PUB: 91/2011

Editorial

Publish or Perish.

"Publish or Perish" refers to the pressure to publish work constantly to further or sustain a career in academia. The competition for faculty position in academia puts increasing pressure on scholars to publish new work frequently which is one of the few methods at the scholar's disposal to improve his/her visibility. The attention that successful publications bring scholars and their sponsoring institutes helps ensure steady progress though the field and continued funding. Scholars who focus on non-publishing related activities or who publish too infrequently may find themselves out of contention for available position. Publications are done in journals and conferences.

There are 24, 000 research journals in all today across all research fields. In 1990s graduates students and assistant professors in field of social sciences had more pressure in publishing papers. After 2000 the pressure spread to other disciplines for advancement in professional promotion especially in United States. In olden days writing and publishing was simple and now it is a more complicated procedure. The growing competition for research funding, academic positions, career advancement and increasing use of bibliometric parameters to evaluate career pressurise the scholars into producing publishable results.

The origin of the term "Publish or Perish" appeared in the non-academic context in 1932 book "Archibald Cary Crolidge: Life and letters" by Harold Jefferson Coolidge. However evidences say that the phrase has originated around 1950 by Kimball C Atwood, a geneticist at Columbia University. "Publish or Perish" expression can be traced back to "The Academic men: A study in the sociology of a profession", a 1942 book by Logan Wilson, New York.

The advantage of "Publish or Perish" culture is, it causes some pressure to produce cutting edge research which is necessary to motivate scholars early in their career to focus on research advancement and learn to balance its achievement with other responsibilities of the profession. Publication in a high impact journal is still an important consideration when assessing individuals for career progression. The research world and specially the academic world is centered around the notion of publication as the basic means to disseminate results, faster interaction among communities, achieve international recognition, career advancement, meeting and networking.

The disadvantages of "Publish or Perish" culture is emphasis on publication which may decrease the value of resulting scholarship as scholars must spend more time scrambling to publish whatever they can and manage rather than spend time developing research agendas. However writing papers is important with the purpose of making results available. The pressure to "Publish or Perish" also detrains from the time and effort professors can devote to teaching. The rewards for exceptional teaching rarely match the rewards for exceptional research, which encourages faculty to favour the latter whenever they conflict. The professors as researchers may cause faculty to neglect or make them unable to perform some other responsibilities. "Publish or Perish" attitude may deemphasize science education skills and create a sort of high pressure atmosphere that lead to scientific fraud. In "Publish or Perish" culture the scientific careers rely on volume of citations, distorts the research results, wasting money. Many institutions focus on the publication than on teaching ability while recruiting teaching staff. The online age practice of self archiving has been shown to increase citation impact by a dramatic 50-250%. In computer science people typically publish a dozen paper per year and submit a little more than that in conference.

One of the hurdles in "Publish or Perish" culture is research funds where researchers of smaller and private foundations are neglected. The Howard Hughes Medical Institute thought it was ironic that researchers were spending a decade of their most productive years, when the energy level to make new discoveries is highest, on grant writing. The National Academy of Science report highlighted that the average age for a biomedical researcher to secure grant is 42 which is considered as gold standard of biomedical funding.

In" Publish or Perish" culture peer (experts) review process decides whether the work gets published in an academic journal. Typically each paper should be reviewed by 3 to 4 reviewers. It doesn't work well many times mainly as a result of the enormous number of papers that are being published (An estimate 1.3 million papers in 23,750 journals in 2006).In addition there are simply not enough people to do this competent job. The overwhelming effect of the huge effort that is put into reviewing papers is to maintain a status hierarchy of journals. Any paper however bad can now get published in a journal that claims to be peer-reviewed. The blame for this sad situation lies with the people who have imposed a "Publish or Perish" culture.

Reviewing process kills good papers and is inherently flawed. In general reviewing a paper is not easy and it is rarely done properly. There are many problems with the peer review process today.

1. Judging the impact of the paper is very hard in general. Even smart people and great researchers have a hard time in assessing whether a topic is interesting and relevant and likely to draw an impact.

2. Sometimes good papers are cut because of bad reviewers. It is not unheard of to have a paper rejected by a journal / conference and win the best paper award at the next one. The main reason is that only one bad review is often enough to kill a paper. Reviews are inconsistent. Sometimes an author gets reviews criticizing the paper and saying opposite things.

3. Some reviewers are generally negative and some more positive. So it is often a matter of luck to a certain extent that the paper gets accepted. Clearly good papers eventually go through, but sometimes late and after a lot of rework.

4. Reviewing takes time, and is not necessarily time that results in better papers. Authors spend a lot of time adapting and tuning the paper not so much for the sake of making the best possible explanation, but to please reviewers and the journal / conference style. Furthermore, sometimes there are certain styles of writing papers that are better accepted by reviewers or that reviewers feel particularly bad in rejecting.

5. A common effect of this review process is that many journal / conferences tend to accept very detailed papers resulting from very detailed studies, rather than more innovative and creative papers.

The entire review process itself sometimes limits dissemination, delays and if the paper is rejected then 6 more months will pass till the work has the chance to be published.

In the "Publish or Perish" culture a piece of research, if it is worth funding and doing at all, must not only be published but used, applied and built upon by other researchers worldwide. This is called "Research Impact" and a measure of it is the number of times an article is cited by other articles "Citation Impact" which is rewarded by universities, research funders and libraries. Counting citations is a natural extension of the cruder measure of research impact counting publications themselves in "Publish or Perish" culture. An increase from 0 to 1 citation is worth more than an increase from 30 to 31 publications.

In "Publish or Perish" culture, the positive results are highest in states with the most productive research environment with perceptive scientists who choose the correct hypothesis to test.. Authors of "Publish or Perish" culture are less likely to publish papers that describe negative results and positive results are likely to be accepted to journals producing a bias against negative results.

Over last decades, there have been a few attempts to experiment with different models as well as to study in a scientific way the effectiveness of the current approach to paper evaluation and publication. There are no indications on which review process and model works best and no clear evaluation of benefits and shortcomings of each so that the journal editors are still left in the dark. Ideally scientists should limit themselves to an average of two original papers a year and one research grant at a time.

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