

# Research Statement

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Political scientists often study phenomena that cannot be observed directly. For example, we use responses to hypothetical survey questions to infer actual behavior, we resort to aggregate election results to understand individual evaluations of politicians' performance in office, and we conduct randomized controlled trials in some places to determine if a policy is advisable in other places. The phenomena we study remains hard-to-observe primarily due to informational imbalances across the actors we study. For example, citizens usually have an incomplete picture of what politicians do in office, and often react to new information by filling in the gaps.

My research focuses on how these informational imbalances present barriers to accountability, governance, and representation in the Global South. These are areas where governments, scholars, and civil society organizations have devoted considerable resources to the implementation of pro-democracy interventions, ranging from gender quotas to anti-corruption investigations. However, research in comparative politics suggests initiatives have a mixed record in terms of effectiveness. I aim to understand where, how, and why they work.

I currently advance two research programs. The first focuses on the unintended consequences of investigating and disseminating information about the performance of elected officials. The second focuses on documenting and understanding criminal governance in contexts where one would not expect this form of organized crime to emerge.

The insights from my substantive work have also led me to develop a methodological agenda on improving research designs to enhance our ability to detect hard-to-observe social and political phenomena. I use tools from statistics and computational social science to identify practices and procedures that researchers can adopt to improve how they approach data collection at the pre-analysis stage. My current agenda on this front focuses on improving statistical precision in experiments and measurement, since this is often the deciding factor when choosing among alternative research designs, all promising unbiased estimators.

## Unintended consequences

The literature on electoral accountability highlights voters' adverse selection problem: They prefer to have good over bad elected officials but they can only infer an incumbent's type through observable outputs of their performance. This adverse selection problem stems from the information gap between politicians and voters. While considerable effort has gone into increasing transparency with the goal of eliminating such gaps, the cumulative evidence suggests these interventions rarely translate into enhanced. Common explanations in the literature focus on the baseline factors that renders these interventions ineffective (e.g. lack of credible alternatives to replace a corrupt politicians).

Instead, I focus on the unintended consequences that emerge from program implementation itself. For example, in a manuscript forthcoming at the *British Journal of Political Science* with Virginia Oliveros (Tulane), Rebecca Weitz-Shapiro (Brown), and Matt Winters (Illinois), we use a survey experiment in Argentina to study gendered differential reactions to policy implementation. Previous work suggests that women face higher scrutiny for their performance in office. However, in the context of the implementation of a food distribution program, we find that voters are only responsive to performance information among men officeholders and tend to ignore performance information when told that an officeholder is a woman. We attribute this result to voters' perception of men politicians as the default category, thus providing no new information on top of performance. In turn, mentioning the gender of a woman politician leads voters to believe that good performance stems from factors beyond the incumbent's control. This has broader implications for research on gender gaps in the evaluation of public officials, since most survey-experimental analysis on the topic fail to account for this informational imbalance.

As another example, in a collaborative piece published in *World Development*, I discuss how the COVID-19 pandemic, through increased discontent with the performance of male-led executives and by priming a health issue commonly associated with women, lead to an increased demand for female political representation. However, as I show in a separate book chapter in *Norms, Gender and Corruption: Understanding the Nexus*, this increased demand for representation, even if met by an increased supply of women seeking elected office, does not immediately translate into descriptive representation due to a combination of social and institutional barriers that prevent women challengers from competing in equal footing.

A second set of projects focuses on applying methodological innovations to improve statistical precision in areas where researchers need it the most. For example, in a working paper with the same team that proposes combining list experiments with the NSUM, we document the prevalence of criminal governance strategies in Uruguay. This is a country with criminal organizations that are small in size but still deeply rooted in pockets of the capital city. Here, estimating the extent of exposure to criminal governance is challenging due to the combination of sensitivity bias and our inability to oversample on key subgroups of interest, which means any attempt to maximize statistical precision needs to come from our research design choices. This is the basis of a recently awarded *European Research Council Starting Grant* seeking to understand criminal governance in least-expected contexts from a comparative perspective, which will in turn serve as a platform for further methodological innovation in survey research.

## **Unexpected contexts**

This program is evolving in two dimensions. First, the focus on unintended consequences of interventions aimed at overcoming the challenges to democracy has led me to focus on phenomena that constitute barriers themselves, but remain hard to observe due to their existence in unexpected contexts.

One such example is organized crime, where most of the conventional wisdom in comparative politics stems from studying countries where the scale of criminal governance is most pro-

nounced (e.g. Brazil, Mexico). In a working paper with with Inés Fynn (Universidad Católica del Uruguay), Verónica Pérez (Universidad de la República), and Lucía Tiscornia (University College Dublin), we document the prevalence of criminal governance strategies in Uruguay. This is a country with criminal organizations that are small in size but still deeply rooted in pockets of the capital city. Here, estimating the extent of exposure to criminal governance is challenging due to the combination of sensitivity bias and our inability to oversample on key subgroups of interest, which means any attempt to maximize statistical precision needs to come from our research design choices. This is the basis of a recently awarded *European Research Council Starting Grant* seeking to understand criminal governance in least-expected contexts from a comparative perspective, expanding to include cases from Argentina, Chile, and Costa Rica.

This program is also serving as a platform to improve research design and survey methods, which is the focus of the second dimension.

## **Improving precision before data collection**

The last decade has seen considerable improvement in research transparency and registration. Recent advances in experimental design provide tools to diagnose the properties of a research design before data collection. For example, one can think about bias, power, or target sample size under different hypothetical data generation processes.

A recurrent goal in statistics, econometrics, and social science methodology is to minimize bias, or being close to the hypothetical truth on average. When planning an original data collection effort, researchers can often choose among many alternative research designs, all with previously identified unbiased estimators. My agenda focuses on optimizing statistical precision, understood as producing consistent results after multiple realizations of the same data generation process. While this is a crucial factor when choosing a research design, the literature implicitly assumes that one can simply improve precision by increasing sample size, without providing much guidance to assess among alternative designs. Moreover, simply increasing sample size is not feasible in most applications due to practical or ethical considerations. Therefore, even when one does not face a choice between alternative designs, statistical precision is still paramount.

Focusing on the design and analysis of surveys and experiments, my agenda advances the argument that the choice between alternative research designs for which unbiased estimators are already documented is rarely free. A design promising improvements in statistical precision without sacrificing unbiasedness often brings unforeseen costs in other dimensions.

Two projects exemplify how I develop standards to navigate research design choices under unforeseen challenges. First, in an article recently published in *Political Analysis* with Erin Rossiter (Notre Dame), we discuss the circumstances under which adopting research design features aimed at improving precision can instead hurt it through implicit or explicit sample loss. For example, block randomization can improve precision, but if this requires contacting participants multiple times to collect pre-treatment blocking covariates, then it creates space for attrition that would not exist otherwise, which may offset the precision gains from blocking. We posit this is the main reason why researchers deviate from the standard experimental design infrequently.

Through three replications and six reanalyses of previously published experiments in leading political science journals, we show how precision gains from alternative designs can withstand significant degrees of sample loss. From this exercise, we also identify guidelines to navigate the tradeoff between precision and sample retention in experiments.

Second, in a manuscript published at the *Journal of Experimental Political Science*, I propose statistical tests to address problems with double list experiments. Social scientists use list experiments in surveys when respondents may not answer truthfully to sensitive questions. When their assumptions are met, list experiments reduce sensitivity biases from misreporting. However, they tend to produce estimates with high variance, which prevents researchers from improving upon direct questioning. Double list experiments promise to remedy this by implementing two parallel list experiments and then aggregating their results, which roughly halves the variance of the estimate for the prevalence of the sensitive trait.

This implies an estimator that is more precise and still unbiased, but their implementation brings the question over whether the aggregation of the results of two parallel experiments yields a valid estimate. Using a reanalysis of a study on support for anti-immigration organizations in California as a running example, the tests leverage variation in the order in which respondents see the sensitive item to detect whether respondents are reacting to list experiment questions in unintended ways. This provides researchers with a tool to apply this underexplored variant of the technique more widely.