## PROCESS for SPSS and SAS <br> Version 3 history and bug fixes

As of December 2020, PROCESS version 3 is no longer available or supported. Always use the most current version available at processmacro.org. See processmacro.org for later release history and bug fixes.

Version 3.5 (released 2 May 2020; released in R in beta version in December 2020) This release adds a new option for generating the correlation between the residuals of the regression equations defining the model. In addition, the SPSS version now defaults to not accepting variables in a model with names longer than eight characters in the data file. This feature was added to protect users of PROCESS who don't read the documentation from interpreting output that might not be correct. The rationale for this prohibition and how to override it is described in the addendum to the documentation that comes with the PROCESS files.

## Version 3.4 (released 12 August 2019)

This release adds a new centering option for models with a moderation component, adds multivariate tests of interaction in models with two moderators, and provides an option for testing whether X interacts with any mediator in a model.

Version 3.3 (released 4 February 2019)
This release requires that variables specified as multicategorical using the mcx, mcw, or mcz options or the GUI contain at least three categories, consistent with the definition of a multicategorical variable. In earlier releases of version 3, a bug in the programming when using the multicategorical option with a dichotomous X, W, or Z (only two categories) could in some circumstances produce incorrect output when plotting interactions or constructing conditional effects/probing.

Version 3.2.02 (released 25 January 2019)
This release adds standardized regression coefficients to the section of output that generates the total effect model when that model is requested using the total option in a mediation analysis.

Version 3.2.01 (released 27 December 2018)
This is a cosmetic release that eliminates a nuisance EXP overflow error that can sometimes occur for models with a dichotomous Y. In addition, the stand option will now also automatically toggle on the effsize option, so that when standardized regression coefficients are generated, so too are standardized direct, indirect, and total effects of $X$ in mediation-only models. The standardized option is now also available in the PROCESS GUI in SPSS.

Version 3.2 (released 19 November 2018)
This release adds the production of standardized regression coefficients using the stand option in syntax for models that do not include a moderation component. It is also now possible with this release to assign a variable functioning as a moderator in one equation the role of covariate in another equation, thereby eliminating the need for the trick described on pages 630-632 of Appendix B of the documentation.

Version 3.1 (released 3 July 2018)
This version adds the ability to use dichotomous $Y s$ in any model. This version also disables the computation of the indices of moderated moderated mediation and conditional moderated mediation when W or Z is specified as multicategorical (v3.0 had a bug in the computation of these indices in some of these scenarios). Also changed are some new error messages displayed when outdated version 2 syntax is used in version 3 .

Version 3.0 (released 2 December 2017)
PROCESS v3.0 released with the second edition of Introduction to Mediation, Moderation, and Conditional Process Analysis. This is a complete rewrite of PROCESS to allow for multicategorical X, W, and $Z$ in all models, new programmed models that combine moderation and serial mediation, the ability to construct custom models, and many other features. This release is documented in the 2nd edition of the book. With the release of PROCESS v3.0, version 2 is discontinued and no longer available, distributed, or supported.

