Learning to see a world of opportunities: Amendments to Pre-Analysis Plan

Last updated: 28 October 2020

We received the midline data blind to treatment status from IPA Colombia on 20 October 2020. We reviewed the distributions of our pre-specified primary outcome variables and plan to make the following adjustments to the pre-analysis plan submitted on 19 October 2020.

Transforming variables

In reference to Table 1, we will take a logarithmic transformation of all the monetary variables prior to standardising. We will impute the mid-point for responses that were provided in ranges. Ranges were an option for respondents who felt uncomfortable or unable to provide exact estimates of their income, revenues and savings, as listed in Table 1. We will also multiply the income measures by four to convert them from weekly to comparable monthly measures.

Table 1: Relevant variables and indices

Variable	Relevant index affected
Revenue for the best month of sales in the six months prior to the pandemic	(Sales + Income) if business + Income if no business pre-COVID-19 pandemic
Income of a typical week in February	
Revenue of the last 30 days	(Sales + Income) if business (currently open or temporarily closed) + Incomes if no business (permanently closed and/or no business pre-COVID) during the COVID-19 pandemic
Revenue of the last 30 days from a new business set up during the pandemic	
Income of the last week	
Savings in the best week pre-COVID	Actual and perceived safety nets during COVID-19 pandemic
Amount of credit/funding obtained six months before lockdown	Exploratory analysis
Hours worked last week	Business behavioural response to COVID-19

Treating outliers

We found that many distributions were highly skewed to the right. We will also trim the top 1 percent and present results with and without trimming. Lastly, we will also conduct exploratory analysis on the outliers to form additional hypotheses for future analysis.

Imagery and psychological resilience indexes: minimum detectable effect (MDE)

We found that the imagery scales, as well as the psychological scales for resilience and self-efficacy, tended to be skewed towards high values, with a median of 4 (out of 5) for most of the scale items. We assigned fake treatment statuses to respondents, with shares belonging to the three treatment arms which correspond to the actual shares of the field experiment. We then estimated treatment effects on the imagery index of the visualization training against one of the other treatment arms. We controlled for our stratification variables, as pre-specified. With a standard error of 0.063, the minimum detectable effect size for the imagery index is approximately 0.1747 standard deviations. We simply interpret this MDE as confirming our concerns related to the limited power of the experimental sample (as mentioned in the introduction to the submitted Pre-Analysis Plan), but we will continue to proceed with our plan of presenting results related to the families of imagery and psychological resilience.

Treating standard errors

For our primary specifications, we will present both robust standard errors and randomised inferenced standard errors, following Young (2019).

Heterogeneity analysis using baseline trauma

When conducting our heterogeneity analysis, we will use an impact of event score of 33, as pre-specified. A score of 33 is considered the threshold above which post-traumatic stress symptoms may be considered to be a probable clinical concern (Creamer, Bell and Failla, 2003). Approximately 18 percent of the overall sample report an impact of event score of 33 at baseline. In order to address potential power concerns, we will also use a threshold of 24 in our analysis, above which post-traumatic stress symptoms are suggestive of a clinical concern. We will treat this as a separate family of outcomes and correct for multiple hypotheses testing within the family.

References

Creamer, M., Bell, R. and Failla, S. (2003). Psychometric properties of the Impact of Event Scale – Revised. *Behaviour Research Therapy*, 41(12), 1489-1496.

Young, A. (2019). Channeling Fisher: Randomization Tests and the Statistical Insignificance of Seemingly Significant Experimental Results. *The Quarterly Journal of Economics*, 134(2), 577-598.