



Early Learning in South Punjab, Pakistan: Investigating Child Development and Classroom Quality

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This review verifies the reproducibility of the exhibits included in the paper “*Early Learning in South Punjab, Pakistan: Investigating Child Development and Classroom Quality*”.

Contents in this review:

1. Main findings
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Main findings

- The code was successfully executed on two new computers after:
 1. Changing the file paths in the main R script and do-file.
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 8 minutes to run.
- We conducted our reproducibility analysis based on the paper shared by the authors via email on April 27, 2024.
- Every exhibit has been reproduced accurately.
- **Reproducibility Summary:**
 - **Data:** All data is confidential and not included in the package (details provided in README).
 - **Code:** All code files (from cleaning to analysis) are included in the package.
 - **Outputs:** All outputs are generated by code included in the reproducibility package.
 - **Reproducibility verification:** Reviewers used data provided directly by the authors to conduct the reproducibility verification and this is not included in the package.

List of exhibits and reproducibility status

Results in the Main Section of the Paper

- **Table 1** Reproduced
- **Figure 1** Does not show analysis results
- **Table 2** Reproduced
- **Figure 2** Does not show analysis results
- **Figure 3** Does not show analysis results
- **Table 3** Does not show analysis results
- **Table 4** Does not show analysis results
- **Table 5** Does not show analysis results
- **Table 6** Reproduced
- **Figure 4** Does not show analysis results
- **Table 7** Reproduced
- **Figure 5** Reproduced
- **Figure 6** Reproduced
- **Figure 7** Reproduced
- **Figure 8** Reproduced
- **Figure 9a** Reproduced
- **Figure 9b** Reproduced
- **Figure 10** Reproduced
- **Figure 11** Reproduced
- **Figure 12** Reproduced
- **Figure 13** Reproduced
- **Figure 14** Reproduced
- **Figure 15** Reproduced
- **Figure 16** Reproduced
- **Figure 17** Reproduced
- **Figure 18** Reproduced

- **Figure 19** Reproduced
- **Figure 20** Reproduced
- **Table 8** Reproduced
- **Figure 21** Reproduced
- **Figure 22** Reproduced
- **Figure 23** Reproduced

Results in the Annex

- **Appendix A** Does not show analysis results
- **Appendix B** Does not show analysis results
- **Appendix C** Reproduced
- **Appendix D - Panel A** Reproduced
- **Appendix D - Panel B** Reproduced

Reproduction Environment

Paper exhibits were reproduced on two computers with the following specifications:

- Computer 1:
 - OS: Windows 11 Enterprise
 - Processor: Intel(R) Core(TM) i5-1145G7 CPU @ 2.60GHz
 - Memory available: 15.7 GB
 - Software version: R 4.3.2; Stata 17
- Computer 2:
 - OS: Windows 10 Enterprise
 - Processor: Intel(R) Core(TM) i7-8665U CPU @ 1.90GHz 2.11 GHz
 - Memory available: 15.8 GB
 - Software version: R 4.2.1; Stata 18