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Why use MplusAutomation?

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What is MplusAutomation?

- MplusAutomation is an R package developed by

  Hallquist & Wiley (2018)

- It "wraps around" the Mplus program (Muthén & Muthén, 2017)

- Car metaphor: R/Rstudio is the *steering wheel or dashboard* &

  Mplus is the *engine*

- Requires both R/Rstudio & Mplus software

- Requires learning some basics of two syntax languages

Why go to all the trouble?

- As a data analyst using Mplus to analyze projects that often span multiple years I realized a need for clearly organized work procedures in which every research decision can be documented in a single place.

- Using guidance & tutorial examples learning MplusAutomation can be achieved in an academic quarter. This is similar in timeframe to learning Mplus alone because syntax is intuitive, concise, and efficient.

- Ultimately, the effort committed initially to learning this powerful analysis tool will save your *future-self* time in the long run.

- MplusAutomation was designed to make running models easier, safer, and expand our modeling capabilities (i.e., large-scale simulation studies, complex analyses)

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The bottom-line:
4 reasons to use MplusAutomation?

✓ Efficiency: It saves you time in the long run!

✓ Organization: All analyses, data, syntax, tables, & figures are systematically filed!

✓ Transparency: All research decisions exist on a single script, which includes input, output, result summaries, and annotation!

✓ Reproducibility: A highly systematized routine has been developed which is designed to maximize reproducibility!

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Citing R, Mplus, & MplusAutomation

Hallquist, M. N., & Wiley, J. F. (2018). MplusAutomation: An R Package for Facilitating Large-Scale Latent Variable Analyses in Mplus. Structural equation modeling: a multidisciplinary journal, 25(4), 621-638.

Muthen, L.K. & Muthen, B.O. (1998-2017). Mplus User's Guide. Eighth Edition. Los Angeles, CA: Muthen & Muthen

R Core Team (2017). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL http://www.R-project.org/

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