# README: Replication for "Testing the promise of digital scaling: in-person vs. app-based training for women entrepreneurs" (Cassidy et al 2024)

# Overview:

The code in this replication package constructs all tables and figures from the working paper using Stata. The package consists of four Stata do-files. All figures and tables but two can be constructed using the code from the primary Stata do-file. Two raw datasets from the World Bank Microdata Library should be included in the package, one for the main panel, and one for the screening applicants. The "clean" do file will generate variables needed for analysis, and two new datasets with these variables. The replicator should expect the code to run for 15 minutes or less.

#### <u>Data and Code Availability Statement:</u>

This paper uses data from the baseline and endline survey of an impact evaluation of an app-based v/s in-person business training for women entrepreneurs.

Figure A3 uses a screenshot from a confidential administrative portal to track user activity. This data source cannot be made publicly available.

# **Statement about Rights:**

• I certify that the author(s) of the manuscript have legitimate access to and permission to use the data used in this manuscript.

# Summary of availability:

Some data cannot be made publicly available.

### Data Sources:

Two raw datasets should be added in the reproducibility package: the main panel survey including a baseline and endline phone survey, carried out with women entrepreneurs, and a screening survey, carried out with women entrepreneurs who were contacted to determine eligibility into the study. Additional information on each dataset can be found in the table below:

File name:	Location:	Description:
application_data_anon.dta	`user'/Data	N=6036 women entrepreneurs. Phone survey consisting of some characteristics and other variables needed to determine eligibility for the appbased training
elearning_bl_fu_anon_clean.dta	`user/Data	N=2000 women entrepreneurs

Raw merged dataset that
includes in person
baseline survey data,
administrative data from
the trainings, and the
endline phone survey
data.

# **Software Requirements:**

This replication package requires Stata (code was last run with version 14). The Stata do-file will require the following packages to be installed (which the master do file should take care of):

Winsor; mat2txt; estout; ietoolkit; kmatch; ritest; moremata; ivreg2; ranktest; pdslasso; sg97\_5; st0085\_2; lassopack

# Description of code:

This package consists of four Stata do-files. All figures and data in the paper can be generated using only the *master\_replication.do* file. The files and their purposes are as follows:

- Code in *master\_replication.do*, specified directories, installs packages, and generates all figures and tables in the paper. It references *clean.do*, *analysis.do*, and *appendix.do* and is the only Stata file that needs to run for the replication.
- Code in clean.do generates the variables and datasets used for analysis from the two raw data files described above. It is called in master\_replication.do and does not need to be run separately.
- Code in *analysis.do* generates one figure and four tables in the paper. It is called in *master\_replication.do* and does not need to be run separately.
- Code in *appendix.do* generates two figures and 13 tables in the online appendix of the paper. It is called in *master\_replication.do* and does not need to be run separately.

#### Instructions for replicators:

- Download the two datasets in the replication package and place in the 'Data folder'
- Edit the file path in line 36 in the *master\_replication.do* file to reflect the folder that will be used for replication.
- Install required packages as necessary.
- Run only master\_replication.do to generate all tables and results.
- NOTE: One table and one Figure in the online appendix are constructed by hand, and are therefore not included in this package. See additional details below:

Figure/Table	Program	Line	Output file	Notes
#		Number		
Table 1	analysis.do	220	Table_1_balance_mat.tex	Table is
				manually

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Table 2	analysis.do	262	Table_2_Impacts_takeup.tex	Table is
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Table 3	analysis.do	377	Table_3_Impacts_all.tex	Table is
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Table 4	analysis.do	419	Table_4_Takeup_predict.tex	Table is
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Figure 1	analysis.do	455	Fig_1_Course_hist.png	Size
Table A1	appendix.do	161	Table_A1_application_ttests.tex	Table is
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Table A3	appendix.do	215	Table_A3_Impacts_takeup_4g.tex	Table is
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Table A4	appendix.do	266	Table_A4_Impacts_primary_4g.tex	Table is
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Table A.C		226	Table AC Investe service Action	size
Table A5	appendix.do	338	Table_A5_Impacts_secondary_4g.tex	Table is
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Table A6	appendix.do	383	Table_A6_Impacts_primary_nocontrol.tex	Table is
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Table A12	appendix.do	636	Table_A12_Impactshetero_digskillsmed.tex	Table is
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Table A13	appendix.do	697	Table_A13_Impactshetero_post_secondary.tex	Table is
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Figure A1	appendix.do	845	Fig_A1_quantile_reg_app.png	Table is
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Figure A2	appendix.do	851	Fig_A2_quantile_reg_person.png	Table is
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Table A14	N/A	N/A	N/A	Manually
				generated,
				no code
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Figure A3	N/A	N/A	N/A	Manually
				generated,
				no code
				used. See
				raw excel
				file.