

[Konfound-It](#) App Distribution Message

Subject: Released! Interactive web application to carry out sensitivity analysis to quantify how robust inferences are to potential bias

We are happy to announce the release of an interactive web application, [Konfound-It](#), to make it easy to quantify the conditions necessary to change an inference. For example, [Konfound-It](#) generates statements such as “XX% of the estimate would have to be due to bias to invalidate the inference” or “an omitted variable would have to be correlated with the outcome and predictor of interest (e.g., treatment) at ZZ to invalidate the inference.” Thus, [Konfound-It](#) provides a precise language for debating causal inferences.

Who would use such an approach in the course of their work?

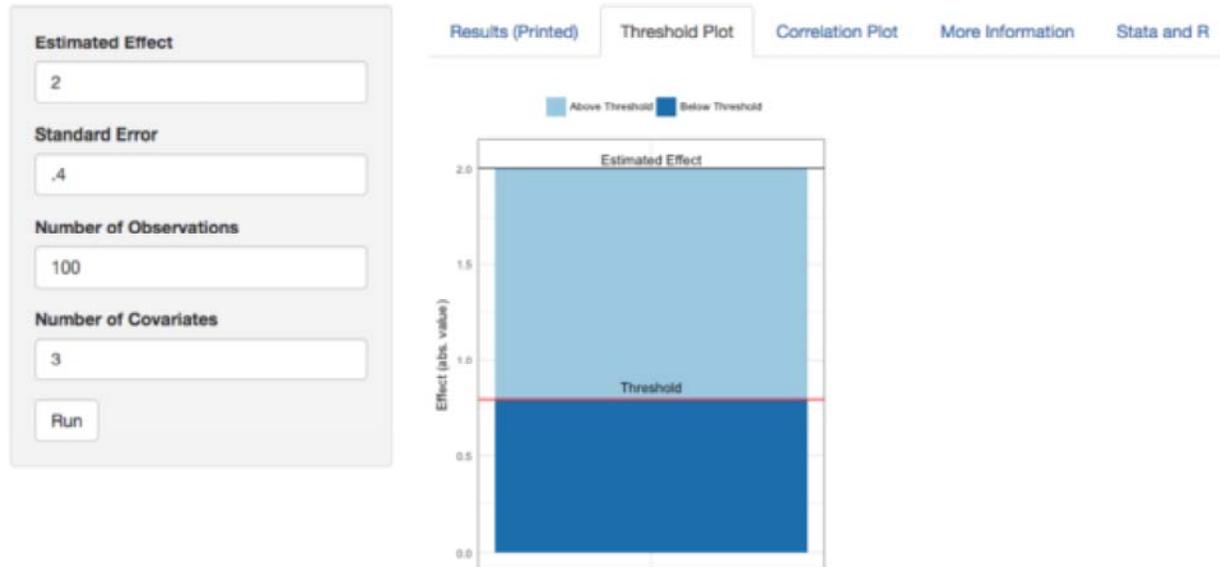
- *Researcher receiving a revise and resubmit decision* for a manuscript who is asked to carry out sensitivity analyses or alternative analyses as part of the revision of their manuscript.
- *Practitioners (including policymakers) seeking to understand whether evidence in a research report is strong enough to support action in their contexts*
- *Data analysts and scholars debating* whether a research community should make an inference in light of an estimated effect
- *Those analyzing observational data* seeking to understand how trustworthy an inference is relative to potential omitted variables
- *Those analyzing data from a randomized controlled trial (RCT)* trying to understand how generalizable the results from the study are to other contexts
- *Those needing to characterize the strengths of their research* for the media / a wider audience, including audiences of teachers and administrators

[Konfound-It](#) takes four values - the estimated effect (such as an unstandardized regression coefficient), its standard error, the number of observations, and the number of covariates. [Konfound-It](#) returns output in the forms of publishable statements as well as figures to support the interpretation of the output. As you can see in the figure below, the [Konfound-It](#) interface is easy-to-use (and can be accessed from both a computer browser as well as mobile devices) and provides links to additional resources and a State procedure and R package for further use.

Konfound-It: Interactive application (and Stata procedure and R package) to carry out sensitivity analysis

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Change or set any of the values below and then click run to see output from KonFound-It!



To cite this KonFound-It interactive application:

Rosenberg, J. M., Xu, R., & Frank, K. A. (2018). Konfound-It: Interactive application (and Stata procedure and R package) to carry out sensitivity analysis. <http://konfound-it.com>.

More information can be found in Frank (2000) and Frank, Maroulis, Duong, and Kelcey (2013):

Frank, K. 2000. "Impact of a Confounding Variable on the Inference of a Regression Coefficient." *Sociological Methods and Research*, 29(2), 147-194 <https://msu.edu/~kenfrank/papers/impact%20of%20a%20confounding%20variable.pdf>

Frank, K.A., Maroulis, S., Duong, M., and Kelcey, B. 2013. What would it take to change an inference?: Using Rubin's causal model to interpret the robustness of causal inferences. *Education, Evaluation and Policy Analysis*. Vol 35: 437-460. <https://msu.edu/~kenfrank/What%20would%20it%20take%20to%20Change%20an%20Inference%20published.docx>

To learn more, check out [Konfound-It](http://konfound-it.com) here: <http://konfound-it.com>. If you have any questions or feedback, please do not hesitate to contact Ken Frank (and Joshua Rosenberg and Ran Xu) at kenfrank@msu.edu.