



The Editor's Note

Scientometrics or Scientistometrics?

When the Soviets successfully launched the Sputnik to the space in mid 1950s, American's scientific and technological supremacy was challenged. Repeated attempts by Americans to repair the damage did not meet expectations. In early 1960s, US government decided to allocate special funds to fill the gap. Experts invited to propose comment on the problem, overwhelmingly pointed to deficiencies in the nation's educational system. However, changing educational system was considered a long term task which the emergency of the time did not allow it. Therefore, short term strategies were sought.

Among many, Openheimer's proposal for setting up an "Exploration House" was adopted by the government.

His idea was an initiative based on Piaget's doctrine. At the "Exploration House" nothing was taught directly. Every learner was expected to work with topics of their interest in an intuitive manner followed by personal examination.

This initiative was also implemented in many European as well as Asian countries in later years.

In our country too, the issue of scientific development has surfaced in influential circles and media over the past several years. The media pay unprecedented attention to reports by international agencies about the rank of Iran on scientific productivity lists. Here too, there is an expressed interest to identify the reasons behind unsatisfactory position of the country in scientific production.

Scholarly communities have always been keen to devise tools for measuring the advance of sciences. They have employed standard methodologies to compare communities with each other. Scientometrics is one such method. LIS professionals as well as a number from the field of sociology have paid attention to this area more than other disciplines. They have done this by counting the number of citations to published articles, the number of books published, and the number of patents issued.

Fascination with scientometrics has not remained without criticism. Some regard it an unforgiving sin and a sign of lack of understanding of what science is. They point to the quantitative nature of measurement in scientometrics, and, discredit it. Others put a high value to the method. In their view, publication of articles in journals indexed by ISI is the condition for academic promotion and recognition for one's contribution to knowledge. It looks that they expect even scholars in the field of Persian language and literature or Moslem clergies publish their worked in ISI indexed journals!

Disregard of such extreme views, the fact is that scientometrics is a valuable technique that should be used

in a reasonable manner. However, the merits and limitations of the method should also be considered carefully. That is to say that one should not apply without reservation for judgment. Essentially, scientometrics is not a normative or value based technique which has received criticism of its own. One vigorous criticism made is that its views scientific productivity merely quantitative. On the other hand, advocates of scientometrics consider it a measure to weigh quality. Yet, critics argue that counting citations is quantifying the quality with obvious reductionist bias.

Criticism to scientometrics is in our country, however, is focused not on the method itself, but rather on the way it is used (or misused) by writers of scientific literature. There are writers who put together a paper solely to publish it in a journal, with no regard of the needs of the scientific community. Also, there are writers who repeatedly commit self-citation unnecessarily in order to prove the value of their previously published work.

Such misuses are not intrinsic to the methodology itself, but rather caused by moral weakness of the individual or problematic regulations in force for

academic promotion in our country, where we expect scientometrics to become scientistometrics. Recently I realized that a journal in our field requires that every contributor adds at least three citations from that journal to their papers as a condition for final approval to given higher impact factor rate!

Let's remember that scientometrics has experienced a natural development in the context it was born. Those who have devised tools such as SCI pursued a genuine purpose. The centers that undertake the task are private enterprises.

To utilize scientometrics in Iran, I believe we have to consider the realities of our environments if we, too pursue a genuine purpose. I hope that the existing plan to produce an Iranian citation index meet its goals. Let's not forget that in order to measure knowledge generation in our society; we must first turn the engine of knowledge production on. This is

mainly depends on the capability of our system of education.

In our country, too, many observers consider an overhaul of the educational system the only way for scientific advancement of the nation. However, because of the magnitude of the task and the risk involved, they maintain that the government is not capable to implement it without help from outside.. .

To be solely concerned with the country's scientific ranking results in putting pressure on the scientific community without paying attention to its prerequisites. That would likely to lead to an superficial tendency among academics to put together for the sake of personal promotion. This hardly helps us solving our problems. In fact, it might turn to a barrier to scientific development.

As the editor, I'd like to thank Ebrahim Emrani and Dr Keyvan Koosha for their role in preparing the present special Issue.

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