This Week's Citation Classic[®] SEPTEMBER 7, 1987

Gordon R A. Issues in multiple regression. Amer. J. Sociol. 73:592-616, 1968. [Johns Hopkins University, Baltimore, MD]

Automatically controlling for variables, as in multiple regression, implies a theory in which relevant variables are meaningfully distinct. Not specifying the theory promotes the partialling fallacy, wherein a relationship between variables is partialled out of itself using the very same variables, but in another guise. [The SSCI® indicates that this paper has been cited in over 260 publications.]

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This methodological article emerged from concern with a real and substantive problem. Using sophisticated statistics. Bernard Lander had concluded that the inverse correlation between delinguency rates and socioeconomic status did not exist when other variables were held constant.¹ His report contradicted my own theorizing; I found that Lander's conclusions depended on converging statistical artifacts in three different forms of multivariate analysis, all involving partialling. Since I did not agree with his results. I wrote a two-part paper stating my views. One part became this Citation Classic, and the more substantive part was published separately.² Both have generated many reprint requests and have been reprinted several times. A problem with an analysis involving oblique factors was fully resolved when I had to answer rejoinders to the substantive paper.³

My terms partialling fallacy and redundancy and repetitiveness for two forms of that fallacy are sometimes used.⁴ However, citations to one's own work expose just how superficial many citations are. I have seen this work cited against the opposing side by both parties to a controversy and the partialling fallacy credited to others. Often, my article is misconstrued as being about multicollinearity—mainly a statistical issue—when it really takes up where that problem leaves off.⁵ Since my concerns were abstractly substantive, my critique should be viewed as dealing with a general form of what econometricians call specification error.

Because of its demanding nature, I never expected my article to be much read, let alone cited. Until econometrics swept sociology, it made me a guru of regression analysis, so it became my duty over the next eight years to referee many difficult papers on that topic intended for sociologists.

Since my critique "forbids" certain practices, it is not cited for handy formulas. To overcome its dullness, I strove for readability, especially for students and nonmathematicians. Because my own quantitative aptitude is modest, I had to translate mathematics into words. I believe that the article's heuristic value resulted from my efforts to combine verbal and quantitative reasoning and that this accounts for its good reception.

An ironic sidelight is that I was refused promotion with this and two other articles in press. When the articles were eventually read, that decision was overturned, but history repeated itself six years later, while a coauthored manuscript that later won the American Association for the Advancement of Science Socio-Psychological Prize⁶ was in press. No wonder many bright scholars spend their best, but untenured, years working well within their competence.

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^{1.} Lander B. Towards an understanding of juvenile delinquency. New York: Columbia University Press, 1954, 143 p. (Cited 120 times since 1955.)

^{2.} Gordon R A. Issues in the ecological study of delinquency. Amer. Sociol. Rev. 32:927-44, 1967. (Cited 55 times.)

^{3. -----.} On the interpretation of oblique factors. Amer. Sociol. Rev. 33:601-20, 1968. (Cited 5 times.)

Pedhazur E J. Multiple regression in behavioral research. New York: Holt, Rinehart and Winston, 1982, 822 p. (Cited 205 times.)

Farrar D E & Glauber R R. Multicollinearity in regression analysis: the problem revisited. *Rev. Econ. Statist.* 49:92-107, 1967. (Cited 280 times.) [See also: Farrar D E. Citation Classic. *Contemporary classics in the social and behavioral sciences.* Philadelphia: ISI Press. 1987. p. 38.]

McAuliffe W E & Gordon R A, A test of Lindesmith's theory of addiction: the frequency of euphoria among long-term addicts. Amer. J. Sociol, 79:795-840, 1974. (Cited 45 times.)
