Reproducible Research Repository

Behaviorally Informed Messages Boost COVID-19 Vaccination Intentions: Global Insights from a Meta-Analysis with 23 Countries and Territories

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Miguel Pérez, María Reyes Retana
reproducibility@worldbank.org
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This review verifies the reproducibility of the exhibits included in the paper *"Behaviorally Informed Messages Boost COVID-19 Vaccination Intentions: Global Insights from a Meta-Analysis with 23 Countries and Territories"*.

Contents in this review:

1. Main findings

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Main findings

- The code was successfully executed on a new computer after:

  1. Changing the file path.

- The output demonstrates consistent stability across multiple runs. Specifically, executing the code two times consecutively yielded identical results.

- The code takes approximately 1 hour to run.

- We conducted our reproducibility analysis based on the paper shared by the authors by mail on October 31st.

- Every exhibit has been reproduced accurately. See more details in List of exhibits and reproducibility status

- **Reproducibility Summary**:

  - **Data**: All data are confidential and have not been included in the reproducibility package.
  - **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.
  - **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.
  - **Dependencies environment**: The reviewers created a new environment for dependencies using the latest versions available for each dependency at the moment of the review.

List of exhibits and reproducibility status

Results in the Main Section of the Paper

- **Figure 1** Reproduced, but requires manual steps. Results are shown in the Stata console The exhibit was compared against Stata console output from lines 362 to 389 from Do-file "reproducibility_do".

- **Table 1** Reproduced, but requires manual steps. Results are shown in the Stata console. The exhibit was compared against Stata console output from lines 391 to 410 from Do-file "reproducibility_do".

- **Table 2** Results reproduced, but table includes manual changes from code output. The exhibit was compared against code output "Table 2.xls".

- **Figure 2** Reproduced. The exhibit was compared against code output "Figure 2&3 T5.png", "Figure 2&3 T6.png", "Figure 2&3 T7.png", and "Figure 2&3 T8.png".

- **Figure 3** Reproduced. The exhibit was compared against code output "Figure 2&3 T1.png", "Figure 2&3 T2.png", "Figure 2&3 T3.png", and "Figure 2&3 T4.png".

- **Table 3** Reproduced. The exhibit was compared against code output "Table 3.xls", columns B, C, H, J, O, N, and P.

- **Figure 4** Reproduced. The exhibit was compared against code output "Figure 4 i_gender.png", "Figure 4 i_age.png", "Figure 4 i_education.png", and "Figure 4 health worker.png".

- **Table 4** Reproduced. The exhibit was compared against code output "Table 4.xls", sheet "int5".

- **Figure 5** Reproduced. The exhibit was compared against code output "Figure 5_6 young T8.png" and "Figure 5_6 old T8.png".

- **Figure 6** Reproduced. The exhibit was compared against code output "Figure 5_6 young T5.png" and "Figure 5_6 old T5.png".

- **Figure 7** Reproduced. The exhibit was compared against code output "Figure 7 male T4.png" and "Figure 7 female T4.png".

Results in the Annex

- **Appendix A** Reproduced, but figure includes manual changes from code output. The exhibit was compared against Stata dataset "moderator.dta", related to line 951 from Do-file "reproducibility_do".

- **Appendix B** Reproduced, but requires manual steps. Results are shown in the Stata console. The exhibit was compared against Stata console output from lines 957 to 959 from Do-file "reproducibility_do".

- **Appendix C** Does not show analysis results.

- **Table SD1** Reproduced. The exhibit was compared against TableSD1.xlsx

- **Appendix E** Reproduced. The exhibit was compared against code output "Appendix E.xls".

- **Appendix F** Reproduced. The exhibit was compared against code output "Appendix F.xls".

- **Appendix G** Reproduced. The exhibit was compared against code output "Appendix G.xls".

- **Appendix H** Reproduced. The exhibit was compared against code output "Table 4.xls", sheet "int1".

Reproduction Environment

- Paper exhibits were reproduced in a computer with the following specifications:

  - OS: Windows 11 Enterprise

  - Processor: Intel(R) Xeon(R) Gold 6226R CPU @ 2.90GHz, 2901 Mhz, 4 Core(s), 4 Logical Processor(s)

  - Memory available: 8.17 GB

  - Software version: Stata version 18