# A Nearly Similar Powerful Test for Mediation: Code

This repository contains the code accompanying the paper "A Nearly Similar Powerful Test for Mediation", written by Kees Jan van Garderen and Noud van Giersbergen, and published in the Review of Economics and Statistics.

## Code

The Stata file `2_Table3.do` within the `code` folder generates the $t$-ratios for Table 3 in the paper. It assumes the presence of the two files `gstyping.dta` and `1_measures.do` from the replication repository of the paper by Alan, S., Ertac, S. and Mumcu, I. (2018) Replication Data for: "Gender Stereotypes in the Classroom and Effects on Achievement", https://doi.org/10.7910/DVN/FGBZCK, Harvard Dataverse.

The Julia file `Table-4.jl` generates the rejection frequencies shown in Table 4 of the paper.

The R code `gFunctions.R` within the `code` folder can be used to determine the critical values of the optimal $g_{opt}(t)$ and $g_{1.2}(t)$-functions as reported in the paper and shown in the online Appendix.

## Outputs

The results of the Stata-do file for Table 3 are saved as `Table3_Girls_Reg1.csv` (estimates and t-ratios for regression (1) of the paper) and `Table3_Girls_Reg2.csv` (estimates and t-ratios for regression (2) of the paper).

The file `Table-4-RF-REP1000000.csv` contains the results for Table 4, generated by the Julia script for $n = 50, 100, 250$, and 500. Due to page space restrictions, Table 4 does not show the results for $n = 250$.

## Software

The results were obtained using Stata/MP 18.0 and Julia v1.10 running on Windows 11.