## **PROCESS for SPSS and SAS**

Version 2 history and bug fixes

As of December 2017, PROCESS version 2 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.

January 2012-April 2013	Various beta releases with six digit release numbers in DDMMYY format. Users of these releases should discard and update to the most current version.
6 May 2013	PROCESS v2.03 released with the publication of Hayes (2013) Introduction to Mediation, Moderation, and Conditional Process Analysis
6 June 2013	PROCESS v2.04 released; fixes bug in SAS version affecting computation of conditional indirect effects in models 72 and 73 in all prior releases.
15 July 2013	PROCESS v2.05 limited private release with features to appear in v2.10
27 September 2013	PROCESS v2.10 released. Adds models 75 and 76, produces new Johnson-Neyman output, an option for changing the number of decimal places in output, and implements the index and test of moderated mediation described in "An index and simple test of moderated mediation" and in sections 12.2 and 12.3 of Introduction to Mediation, Moderation, and Conditional Process Analysis. This version also fixes a bug generating some unnecessary warnings in the conditional effects section of the output for some models. It also eliminates the printing of two conditional indirect effects in model 74 when X is dichotomous.
15 February 2014	PROCESS v2.11 released. Corrects a few typos in output and adds new option to generate the variance-covariance matrix of the regression coefficients in the output.
14 June 2014	PROCESS v2.12 released. Adds the mean squared error to the summary statistics for a regression model and implements a procedure for comparing conditional effects in moderation analysis in models 2 and 3. This version also generates SPSS syntax for production of a plot of moderation in models 1, 2, and 3.
26 June 2014	V2.12.1 update released that fixes a bug that generates estimates of certain effect sizes for indirect effects in model 5 that should not be generated.
13 August 2014	V2.12.2 update released that fixes a bug in the SAS version that produced small inaccuracies in bootstrap standard errors and upper bounds on

bootstrap confidence intervals in model 6.

26 September 2014

PROCESS v2.13 released. This release adds the production of effect size measures in mediation-only models (models 4, 5, and 6) with covariates. In addition, PROCESS for SPSS will no longer accept variable names with more than eight characters to avoid some computational problems produced by variable names in a model that are not distinct in the first eight characters.

21 July 2015

Limited private release of PROCESS v2.14 with features to appear in public release as v2.15

10 January 2016

PROCESS v2.15 released. This release adds a new feature to model 1 for estimating moderation and probing interactions when X or M is multicategorical (three or more levels). Multicategorical X variables are also now available as an option in model 4. In addition, PROCESS will now generate incremental R-square for interactions and corresponding hypothesis tests in models 1, 2, and 3 when using the HC3 option for heteroscedasticity-robust inference. A new option is also included for overriding the eight character limitation on variable names.

1 July 2016

PROCESS v2.16 released. This releases adds the indices of partial, conditional, and moderated moderated mediation. It also disables Preacher and Kelley's kappa-squared, and also sets the default number of bootstrap samples to 5000 for the construction of bootstrap confidence intervals.

1 December 2016

PROCESS v2.16.3 released. This fixes a few cosmetic bugs that don't affect computations in prior releases and that clean up some of the output.