Pre-Analysis Plan: Title of the Study

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Invalid Date

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> **Note**
>
> Template for a Pre-Analysis Plan (PAP) for a randomized experiment. This is modified from an original template created by Alejandro Ganimian, available here.
> Other Helpful Resources:
> For guidance on pre-analysis plans, refer to
>
> - the World Bank's DIME Wiki: Pre-Analysis Plan - DIME Wiki
> - The J-Pal Research Resources Website: J-Pal Research Resources
>
> For examples of pre-analysis plans, explore the AEA's RCT Registry: AEA RCT Registry. Here are some of mine:
>
> - Pay by Design Trial
> - Anemia P4P Trial

Introduction

Abstract

- In 1-2 sentences, what does the study entail?
- In 1-2 sentences, why is this study important/relevant?

Motivation

- What is the main problem/question motivating the study?
- How has this problem/question been addressed thus far?
- How is this study different from prior research on this problem/question?
- Why is the context that you have chosen for this study appropriate?

Research Questions

- What are the main research questions the study seeks to answer?

Research Strategy

Sampling

Sampling Frame

- What is the eligible population for the study?
  - What are the main characteristics of this population?
- What is the expected sample for the study?
  - What is the expected sample size?
  - How does the expected sample differ from the population?

Statistical Power

- What is the effect size you will be able to detect?
  - What are your assumptions about your alpha-level?
  - What are your assumptions about your statistical power?
  - What are your assumptions about variability in your effect size?
  - How many sites will you have?
  - How many people will you have in each site?
  - What share of the variance do you expect to predict with your covariates?
- How sensitive is your effect size to changes in your parameters?

Assignment to Treatment

- How will individuals be assigned to treatment and control conditions?
- What is the source of exogenous variation in your study?

Attrition from the Sample

- Do you anticipate any form of attrition from the sample?
  - If so, what share of the sample do you anticipate will attrit?
  - On what evidence are you basing your expectations about attrition?
  - How realistic are your expectations about attrition?
- What can you do to prevent/remedy sample attrition?
- How does expected attrition change your power calculations?

Fieldwork

Instruments

- What data collection instruments will you employ?
  - What (groups of) indicators will each instrument cover?
  - How was each instrument developed?
  - Have each instrument been used before?
  - If so, by whom? If not, are you piloting it?
  - What are the main advantages/disadvantages of each instrument?

Data Collection

- How long will the entire data collection process take from start to finish?
- What does the data collection entail?
- What steps will be taken to keep the data collected confidential at this stage?

Data Processing

- How long will data processing take from start to finish?
- What does the data processing entail?
- What steps will be taken to keep the processed data confidential?
- Who has ownership over the processed data?
- How will the data be used/stored after the study at this stage?

Empirical Analysis

Variables

- What are the main variables of interest in your study?
  - How is each of them defined in your dataset?

Balancing Checks

- How will you check balance between treatment and control groups?
  - What is the specification that you will run?
  - What variables will you include in these balancing checks?
- How will you check balance between attritors and non-attritors?
  - What is the specification that you will run?
  - What variables will you include in these balancing checks?

Treatment Effects

Intent to Treat

- How will you estimate the (causal) effect of the offer of the treatment?
  - What is the specification that you will run?
  - What controls will you include in your specification?

Treatment on the Treated

- How will you estimate the (causal) effect of the receipt of the treatment?
  - What is the specification that you will run?
  - What controls will you include in your specification?

Heterogeneous Effects

- Which groups do you anticipate will display heterogeneous effects?
- What is the broad theory of action that leads you to anticipate these effects?

Intent to Treat

- How will you estimate the heterogeneous effects of the offer of the treatment?
  - What are the specifications that you will run?
  - What controls will you include in your specification?

Treatment on the Treated

- How will you estimate the heterogeneous effects of the receipt of the treatment?
  - What are the specifications that you will run?
  - What controls will you include in your specification?

Standard Error Adjustments

- How will you account for clustering in your data?
- How will you address false positives from multiple hypothesis testing?
  - If you plan to adjust your standard errors, what adjustment procedure will you use? (e.g., Family Wise Error Rate, False Discovery Rates, etc.)
  - If you plan to aggregate multiple variables into an index, which variables will you aggregate and how?
  - How will you deal with outcomes with limited variation?

Research Team

- Who are the principal investigators of this study?
  - What will each of these investigators do?
- Will there be any research assistants in this study?
  - If so, what will these research assistants do?

Deliverables

- What are the main products that will result from this study?
- Who will be the lead author(s) for each of these deliverables?