May 9, 2007

Overview of Web Appendices for:

Atkins, D. C., & Gallop, R. J. (2007). Re-thinking how family researchers model infrequent outcomes: A tutorial on count regression and zero-inflated models. *Journal of Family Psychology*.

The web appendices include the data and computer code from four different statistical packages (R, SAS, Mplus, SPSS) to run examples in the manuscript. Not all analyses are possible in each of the packages. Here is a brief overview:

R: The R code is the most complete and includes code for all tables, figures, and various additional analyses (e.g., bootstrapping ZIP/ZINB models, random-effects Poisson, random-effects ZINB). It requires several additional user-contributed packages, which are noted in the file. To run the random-effects ZINB model, you will need the code supplied in the file: "R – Multilevel ZINB.txt"

SAS: The SAS code covers all of the statistical models but does not include code for figures. It also includes an example of using NLMIXED to fit the random-effects ZINB model.

Mplus: There is an example of using Mplus to fit the ZIP model. Mplus can also fit the random-effects ZIP, though it requires some data restructuring. We include a website that has a video on how to fit these models in Mplus.

SPSS: SPSS is the most limited of the software option. As of version 15, SPSS can fit the Poisson and Negative Binomial regression using its generalized linear model command.

We have tested the code that we provide, but please do let me know if you find errors (or if we have overlooked some functionality).

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