

Don't count research papers
(Continuation of Rodney Davis's, January 22, 2002 posting)

ELMAR Contribution by J. Scott Armstrong
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If the goal is scientific advancement, it seems detrimental to count papers. Counting encourages quantity and a quest for the least publishable unit. It encourages people to publish useless papers. It leads to such wasteful practices as censoring what papers can be presented at conferences.

Counting also encourages joint authorship. In preliminary results for work on which I am currently engaged (involving papers published on forecasting), single-author papers have a higher citation rate than multiple-author papers. (I am interested if anyone knows of published research on this issue.). This finding is consistent with research showing that people reduce their efforts when they work in groups. If you do count papers, then, you should divide by the number of authors so that you have "single-author equivalent papers."

Rather than counting papers, establish a screen and ask if anything has been published. Zero would be a bad score.

Counts should focus on outputs from the research. So you might count citations (commonly accepted practice is to use first-author only citations; otherwise one should divide by the number of authors) or the number of useful applications. My favorite, however, would be to count how many important findings have been made. Schools could encourage useful research by adopting such measures of output.

You do not have to wait for your school to change. You can report citations, applications, and findings on your resume and annual report. That said, it is an unusual step and perhaps risky. I must confess that some who have reviewed my resume (see pages 2-4 of my resume at <http://jscottarmstrong.com>) have called it "unprofessional," "irrelevant," or "unbecoming of a professor." On the other hand some people thought it was useful. But if enough of us start to do this, we can change the world over the next 20 years.