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► Volume 39, Issue 2 ► Extracting the Variance Inflation Factor ....

Original Articles

Extracting the Variance Inflation Factor and Other Multicollinearity Diagnostics from Typical Regression Results

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ABSTRACT

Multicollinearity is a potential problem in all regression analyses. However, the examination of multicollinearity is rarely reported in primary studies. In this article we discuss and show several post hoc methods for assessing multicollinearity. One such multicollinearity diagnostic is the variance inflation factor. We outline the post hoc variance inflation factor method, which computes the variance inflation factor from the standardized regression coefficient and semi-partial correlation, both of which can be calculated from commonly reported regression results. Three examples of computing multicollinearity diagnostics using data from published studies are shown. We conclude with a discussion and practical implications.

Notes

Disclaimer: Due to copyediting the R code will not work properly if copied and pasted directly from the digital document. To ensure that the R code works properly, we advise users to retype it from supplementary materials.

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