Completed Replication

Due at 11:59 p.m. on Friday, October 27, 2020

Objective: The purpose of this exercise to replicate and put together publication-quality tables and figures in Stata and LaTeX.

Data: Data for this exercise are from Muralidharan et al. (2019).[1]

Instructions:

1) Please submit your assignment via Canvas.
2) Your submission should include a .do file (or R file) with your code and annotations and a pdf file with your replicated tables and figures with one table/figure per page.

Replication:

1) Well-formatted Table 1 from Muralidharan et al. (2019). This is the balance table. You have already replicated the results in exercise 3, now you need to put together a well-formatted table of the replication first in Stata/R and then export it in LaTeX. For those who are new to LaTeX, I recommend using Overleaf. The resources section has links to tutorials to get you started.

2) Well-formatted Table 2 from Muralidharan et al. (2019). This is the results (ITT) table. Same as above, you have already replicated the results in exercise 4, now you need to put together a well-formatted table of the replication first in Stata/R and then export it in LaTeX.

3) Replicate Figure 2 in Muralidharan et al. (2019)
   - First open the dataset 'mindspark_figure.dta'.
   - Use the 'cibar' command in Stata and create graphs for Panel A and Panel B
   - Install and use the 'grc1leg' command to combine the graphs (see the resources section on how to install and use grc1leg)
   - Export to LaTeX

Resources:

1) Example code for a well-formatted table in STATA that can be exported in LaTeX format: Answer key for exercise 3 (the code will export tables in LaTeX format (.tex) – you can then use LaTeX to make smaller formatting changes). Answer key is Canvas (EDU S598 → Files → Stata solutions)

2) LaTeX how to get started: https://www.overleaf.com/learn/latex/Tutorials

3) LaTeX how to make tables: https://www.overleaf.com/learn/latex/Tables

[1] Muralidharan, Karthik, Abhijeet Singh, and Alejandro J. Ganimian. "Disrupting education? Experimental evidence on technology-aided instruction in India." *American Economic Review* 109.4 (2019): 1426-1460

4) Well-formatted tables in Stata (basic with esttab): http://repec.org/bocode/e/estout/esttab.html

5) Well-formatted tables in Stata (advanced): https://blogs.worldbank.org/impactevaluations/nice-and-fast-tables-stata

6) Combine graphs: https://www.techtips.surveydesign.com.au/post/combining-graphs-and-including-a-common-legend-in-stata

Appendix:

Variable name	**Description**
st_id	*Student ID (unique ID)*
round	*Round of data collection (Baseline or Endline)*
treat	*Treatment status*
st_age1	*Age*
st_female1	*Female*
m_theta_mle1	*Baseline Math test, IRT-scaled score (MLE)*
h_theta_mle1	*Baseline Hindi test, IRT-scaled score (MLE)*
ses_index	*SES Index*
d_sch_grade4	*Grade 4*
d_sch_grade5	*Grade 5*
d_sch_grade6	*Grade 6*
d_sch_grade7	*Grade 7*
d_sch_grade8	*Grade 8*
d_sch_grade9	*Grade 9*