



## *Quality Signaling and Demand for Renewable Energy Technology: Evidence from a Randomized Field Experiment*

*First Submission: RR\_SEN\_2024\_245*

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*April 1, 2025*

This review verifies the reproducibility of the exhibits included in the paper “*Quality Signaling and Demand for Renewable Energy Technology: Evidence from a Randomized Field Experiment*”.

### **Contents in this review:**

1. Main findings
2. List of exhibits and reproducibility status
3. Reproduction Environment

### *Main findings*

- The code was successfully executed on a new computer after:
  1. Changing the directory paths in the Master\_DoFile\_QualitySignalingSenegal.do file
- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.
- The code takes approximately 30 minutes to run.
- We conducted our reproducibility analysis based on the paper shared by the authors by mail on March 10.
- Every exhibit has been reproduced accurately.
- **Reproducibility Summary:**
  - **Data:** All data is not yet publicly available but is expected to be made available through the World Bank Microdata Library in the future. (Future Open Data)
  - **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, unless indicated in the README file (i.e. flowcharts and images).
  - **Reproducibility verification:** Reviewers used data provided directly by the authors to conduct the reproducibility verification, and this is not included in the public reproducibility package. The reviewers did not verify if publicly available data matches the data provided by the authors.
  - **Dependencies environment:** The reviewers created a new environment for dependencies using specific versions defined by the authors in the README file.

## List of exhibits and reproducibility status

### Results in the Main Section of the Paper

- **Table 1 Reproduced.** This exhibit is verified against *table1\_descriptives.xls* and *table1\_ttest.xls*.
- **Table 2 Reproduced.** This exhibit is verified against *table2.xls*.
- **Table 3 Reproduced.** This exhibit is verified against *table3.xls*.
- **Table 4 Panel A Reproduced.** This exhibit is verified against *table4\_a.xls*.
- **Table 4 Panel B Reproduced.** This exhibit is verified against *table4\_b.xls*.
- **Table 4 Panel C Reproduced.** This exhibit is verified against *table4\_c.xls*.
- **Table 5 Panel A Reproduced.** This exhibit is verified against *table5\_a.xls*.
- **Table 5 Panel B Reproduced.** This exhibit is verified against *table5\_b.xls*.
- **Table 5 Panel C Reproduced.** This exhibit is verified against *table5\_c.xls*.
- **Figure 1 Reproduced.** This exhibit is verified against *figure1.png*.
- **Figure 2 Reproduced.** This exhibit is verified against *figure2.png*.

### 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 638926, the Stata version used was 18, and the exhibits selected were: Table C1, C2, D1, D3, D4, D6, D8, D10, D11, D12

- **Table C1 Reproduced.** This exhibit is verified against *table\_c1.xls*. The manuscript contains an additional row for No education as a reference which is not available in the reproduced output, however, this does not impact reproducibility.
- **Table C2 Reproduced.** This exhibit is verified against *table\_c2.xls*. The manuscript contains an additional row for No education as a reference which is not available in the reproduced output, however, this does not impact reproducibility.
- **Table D1 Reproduced.** This exhibit is verified against *table\_d1.xls*.
- **Table D3 Panel A Reproduced.** This exhibit is verified against *table\_d3\_a.xls*.
- **Table D3 Panel B Reproduced.** This exhibit is verified against *table\_d3\_b.xls*.
- **Table D3 Panel C Reproduced.** This exhibit is verified against *table\_d3\_c.xls*.
- **Table D4 Reproduced.** This exhibit is verified against *table\_d4.xls*.
- **Table D6 Panel A Reproduced.** This exhibit is verified against *table\_d6\_a.xls*.
- **Table D6 Panel B Reproduced.** This exhibit is verified against *table\_d6\_b.xls*.

- **Table D6 Panel C Reproduced.** This exhibit is verified against *table\_d6\_c.xls*.
- **Table D8 Reproduced.** This exhibit is verified against *table\_d8\_log.log*.
- **Table D10 Reproduced.** This exhibit is verified against *table\_d10.xls* and *table\_d10\_log.log*.
- **Table D11 Reproduced.** This exhibit is verified against *table\_d11.xls* and *table\_d11\_log.log*.
- **Table D12 Panel A Reproduced.** This exhibit is verified against *table\_d12a.xls* and *table\_d12\_log.log*.
- **Table D12 Panel B Reproduced.** This exhibit is verified against *table\_d12b.xls* and *table\_d12\_log.log*.
- **Table D12 Panel C Reproduced.** This exhibit is verified against *table\_d12c.xls* and *table\_d12\_log.log*.

### *Reproduction Environment*

- Paper exhibits were reproduced in a computer with the following specifications:
  - \* OS: Windows 11 Enterprise
  - \* Processor: Intel(R) Core(TM) i5-1145G7 CPU @ 2.60GHz
  - \* Memory available: 15.7 GB
  - \* Software version: Stata 18.0 MP