

# Strategic nuclear proliferation and public opinion

## Pre-Analysis Plan

Guilherme Fasolin  
Lucas Perez Florentino  
Umberto Mignozzetti  
Matias Spektor

We propose to investigate citizen attitudes towards the pursuit of nuclear weapons in Brazil. More specifically, we seek to understand how national identity conceptions shape national audience views on the utility of nuclear. In order to do this, we will field a survey experiment to a nationally representative sample. This pre-analysis plan outlines our research design.

### Background

Recent theoretical developments in the study of nuclear proliferation highlight the degree to which the spread of nuclear weapons depends on any given country's changing security environment. Potential proliferators choose to weaponize or not to weaponize in the course of dynamic processes of strategic interaction involving allies and adversaries alike (Debs and Monteiro 2014). Given the critical role of threat perceptions in strategic interaction, rational choice accounts of proliferation are consistent with concerns over the political psychology of individual leaders in determining country choices for or against the acquisition of nuclear weapons (Hymans 2006). In this project, we integrate insights from these theories to study public attitudes towards nuclear proliferation through an experimental method.

First, we will map the national identity conceptions of the Brazilian population at large, and match these results with a range of nuclear-policy preferences, building on Jacques Hymans (2006) work on decision-making elites. Hymans establishes national identity conceptions at the level of national leaders. Here, we expand his framework to the study of public opinion. We do this because previous research has shown public opinion shapes the options available to decision-makers (McKeown 2000). Moreover, public behavior is less dependent on the elites than assumed by the literature on elite cues (Berinsky 2009). There is robust evidence that individuals rely on pre-existing dispositions or orientations toward foreign policy issues (Rathbun et al 2016). Ultimately, these dispositions may explain individual choices over cue-givers, since a message is more likely to resonate when they tap into pre-existing beliefs (Kertzer and Zeitoff, 2017)

Second, we will confront our sample to alternative strategic scenarios following Debs and Monteiro (2014). More specifically, we will vary vignettes in an experimental design to prime the population with a combination of international threats and promises of ally protection, and then measure citizen support for the pursuit of nuclear weapons. The combination of actors-level dispositions and situational features in a strategic setting will help us understand more about the impact of individuals on world politics but also – and crucially – the effect of world politics over ordinary citizens (Kertzer and Tingley 2018; Solomon and Steele 2017).

We will run the experiment on a representative sample of the Brazilian population. Brazil is a good fit for our study for at least three reasons. First, Brazil is one of the few countries with large uranium reserves that dominates the complete nuclear fuel cycle, and it will soon

become the first non-nuclear-weapon state to have a nuclear-propelled submarine. Second, the rise of right-wing populism in Brazil has reintroduced the debate in the public sphere about the strategic utility of nuclear weapons. Third, Brazilian society is widely diverse along religious, income, and racial/ethnic lines, providing the basis for significant within-country variation and external validity to our results.

## **Experimental design**

The experiment design consists of three sequential sections. The first measures the public's national identity conceptions. The second investigates how these national identity conceptions shape nuclear preferences, particularly with regards to the acquisition of nuclear weapons. The last section runs experimental scenarios of strategic interaction. We will analyze the data in two stages. In the first one we will randomly vary three main components - threat level, backup from an ally, and the perceived credibility of that backup. This will allow us to study the effects of differential threat scenarios on the public's support for proliferation. In the second stage, we will investigate whether groups that rank extreme in national identity conceptions have heterogeneous reactions to each of the randomly assigned scenarios.

## ***Dispositional instrument***

Survey participants will answer a list of questions that serve as dispositional measures. Our end goal is to actually test Hymans's (2006) typology of national identity conceptions, namely *oppositional nationalist*; *sportsmanlike nationalist*; *oppositional subaltern*; and *sportsmanlike subaltern*. But in order to do so we first need to operationalize the solidarity and status dimension upon which each one of these types rest. We therefore draw on Shalom Schwartz's universal model of values (1992, 1994) and Social Dominance Orientation (SDO) (Pratto et al 1994).

Schwartz's theory of values measures solidarity through ten broad values that structure the overall life in society: benevolence, universalism, self-direction, stimulation, hedonism, achievement, power, security, conformity and tradition. For the purpose of this study, we focus on those values that foment prosocial bonds between individuals as well as solidarity and cohesion against internal and external threats. These allow us to distinguish between the dichotomizing (*oppositional*) and transcendent (*sportsmanlike*) identity conceptions, as proposed by Hymans (2006, 22). An oppositional identity is built on black-white, "us *versus* them" dichotomies. Such national identity conception is more likely to be held by individuals that score high on conservation values such as security, conformity, and tradition. Those who embrace these values are driven by the conception that the world is a dangerous and threatening place. Thus, they seek "in-group solidarity to protect from internal and external threats...which inhibit a sense of global identity and cosmopolitanism" (Rathbun et al 2016, 128). In other words, it is reasonable to expect that an individual holding conservation values have a basic sense that "we" and "they" stand for different interests and values. By contrast, a transcendent identity conception provides a "sense of basic commonality" which produces the feeling of a world made of "us *and* them" (Hymans 2006). This identity is likely to be more commonly held by individuals that score high on universalism, a value associated with "a belief in the interdependent nature of international relations and a commitment to the collective resolution of common problems" (Rathbun et al, 2016, 128). Universalism also emphasizes acceptance of and concern for other individuals, society, groups, and even the global community, which

facilitate cooperation and allow for a higher degree of social organization (Rathbun et al 2016).

In order to measure the status dimension, we rely on an actor’s dispositional characteristic called SDO. SDO is a personality value that measures individual preferences for “inequality among social groups” (Pratto et al, 1994, 91). It focuses on the vertical dimension of self-other comparison, which is essential to determine status hierarchies. Thus, high-SDO individuals are more likely to view dominance hierarchies favorably even when they are legitimate and believe or desire that their own groups “dominate and be superior to out-groups” (Pratto et al 1994, 742). Such perception provides a sense of hierarchy that underscores the status dimension proposed by Hymans (2006). SDO is a measure that has good internal reliability, is stable over time and has adequate convergent and discriminant validity.

By crossing these two psychological measures – solidarity and status - , we provide the foundations for spreading our sample population across Hymans’s four ideal-type NICs: *oppositional nationalist*; *sportsmanlike nationalist*; *oppositional subaltern*; and *sportsmanlike subaltern*. Table below show how these NICs position in relation to each other.

**Table 2.1** *Four ideal-typical national identity conceptions (NICs)*

Status dimension	Solidarity dimension	
	Us and them (nested in transcendent identity)	Us against them (black-white dichotomy)
We are naturally their equals, if not their superiors	Sportsmanlike nationalist	Oppositional nationalist
We are naturally below them	Sportsmanlike subaltern	Oppositional subaltern

Source: Hymans (2006, 25)

*Social Dominance Orientation*

We use a 6-item SDO scale based on Pratto et al. (1994).

Please read each description and indicate your agreement with each item. All scaled from 1 (strong agree) to 7 (strong disagree). Items 4 and 6 are reverse-coded.

1. It is okay if some groups have more of a chance in life than others.
2. Inferior groups should stay in their place.
3. To get ahead in life, it is sometimes okay to step on other groups.
4. We should have increased social equality.

5. It would be good if groups could be equal.
6. We should do what we can to equalize conditions for different groups.

*Universal model of values*

We use solely values that fall in the self-transcendence and conservation superordinate category.

Here we briefly describe some people. Please read each description and tick the box on each line that shows how much each person is or is not like you.

- Very much like me
- Like me
- Somewhat like me
- A little like me
- Not like me
- Not like me at all

*Universalism*

1. He thinks it is important that every person in the world should be treated equally. He believes everyone should have equal opportunities in life.
2. He wants everyone to be treated justly, even people he doesn't know. It is important to him to protect the weak in society

*Benevolence*

1. It is important to him to be loyal to his friends. He wants to devote himself to people close to him.
2. It is important to him to respond to the needs of others. He tries to support those he knows.

*Security*

1. It is important to him to live in secure surroundings. He avoids anything that might endanger his safety.
2. Having a stable society is important to him. He is concerned that the social order be protected.

*Conformity*

1. He believes that people should do what they're told. He thinks people should follow rules at all times, even when no one is watching.
2. It is important to him to be obedient. He believes he should always show respect to his parents and to older people.

*Tradition*

1. It is important to him to be humble and modest. He tries not to draw attention to himself.
2. Tradition is important to him. He tries to follow the customs handed down by his religion or his family.

**Nuclear Preferences**

Once we identify how the public rank themselves on Hymans' national identity conception framework, we proceed to map respondent policy preferences on nuclear affairs.

How much do you agree with the following statements?

	<i>Strongly Agree</i>	<i>Agree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
(a) In order to feel safe in the world, Brazil needs the protection of an allied country with nuclear weapons.				
(b) Brazil should build its own nuclear weapons.				
(c) Brazil should be able to design its own nuclear weapon, but shouldn't build it.				
(d) Brazil should resist the non-proliferation regime because of its discriminatory character of dividing the world into nuclear "haves" and "have-nots".				

**Experiment**

We will run a vignette experiment with the treatment and control conditions for the phrasing. We will then ask the respondents to rank their agreement with the hypothetical pursuit of a nuclear weapon. Our purpose is to determine the public's likelihood to support the pursuit of nuclear weapons while randomly varying threat level, stronger ally backup, and the perceived credibility of that backup.

The vignette experiment will start with the enumerator reading the following text for all participants:

“Everyone talks about Brazil's security in relation to other countries in the world. We will create different imaginary scenarios and ask what you think of each one.”

In treatments 1, 2 and 3, we intend to uncover the independent effects that the level of military threat has on the individual's decision to support the pursuit of nuclear weapons. Some respondents will read that Brazil faces a significant security threat; other respondents will read that Brazil faces a relatively low security threat; and other respondents will read that Brazil does not face a security threat. The texts of the three conditions are as follows:

**(TrH) High threat:** "Consider that a powerful enemy country poses a big military threat to Brazil's survival."

**(TrL) Low Threat:** "Consider that a weak enemy country poses a threat to Brazil."

**Without Threat:** "Consider that Brazil does not have an enemy strong enough to threaten its survival."

The next step will be to identify the effects of the superpower nuclear guarantee on the public decision to pursue nuclear weapons. Thus, in treatments 3 and 4 we will randomize two conditions: one in which the U.S. government offers protection to the protégé when the latter faces high security threats and another in which the U.S. governments decides not to grant the protection. The texts of the two conditions are as follows:

**(TrP) Protection:** "Consider that a powerful enemy country poses a big military threat to Brazil's survival. [The United States says it will protect Brazil]."

**(TrNP) Non-Protection:** "Consider that a powerful enemy country poses a big military threat to Brazil's survival. [The United States says it will not protect Brazil]."

In treatments 5 and 6, we will repeat the scenarios of treatments 3 and 4 and randomize two additional scenarios: one in which the potential proliferator trusts the powerful ally's willingness to mitigate the former's security threats, and one in which the potential proliferator distrust the commitment to protection made by the ally. By doing this, we can measure *ceteris paribus* the independent effects of government's beliefs on the individuals' decisions to support the pursuit of nuclear weapons. The text of the two condition appears below:

**(TrTrust) Trust:** "Consider that a powerful enemy country poses a big military threat to Brazil's survival. [The United States says it will protect Brazil and the Brazilian government trusts this promise]."

**(TrDistr) Distrust:** "Consider that a powerful enemy country poses a big military threat to Brazil's survival. [The United States says it will protect Brazil, yet the Brazilian government does not trust this promise]."

In treatments 3, 4, 5 and 6, we will prime the United States as the powerful and close ally because it is plausible to assume that Washington would indeed boost its security commitment to Brazil in the event of a significant military threat to Brazil, thereby mitigating Brazil's potential disposition to nuclearize.

It is worth noting that we will have a multi-armed treatment, in which we eliminate the factorial questions that make little sense. In the full factorial design, we should have eight treatment conditions as the table below:

	High Threat Scenario		Low Threat Scenario	
	Protection	No Protection	Protection	No Protection
Credible Backup	High Threat + Protection + Credible Backup	High Threat + No Protection + Credible Backup	Low Threat + Protection + Credible Backup	Low Threat + No Protection + Credible Backup
Non-Credible Backup	High Threat + Protection + Non-Credible Backup	High Threat + No Protection + Non-Credible Backup	Low Threat + Protection + Non-Credible Backup	Low Threat + No Protection + Non-Credible Backup

However, there are conditions, such as when we have low threats, that protection makes no sense, and could potentially signal that the threat is actually high (why would a powerful country protect Brazil against a weak threat?). Other conditions, such as the ones involving no protection, should not be evaluated in terms of the credibility of the backup. Thus, our design assumes that we have no variation in the low threat scenario on the following table:

	High Threat Scenario		Low Threat Scenario	
	Protection	No Protection	Protection	No Protection
Credible Backup	High Threat + Protection + Credible Backup	High Threat + No Protection	Low Threat	
Non-Credible Backup	High Threat + Protection + Non-Credible Backup			

Such design requires imposing zeros throughout the entire combinations, so we prefer the multi-armed design as described in the previous page. It is worth noting that the multi-armed design decreases slightly the explanatory power, but it is clearer, facilitating non-specialist evaluations.

The cursive formulation for our experiment is as follows:

[A] With 1/7 of chance the enumerator reads:

“Consider that an enemy country that is weaker than Brazil poses a threat. Do you agree that Brazil should build a nuclear weapon to defend itself?”

[B] With 1/7 of chance the enumerator reads:

“Consider that Brazil does not have an enemy strong enough to threaten its survival. Do you agree that Brazil should build a nuclear weapon to defend itself?”

[C] With 1/7 of chance the enumerator reads:

“Consider that a powerful enemy country poses a big military threat to Brazil’s survival. Do you agree that Brazil should build a nuclear weapon to defend itself even?”

[D] With 1/7 of chance the enumerator reads:

“Consider that a powerful enemy country poses a big military threat to Brazil’s survival. The United States declares that it will not protect Brazil. Do you agree that Brazil should build a nuclear weapon to defend itself?”

[E] With 1/7 of chance the enumerator reads:

“Consider that a powerful enemy country poses a big military threat to Brazil’s survival. The United States declares that it will protect Brazil. Do you agree that Brazil should build a nuclear weapon to defend itself?”

[F] With 1/7 of chance the enumerator reads:

“Consider that a powerful enemy country poses a big military threat to Brazil’s survival. The United States says it will protect Brazil and the Brazilian government trusts in this promise. Do you agree that Brazil should build a nuclear weapon to defend itself?”

[G] With 1/7 of chance the enumerator reads:

“Consider that a powerful enemy country poses a big military threat to Brazil’s survival. The United States says it will protect Brazil and the Brazilian government does not trust in this promise. Do you agree that Brazil should build a nuclear weapon to defend itself?”

The pairwise comparisons elicit the effect of each of the combinations of interest, in the likelihood of supporting the construction of a nuclear weapon by nuclear latent Brazil:

- The effect of varying levels of threat on the likelihood of supporting the pursuit of nuclear weapons: compare [A], [B], [C]
- The effect of not having a superpower nuclear guarantor, conditional on high threat, on the likelihood of supporting the pursuit of nuclear weapons: compare [D] with [C].
- The effect of having a superpower nuclear guarantor, conditional on high threat, on the likelihood of supporting the pursuit of nuclear weapons: compare [E] with [C].
- The effect of the government trusting in a superpower nuclear guarantor, conditional on high threat and superpower nuclear guarantor, on the likelihood of supporting the pursuit of nuclear weapons: compare [F] with [D].
- The effect of the government not trusting in a superpower nuclear guarantor, conditional on high threat and superpower nuclear guarantor, on the likelihood of supporting the pursuit of nuclear weapons: compare [G] with [D].

## Hypothesis

### Hypothesis of Interest

**H.1 Main effect of threat:** In general, oppositional individuals are more likely to inflate security threats than sportsmanlike individuals.

H.1.1. Oppositional nationalists will be more likely to inflate security threats and to possess the willingness to pursue nuclear weapons.

H.1.2. Oppositional subalterns will be more likely to inflate security threats but they do not possess the willingness to pursue nuclear weapons.

H.1.3. Sportsmanlike nationalist and subaltern will be more likely to minimize security threats and therefore lack the willingness to pursue nuclear weapons.

In order to measure the extent to which the research design succeeds in analyzing the independent effect of a powerful ally over the individual's decision to support the pursuit of a nuclear weapon, we will test the following hypotheses:

**H.2 Main effect of superpower nuclear guarantee:** In general, oppositional individuals are more likely to seek superpower nuclear guarantees than sportsmanlike individuals when the level of threat is constant.

H.2.1. Oppositional nationalists will be more likely to be ambiguous on the matter of nuclear guarantees than oppositional subalterns will.

H.2.2. Sportsmanlike subaltern individuals will be more likely to be ambiguous to unlikely on the matter of nuclear guarantees than sportsmanlike nationalists will.

## Sample Size and Recruitment

We will recruit a nationally representative sample of the Brazilian population using the survey company Datafolha, a national leading institute for the study of public opinion. Respondents will be over 18 years old and balanced quotas will ensure that the sample is broadly representative of the Brazilian population. The survey quotas are representative at the regional level, balanced by gender and age. We will use block randomization to ensure that our treatment will be administered with equal probability within each blocking bracket. This concern is intended to increase the testing power of our statistics.

## Analyses

### *Balanced tests*

We will receive the data from Datafolha with the following pre-treatment variables:

1. Gender
2. Age
3. Country region
4. Education
5. Income (personal and family)

6. Municipality size
7. Religion

The sample will be blocked at the Gender-Age-Region levels. We detail the blocking below. To ensure balance, we will test the following pre-treatment variables against our treatment schedule. The averages of these variables, within each group, should remain constant.

#### *Social Dominance Orientation (SOD) and Universal Modes of Values Scale*

We will construct the Social Dominance Scale by taking the Pratto et al (1994)'s six items, and the Values Scale by taking Schwartz (1992)'s ten items and extracting a Principal Component Analysis. The range of the principal component will be then cross-checked against the actual variables to ensure that the variable is increasing in the direction of more social dominance. We will extract the Principal Components using the R function `factanal` with 'regression' scores.

#### *National identity variable construction*

To construct the national identity indicator we will take the variables in bloc 2 in a heterogeneous effect approach, as each response here maps to a given national identity conception formulated by Hymans (2006). We expect to find the following heterogeneous effects:

1. For *Oppositional nationalists*:

Oppositional nationalists want their countries to acquire nuclear weapons. They are also likely to promote the development of indigenous nuclear technology and reject the non-proliferation regime. Their posture vis-à-vis nuclear guarantees is ambiguous. Although they are likely to avoid falling under a superpower's tutelage, they will probably accept the protection from a superpower since security is stronger motivator than pride (Hymans 2006, 38).

2. For *Oppositional subalterns*:

Oppositional subalterns do not want to acquire nuclear weapons because they see these weapons as something beyond their country's abilities. For the same reason, they should reject pursuing nuclear technological autonomy. Moreover, the individuals holding this profile should consider resisting the NPT. Thus, seeking a superpower nuclear guarantee is the most preferable policy to reduce their insecurity feeling (Hymans 2006, 39-40).

3. For *Sportsmanlike nationalists*:

Sportsmanlike nationalists do not want nuclear weapons because they do not to fear when involved in strategic interactions with key comparison others. For the same reason, they rejected superpower nuclear guarantee that would make them fall needlessly under the "superpower tutelage." However, sportsmanlike nationalists for reasons of self-expression normally are interested in pursuing nuclear technological autonomy to foment national development and raise the international prestige of their country. These self-expressive

elements of their nuclear policy stance also seem to make them resist the non-proliferation regime due to its nature and discriminatory content (Hymans 2006, 39).

#### 4. For *Sportsmanlike subalterns*:

Sportsmanlike subalterns do not seek nuclear weapons because they have neither the motivation nor the security need to do so. Additionally, they do not see any reason to seek a nuclear umbrella or pursue a level of nuclear autonomy beyond what is efficient in economic terms and or to stay outside and resist to the NPT (Hymans 2006, 40).

As the construction of the categories can have a substantial correlation between the two types of national identity, we will also use the results of a Principal Component Analysis, extracting two orthogonal components that represent Nationalism and Oppositionism, and we will then use the median in both levels to compare them. The feasibility of this strategy will depend on the correlation within the two components measuring each item. As a disclaimer, we believe that this analysis will be exploratory. With two components measuring each national identity category, there is limited variability in the underlying data to provide a more robust comparison.

Finally, as our heterogeneous effects assume an increasingly nationalist or oppositional effect in each of the categories, we will report the results for first and last quartiles. The coefficient size should have the same sign as the coefficients in the main regressions, but it should be overall higher. We cannot ensure significance here, as the quartiles reduce the sample size substantially. This part should be considered as a robustness check for our theory.

#### Robustness checks

To access the robustness of our results we will perform the analysis with:

1. Mansky Bounds for missing data.
2. Randomization inference for each of the previous models.
3. The sensitivity to the addition of pre-treatment covariates.
4. Varying the cutoffs on heterogeneous effects, which have an impact on power statistics.
5. Jackknife to ensure our results are not driven by outlier responses.

#### Experimental analysis

We will analyze the overall impact of our intervention using the series of models below:

1. A linear regression model with each component of the treatment and the dichotomized responses in the outcome variable.
2. A linear regression model with each component of the treatment and the responses in the outcome variable.
3. The above models with the inverse probability weights for each of the blocks (the most adequate model, as the blocks vary in size).
4. A multilevel probit, as the responses are ordinal and discrete.

We will use robust standard errors for all the models. There is no need for clustering, as the treatment assignment has similar probabilities within each model.

## Randomization and power

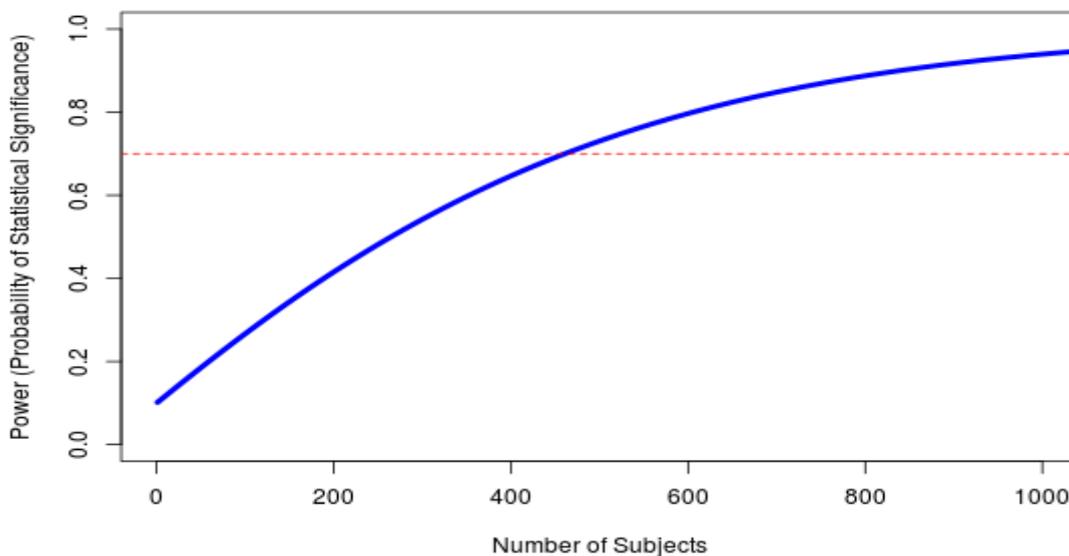
We will use block randomization, following the blocking schedule proposed by the survey company. The survey company allocates the sample in the following categories:

1. Age:
  - a. 18 to 24 years old
  - b. 25 to 34 years old
  - c. 35 to 44 years old
  - d. 45 to 59 years old
  - e. 60 years old or more
2. Gender:
  - a. Male
  - b. Female
3. Region:
  - a. North
  - b. Center-West
  - c. Northeast
  - d. Southeast
  - e. South

These components form a stratified sample, and we will, for each given strata, randomly assign the treatment using complete randomization within each strata. The probabilities of random assignment will be equal within each strata, and will then be checked against the data, in order to ensure the validity of the random assignment.

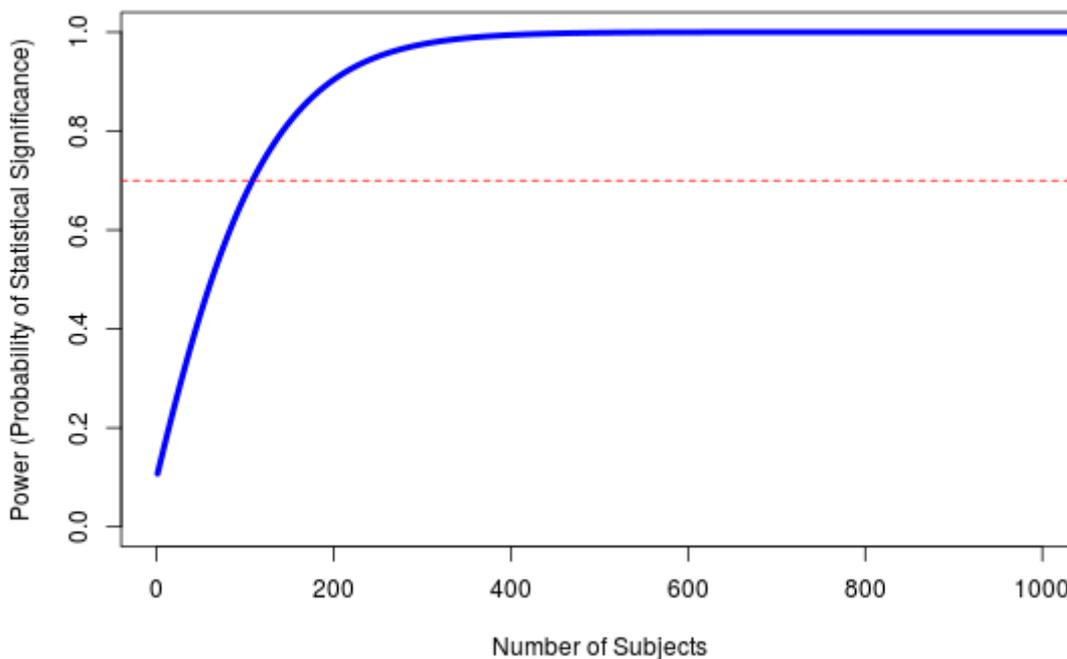
In terms of power test, we have six treatment arms in a multi-armed design. With a sample of 1900 respondents, we have approximately 315 observations for each experimental component. This means that each two-by-two comparison comprises 630 observations. Using the EGAP power statistics tool, and assuming a p-value of 0.10 (one-sided 5%) and 70% of statistical power, we can detect a difference of 0.10 percentage points.

**Power Analysis: Hypothetical Treatment Effect = 0.1 Percentage Points**



In the heterogeneous effects, the test power falls sharply and allow us to detect only a 20% difference from the baseline control. Assuming that each profile has  $\frac{1}{4}$  of the observations, we would be dividing the number of observations by 4, yielding to an effective sample of 155 observations in the two-by-two comparison. However, we assume that the differences will change substantially based on the profiles hypothesized by Hymans (2006). In any case, we will run the same regressions using the non-binary outcomes and an ordered probit model to improve efficiency. These models will be added to the appendix of our research paper.

### Power Analysis: Hypothetical Treatment Effect = 0.2 Percentage Points



### References

Adam J. Berinsky, *In Time of War: Understanding American Public Opinion from World War II to Iraq* (Chicago: University of Chicago Press).

Alexandre Debs and Nuno Monteiro, "The Strategic Logic of Nuclear Proliferation", *International Security*, Vol. 39, No. 2 (Fall 2014), pp.7-51.

Brian C. Rathbun, Joshua D. Kertzer, Jason Reifer, Paul Goren, and Thomas J. Scotto, "Taking Foreign Policy Personally: Personal Values and Foreign Policy Attitudes," *International Studies Quarterly*, Vol.60, No.1, 2016, pp. 124-137.

Felicia Pratto, James Sidanius, Lisa M. Stallworth, and Betram F. Malle, "Social dominance orientation: A personality variable predicting social and political attitudes," *Journal of Personality and Social Psychology*, Vol.67, No.4, 1994, pp. 741-63

Jacques E.C. Hymans, *The Psychology of Nuclear Proliferation: Identity, Emotions, and Foreign Policy* (Cambridge: Cambridge University Press, 2006).

Joshua D. Kertzer and Dustin Tingley, "Political Psychology in International Relations: Beyond the Paradigms," *Annual Review of Political Science*, Vol.21, 2018, pp.319-339.

Joshua D. Kertzer and Thomas Zeitzoff, "A Bottom-Up Theory of the Public Opinion about Foreign Policy," *American Journal of Political Science*, Vol.61, No.3, July 2017, p.543-558.

Shalom H. Schwartz, "Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries," *Advances in Experimental Social Psychology*, Vol.25, 1992, pp.1-65.

Shalom H. Schwartz, "Are there Universal Aspects in the Structure and Contents of Human Values?" *Journal of Social Issues*, Vol.50, No.4, 1994, pp. 19-45.

Timothy J. Mckeown, "The Cuban Missile Crisis and Politics as Usual," *Journal of Politics*, Vol.62, No.1, pp.70-78.