A Socratic Dialogue on Impact Factors

Characters of the Dialogue

SOCRATES
LOWELL GOLDSMITH, MD, MPH, Editor, Journal of Investigative Dermatology
RUSSELL HALL, MD, Deputy Editor, Journal of Investigative Dermatology

Scene
A Barbecue Restaurant in North Carolina

SOCRATES: My colleagues in the search for the truth — you seem glum and solemn when we should be enjoying Barbecue and Sweet Tea and talking of Basketball.

LOWELL: As always, Socrates, you are perceptive and can read the emotions and the minds of others. We have received the impact factor for 2005 for the Journal of Investigative Dermatology from the gods on the Mount of Garfield high above the clouds in the lands of ISI, and we fear the number is still not high enough.

SOCRATES: I know the gods on Garfield but I do not know about impact factors and how they affect the affairs of the world.

RUSSELL: Computers, counting and memory machines, survey all of the scientific articles published in 2005 and record every time a JID publication from 2003 and 2004 was cited as a reference. The total number of those citations is divided by the total number of articles published in 2005, to yield the impact factor number: ours is 4.406. We are pleased that this number has increased for the third year in a row, but always we hunger for higher numbers.

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SOCRATES: That seems complex. Let me hear more; and first, your notation for fractions was not used in my day, but we anticipated that Napier would eventually populate the world with many of these decimal points. Is your number like pi, the other number I know with a long list of digits after the point?

RUSSELL: Oh no indeed; pi is constant all over the Universe. The impact factor changes every year and is different for every journal.

SOCRATES: How can a number that is always changing be very important? It seems like the random sound from waves or the twinkling of light through the leaves.

LOWELL: Oh, it is very important, because the impact factor may be used to judge the importance of our journal and decide whether libraries will subscribe to it.

SOCRATES: How do libraries use the impact factor; and, if the Journal of Centaur-shoeing has the highest impact factor, will every library subscribe?

LOWELL: Of course not; libraries subscribe to those journals that are used by and are important to their patrons.

SOCRATES: Are those always journals with the highest impact factors?

RUSSELL: No — there are specialized journals that may be of interest to very few but are important to those few because they publish the work in a very limited field, such as the fish populations in the waters around Rhodes.

SOCRATES: Could I be happy reading about the fish around Rhodes even if that journal had the lowest impact factor of any journal published?

LOWELL: You might be happy, but if you were a researcher and publishing on a new fish from Rhodes you might want to submit your missive to a journal with a higher impact factor, hoping to achieve immortality with those who study not only the fish from Rhodes but perhaps all kinds of animals that dwell around Rhodes.

SOCRATES: Achieving immortality seems an impractical and long-term goal for those who pursue wisdom through the sciences. There must be other reasons why, when everyone knows there is a journal specializing in the fish of Rhodes, I would submit my finding of a new fish to another journal.
Russell: You are perceptive, Socrates. There is a much more immediate and practical reason. When you come up in competition for a lifetime job in the Academy, those judging you will want to see whether you publish in journals with the highest impact factors.

Socrates: Even if my work really belongs in the journal specializing in the fish of Rhodes? Is that a rule that came from the gods on the Mount of Garfield?

Lowell: There are several answers to these several questions. The rules are not those of the gods but have been made by men. The degree of virtue in the work of an individual may be difficult to judge, so one measure is whether the person's scholarship has been judged of high merit by his or her peers.

Socrates: How many people are on the jury?

Lowell: Usually two or three peers review and judge a paper.

Socrates: These jurors must be noble men and women, pure of motive and free of conflict, to undertake the important task of judging the merits of scholarship.

Lowell: This is often the case, but after all they are but mortals and may succumb to the vices of ignorance, vanity, and self-protection, and this occasionally results in the rejection of excellent scholarship.

Socrates: That is regrettable, but understandable; men and women are not perfect. Surely, however, these important jurors view excellent scholarship from all fields of study equally.

Russell: Oh no, Socrates, that is far from the case. Those journals deemed by the gods of Garfield as high impact often view scholarship from more specialized fields less favorably.

Socrates: So, if these jurors decide a paper is unworthy and without merit, what happens then? Is the scholarship lost for all of eternity?

Lowell: Thankfully not. The author eventually finds a journal that will have a jury of two accept the paper.

Socrates: That paper that has been rejected by one journal could then cite papers in the rejecting journal and thus raise its impact factor, is that right? In this scheme it seems that works of low virtue could be contributing to the higher virtue. Is this the way the gods of Garfield planned this Universe?

Russell: Mere mortals started the systems of counting to add virtue to the world of scientific communication. The messages from the gods were difficult to interpret.

Lowell: The impact factors were started as a way to judge and rank journals within types of journals. We are pleased and glad that our journal is the highest ranked of the 40 or so journals related to skin and its diseases.

Socrates: Is being number one not a mark of high esteem and a reason to be happy?

Lowell: Of course, but if we also judge ourselves with other more basic-science or general journals, we are less successful in terms of impact factor.

Socrates: Is there happiness in judging yourself as compared with the Athletes who win the Olympic games?

Lowell: The server is coming with the Barbecue and Tea, and we should indulge in those before we discuss other weighty issues.

Lowell A. Goldsmith  
Editor  
Russell P. Hall  
Deputy Editor