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## CORRESPONDENCE

### Impact factors – A note of caution

The article by Endre Száva-Kováts and the write-up on it in the 25 May 1997 issue emphasize the importance of exercising caution in using citation indices in evaluating scientists. The danger in placing excessive reliance on these indices and, when used, the need for normalizing them against several variable factors, are well-known. Although they are useful as one of the yardsticks for assessments, periodic warnings against over-reliance on citation indices are appropriate.

What is more disturbing is the undue importance that appears to be given to a still cruder yardstick, namely, the impact factor of the journals that one publishes in. It is certainly desirable to publish in reputed journals. Here again, normalizations are extremely important as in the case of the citation index. However, most often the tendency appears to be to take simple numerical values far too seriously. Furthermore, to judge the value of a paper entirely or substantially by a numerical index attached to the journal in which it is published, is somewhat like judging a person by the clothes he/she wears, or, at best, by the company he/she keeps.

Over-emphasis on impact factors has promoted a scramble for publication in a few top journals. Other considerations become relatively unimportant. These

few journals certainly cannot accommodate all the quality papers that are produced. Then acceptance in them often becomes a matter of chance and, worse still, subjective factors. In some of them, normal peer review is preceded by a short-listing process based on ill-defined criteria, making the system less than objective. Furthermore, immoderate reliance on impact factors has led to an unhealthy skewness in the realm of scientific publication. As in the star system in the show business, attention is concentrated on a few journals, at the comparative exclusion of a large number of journals with reasonably high standards.

Excessive reliance on impact factors is particularly inappropriate in third world countries like India. Admittedly, the number of high quality publications emanating from India is low. Even in the case of good work, it is well known that it is in general harder to publish from India than it is from the advanced countries. The article by W. Wayt Gibbs in the August, 1995 issue (pp. 76–83) of *Scientific American* is instructive in this context. In addition to scientific considerations, one wonders if apathy, prejudice and commercial consideration in terms of circulation in different countries, also come in the way of publication of scientific results from countries

like India in top journals. In such a scenario, the use of impact factor as a major criterion in evaluation could be counter productive. This may sometimes lead to unhealthy tendencies. I have heard it said that one way of getting publications in high-impact journals is to tag on to scientists in the West, irrespective of whether a collaborative arrangement is genuinely needed or not.

Lest I should be misunderstood, let me emphasize that it is certainly important for scientists to seek publications in highly reputed journals in their respective fields. I myself, like other working scientists, have sought publication in such journals and have rejoiced when successful. But some numerical values associated with them should not be indices for instant assessment. There is no alternative to detailed assessment largely based on proper peer review. While impact factors could certainly form a component of assessment, the apparent current tendency to make judgements based wholly or substantially on them need to be discouraged.

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