Nkasiobi Nwobi’s reproducibility report of Galiba Zahid’s work

**Research Replicability and Workflow Management**

**Summary:**

The project was highly reproducible with only minor issues encountered. The outputs for the regression model and the accompanying table were consistent; however, the instructions lacked clarity regarding data access and download procedures, and the type of regression model used was not stated.

**Replicator’s Computing Environment:**

Software:

Edition Windows 11 Home

Version 22H2

Installed on ‎10/‎5/‎2023

OS build 22621.4317

Experience Windows Feature Experience Pack 1000.22700.1041.0

R version 4.3.1 (2023-06-16 ucrt)

Hardware:

Processor ntel(R) Core(TM) i5-7200U CPU @ 2.50GHz 2.70 GHzHz

Installed RAM 16.0 GB

System type 64-bit operating system, x64-based processor

Replication steps:

1. Recode variable MARSTAT and name the new variable MARTSTAT2Downloaded auxiliary do files Combine categories ‘1, 2’ and recode to “married/common-law”

* Combine categories ‘3, 4, 5’ and recode to “single now/previously married”
* Recode ‘6’ to “never married”
* Combine ’96, 97, 98’ as “NA”
* Drop “NA” from MARSTATure 2 to set range on the graph to match the manuscript

1. Create a table for the new recoded variable MARTSTAT21
2. Create regression analysis

* Assign regression (AGEC is DV, SEX is IV and MARSTAT2 is control) to ‘reg1’.
* Display ‘reg1’ 2

|  |  |  |
| --- | --- | --- |
| Figure or table | Output | Replicated (comments) |
| Table 1 | Frequency table | Yes |
| Figure 1 | Linear regression output | Yes with a little intuition because the type of regression model used was not stated |

**Discrepancies:**

n Table 1, all descriptive table frequencies match the reproduced output.

|  |  |  |
| --- | --- | --- |
| Table row | Manuscript | Reproduction |
| married/common-law | 11576 | 11576 |
| single now/previously married | 4309 | 4309 |
| never married | 4710 | 4710 |

For Figure 2. All Regression coefficients match the reproduced output

|  |  |  |
| --- | --- | --- |
|  | Manuscript | Reproduction |
| Intercept | 53.7 | 53.6822 |
| SEX | --0.747 | -0.7473 |
| MARSTAT2never married | -15.0 | -15.0132 |
| MARSTAT2single now/previously married | 12.5 | 12.4708 |