

## Pre-Analysis Plan

About Time II evaluates if elementary school teachers' opinions about recommending math apps to their students for home-use can be influenced by research-based evidence and by the fact that other teachers are doing it.

The sample consists on math teachers between PreK and 4<sup>th</sup> grade who agree to complete a one-time survey.

The project has a within-subject design. Teachers will be asked how likely they are, in a scale from 0 to 10, to recommend 4 different hypothetical apps to their students. Each app will be accompanied by one of the following sets of information:

- (1) A short description of the app
- (2) A short description of the app + research-based evidence about its effectiveness (hereafter referred to as "evidence information")
- (3) A short description of the app + the high percentage of teachers that are recommending it (hereafter referred to as "percentage information")
- (4) A short description of the app + evidence information + percentage information

The set of information for each app and the order in which they appear will be randomized.

The model for the main analysis is:

$$Y_{ij} = \beta_0 + \beta_1 Evidence_{ij} + \beta_2 Percentage_{ij} + \beta_3 Evidence_{ij} Percentage_{ij} + \gamma_j + \alpha_i + \varepsilon_{ij}$$

Where:

- $Y_{ij}$ : how likely teacher  $i$  is to recommend app  $j$
- $Evidence_{ij}$ : binary variable indicating if, for teacher  $i$ , the app  $j$  contained the evidence information.
- $Percentage_{ij}$ : binary variable indicating if, for teacher  $i$ , the app  $j$  contained the teacher information.
- $\gamma_j$ : app's fixed effects
- $\alpha_i$ : teacher's fixed effects

Errors are clustered at the teacher level. The coefficient  $\beta_1$  estimates the average effect of only getting evidence information,  $\beta_2$  estimates the average effect of only getting the percentage information, and  $(\beta_1 + \beta_2 + \beta_3)$  estimates the average effect of receiving both types of information.

The heterogeneous treatment effects will be estimated for five baseline characteristics: SES of the teacher's district, teacher's age, teacher's sex, number of hours per week teaching math, and whether the teacher already recommends apps to their students.