creative elementary school activities), “COVID-19” (emergency legislation to combat COVID-19). For every round, the politicians name, and thereby gender and immigration background, are manipulated in the text and in the picture as well as the decision to strike a compromise. For an illustration of the stimulus material, see Figure 1. All manipulated elements are within the blue boxes.

The text of the treatment is a Dutch translation of the stimulus material developed by Bauer, Yong, and Krupnikov (2017). The authors have pre-tested the text of the stimuli material several times (see the Web Appendix of Bauer, Yong, and Krupnikov 2017). The photo’s of their stimuli material can unfortunately not be used, because a) Bauer, Yong, and Krupnikov (2017) only investigate the difference between men and women politicians, using solely photo’s of caucasians; and b) the American flag was present in their material. Instead, I have used photo’s from local politicians of the city of The Hague that are not known to the general public. The men politicians are in real life representatives of the liberal-progressive party D66 (man with immigrant background) and of the christian democratic party CDA (man without immigrant background). The women politicians are in real life representatives of a right-wing populist party *Hart voor Deen Haag/Groep de Mos* (woman with migration background) and of the social democratic party PvdA (woman without immigrant background). Thereby we have a spread over the ideological different parties present in Dutch politics. The names for the politicians without immigration background are *Karel* (man) and *Karin* (woman) *van der Kleijn*, which are typical native Dutch names. For the politicians with an immigration background, we picked *Rachid* (man) and *Rachida* (woman) *Amezian*.

Figure 1: Annotated Example of Stimulus Material

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## Politicus sluit compromis op intensivering defensiesamenwerking.

In deze termijn staat het parlement voor een cruciaal kruispunt met betrekking tot een intensivering van defensiesamenwerking. Nu de deadline voor een stemming snel nadert, moet het parlement de toekomst bepalen van het beleid inzake intensivering defensiesamenwerking in Nederland. Een aantal onpartijdige organisaties heeft er bij het parlement op aangedrongen om over deze kwestie een compromis te bereiken. De tijd dringt.

Om dit belangrijke wetsvoorstel te laten slagen, zullen politici van verschillende politieke partijen hun verschillen opzij moeten zetten en een compromis moeten sluiten. Terwijl velen in het parlement nog steeds debatteren over hun standpunten, hebben sommige leden van zowel linkse als rechtse partijen al de bereidheid getoond om een compromis te sluiten. Een van degenen die wel een compromis willen sluiten, is de politicus Rachida Amezian. Rachida Amezian heeft al publiekelijk verklaard dat zij een compromis wil sluiten en voor dit wetsvoorstel zal stemmen. Hoewel de stemming nog een week verwijderd is, heeft Rachida Amezian talloze mediabronnen verteld dat zij haar stem niet zal wijzigen. "Dit is een kwestie waarover ik bereid ben een compromis te sluiten", zei Rachida Amezian. "Mijn kiezers wisten dit toen ze mij verkozen."



## 2.3 Power Analysis

As detailed in Section 4, I conduct an OLS regression within a multiverse approach (Simonsohn, Simmons, and Nelson 2019; Steegen et al. 2016) using the four post-treatment questions on the politician’s a) leadership evaluation (scale); b) general favorability; c) representative quality; and d) career perspective as dependent variable and the three manipulations (gender, migration background and whether or not the politician is willing to strike a compromise ) as independent variables. Each hypothesis is tested separately for all four issues.

We will test each hypothesis separately for all four issues. We used the R package “DeclareDesign” (Blair et al., 2019) for our power analysis 1, assuming a small effect of  $b = 0.2$  (Figure 2, yellow line). As our hypotheses are directional, we will run one-tailed tests with an alpha of .05. Our power analysis shows that testing hypotheses 1 (a, b and c) and 3 (a and b), requires a sample size of 1,200 participants (x-axis) to reach power of 0.95 (black dashed line, Figure 2, panel A). Note that if the effect size  $b$  is bigger than .2 { i.e., .3, .4, .5 or .6 } smaller sample sizes are sufficient to reach power of 0.95. To test Hypotheses 2 (Anger frame) and 4 (Anxiety Frame), we can detect a small effect  $b = 0.2$  (yellow line) with a power of .8 (gray dashed line) and a one-tailed test of significance at alpha .05 with a sample of 1,500 participants (Figure 2, Panel B). At 1,800 participants, with a small effect and one-tailed test of significance at .05, we reach power of .88. A sample of 1,800 participants therefore gives us sufficient power to test Hypotheses 1 and 3 but a probability of 12% for a Type II error remains when testing Hypotheses 2 and 4. We will therefore test Hypotheses 2 and 4 first by issue and second, by pooling our data across issues. This will give us sufficient power to test H2 and 4.

## 3 Measures

### 3.1 Dependent Variables

### 3.2 Control Variables

### 3.3 Attention Checks

### 3.4 Exclusion Criteria

## 4 Analysis

### 4.1 Hypothesis 1

### 4.2 Hypothesis 2

### 4.3 Hypothesis 3

## Stimulus Material

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>.

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Steegen, Sara, Francis Tuerlinckx, Andrew Gelman, and Wolf Vanpaemel. 2016. “Increasing Transparency Through a Multiverse Analysis.” *Perspectives on Psychological Science* 11 (5). Sage Publications Sage CA: Los Angeles, CA: 702–12. <https://doi.org/10.1177/1745691616658637>.