



Testing The Promise Of Digital Scaling: In-Person Versus App-Based Training For Women Entrepreneurs

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This review verifies the reproducibility of the exhibits included in the paper “*Testing The Promise Of Digital Scaling: In-Person Versus App-Based Training For Women Entrepreneurs*”.

Contents in this review:

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Main findings

- **Every exhibit in the main section of the paper and 10 randomly selected exhibits in the appendix were reproduced accurately**
- The code was successfully executed on a new computer after:
 1. Updating the working directory in line 33 of the do-file "master_replication", and running it.
 2. Opening the R project "WBER_Replication.Rproj".
 3. Restoring the environment by running `renv::restore()` and following the prompts.
 4. Opening the scripts `generic_inperson.R` and `generic_elearning.R`, and running the code.
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 75 minutes to run.
- We conducted our reproducibility analysis based on the paper shared by the authors on March 18, 2026.
- **Verification Process and Data Handling:**
 - The reproducibility package relies on accessible data
 - Reviewers used the accessible data provided directly by the authors to conduct the reproducibility verification, and this is included in the public reproducibility package. The data is available on the World Bank Microdata Library.

- *data_hash_report.csv* lists the SHA256 hashes of all files in the Data folder to support data integrity checks. Users who acquire the accessible data can use this file to verify that the data has not been altered.
- **Reproducibility Summary:**
 - **Data:** All data sources are publicly available, but not included in the reproducibility package. Data can be accessed from the World Bank Microdata Library.
 - **Code:** All code files (from cleaning to analysis) are included in the reproducibility package.
 - **Outputs:** All outputs are generated by code included in the reproducibility package.
 - **Dependencies environment:** The reviewers created a new environment using the latest versions of dependencies available at the moment of the review.

List of exhibits and reproducibility status

Results in the Main Section of the Paper

- **Table 1** Reproduced.
- **Table 2** Reproduced.
- **Figure 1** Reproduced.

Results in the Annex

For the Appendix, we did not review every exhibit. Instead, we randomly selected 10 exhibits from the remaining datasets to assess the appendix. Our review was based on those 10 exhibits. Since they were chosen randomly, we are operating under the assumption that if all randomly selected exhibits are reproducible, then the rest should be as well. The seed used to generate the random selection was [632413], the Stata version used was [19], and the exhibits selected were: Figure S2, Figure S4, Table S1, Table S2, Table S5, Table S1.7, Table S8, Table S9, Table S12, Table S15.

- **Figure S2** Reproduced.
- **Figure S4** Reproduced.
- **Table S1** Reproduced.
- **Table S2** Reproduced.
- **Table S5** Reproduced.
- **Table S7** Reproduced.
- **Table S8** Reproduced.
- **Table S9** Reproduced.
- **Table S12** Reproduced.
- **Table S15** Reproduced.

Reproduction Environment

Paper exhibits were reproduced on a computer with the following specifications:

- OS: Windows 11 Enterprise
- Processor: INTEL(R) XEON(R) PLATINUM 8562Y+ 2.80 GHz (4 processors)
- Memory available: 32 GB
- Software version: Stata 19.0 MP; R version 4.5.2