12th EAHIL Conference, Lisbon-Estoril, Portugal 18th June 2010





Anna Berhidi <u>aberhidi@lib.sote.hu</u> Central Library of Semmelweis University, Budapest, Hungary

SHOULD ERA OF THE IMPACT FACTOR END IN HUNGARY?

AIMS

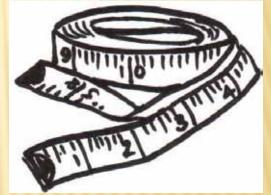
- To introduce briefly the situation of the Hungarian biomedical journals
 - focusing on the scientometric novelties for example the expanse of Journal Citation Reports Web, Hirsch-index, Eigenfactor and SCImago Journal algorithms
- To express the differences and similarities between Impact Factor and other scientometric indicators

MATERIALS AND METHODS

- Behind the scientometric indicators
 - + well-designed, well-edited websites
 - + well-known databases (Web of Science, Journal Citation Reports; Scopus).
- Compare the biomedical journals by their performance based on the data from the aboved mention databases.

JOURNAL CITATION REPORTS WEB

- × Main content:
 - + Impact Factor
- Enhanced content (e.g.):
 - + 5-year IF
 - + Eigenfactor
 - + Article Influence Score



Source: Design & Technology Clip Art 3. [Internet]. Available from: http://ngfl.northumberland.gov.uk/dt/dtclip/textile s_alb/pages/tape%20measure_JPG.htm

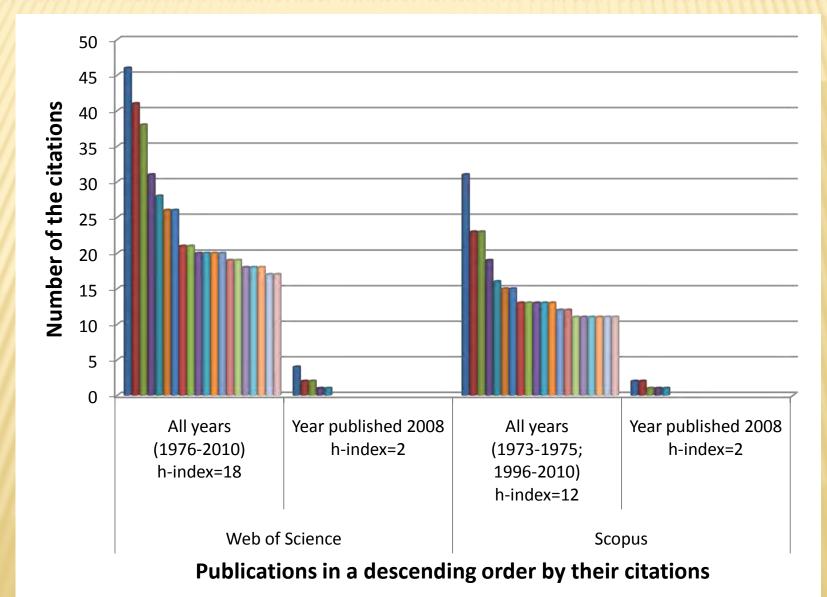
H-INDEX OF JOURNALS

× H-index:

It was invented by Jorge Hirsch, an American physicist in 2005. The index of a researcher is H, if H number of his/her articles has been cited at least H times.

H-index of journals: The index of a journal is H, if H number of its articles has been cited at least H times.

H-INDEX OF ACTA ALIMENTARIA THE ENGLISH-LANGUAGE HUNGARIAN JOURNAL IN WEB OF SCIENCE AND SCOPUS DATABASE



APPEARANCE OF PAGE RANK AMONG THE OTHER INDICATORS

- Some new algorithms analyze the citation links between journals in iterative cycles in the same way as the Google PageRank algorithm:
 - + Eigenfactor
 - + SCImago



Source: Hariharan Y. How To Stop Your Blog From PageRank Dilution [Internet]. Available from: <u>http://www.techspikes.com/wp-</u> <u>content/uploads/2008/08/pagerank-algorithm.jpg</u>

EIGENFACTOR AND ARTICLE INFLUENCE SCORE

- The Eigenfactor algorithm was developed by Carl T. Bergstrom and his team at the biology department of Washington university. A website in connection with it was launched in 2007: <u>http://www.eigenfactor.org/</u>
- × Its source is Journal Citation Reports Web.
- Eigenfactor measures the prestige of journals and it examines the given journal's citation in the previous five years.
- Article Influence measures the influence of the articles.

SCIMAGO JOURNAL RANK AND SNIP

- The SCImago team consists of researchers from Spanish universities. The SCImago website was launched in December, 2007: <u>http://www.scimagojr.com</u>
- × Its source is Scopus database.
- SJR expresses the average number of weighted citations received in the given year by publications published in the journal in the three previous years.
- SNIP (Source Normalized Impact per Paper) corrects for differences in the frequency of citation across research fields. It developed by Henk Moed at University of Leiden.

RESULTS - DATA FROM DATABASES 1.

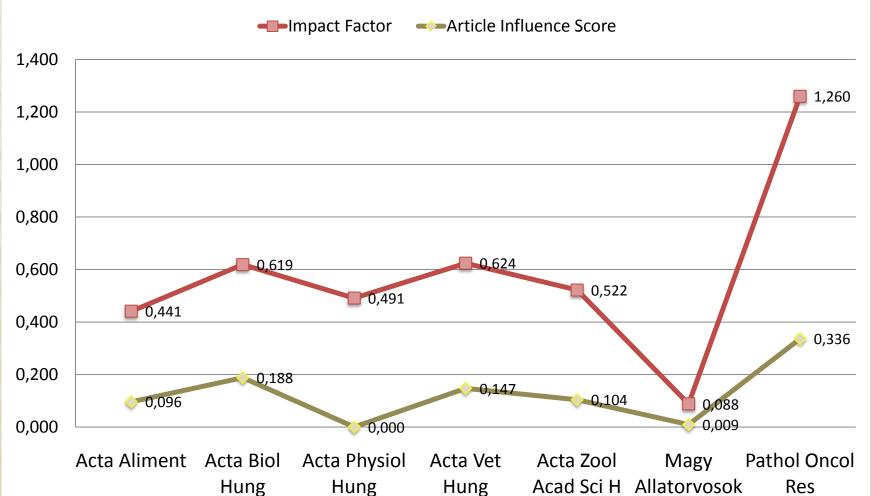
- × Journal Citation Reports Web 2008 Table I-III.
 - + Impact Factor
 - + Article Influence Score
 - + 5-year IF
 - + Eigenfactor Score



Source: Design & Technology Clip Art 3. [Internet]. Available from: http://ngfl.northumberland.gov.uk/dt/dtclip/textile s_alb/pages/tape%20measure_JPG.htm

TABLE I.

Hungarian biomedical journals in JCR Web 2008 - I.





Hungarian biomedical journals in JCR Web 2008 - II.



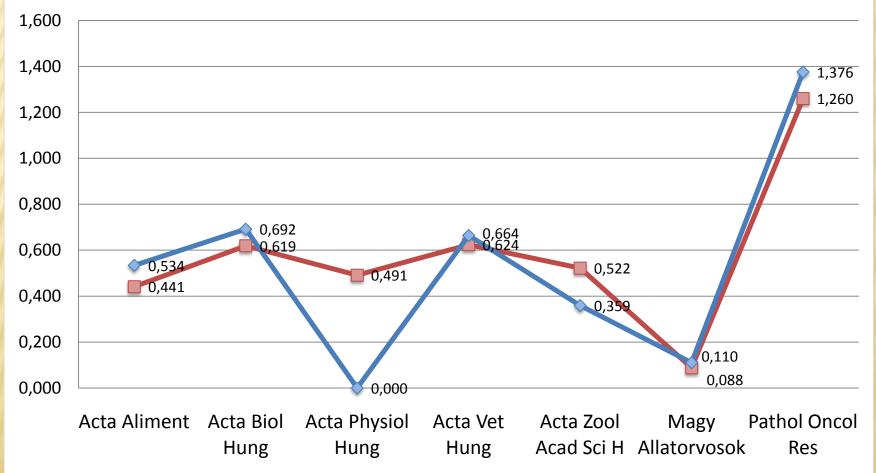
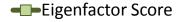
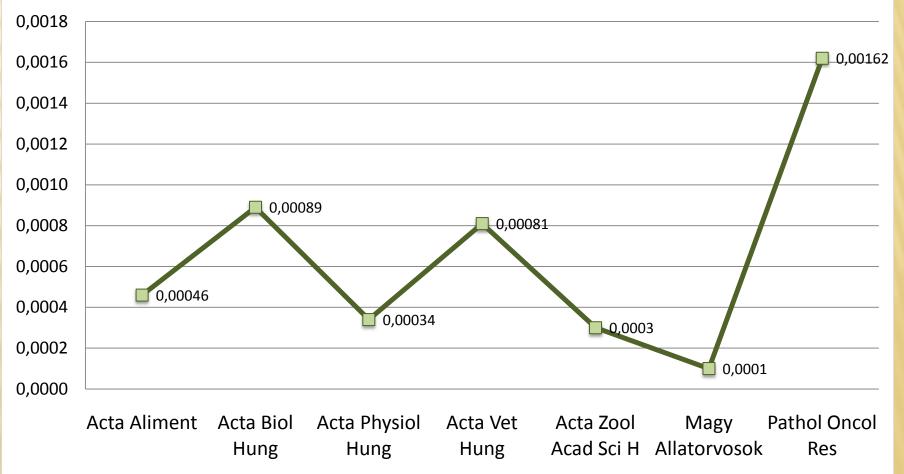


TABLE III.

Hungarian biomedical journals in JCR Web 2008 - III.





RESULTS - DATA FROM DATABASES 2.

× Scopus & SJR – 2008 Table IV-V.

+ SJR

+ SNIP

+ H-index



Source: Design & Technology Clip Art 3. [Internet]. Available from: http://ngfl.northumberland.gov.uk/dt/dtclip/textile s_alb/pages/tape%20measure_JPG.htm

TABLE IV.

Hungarian biomedical journals in Scopus - I.



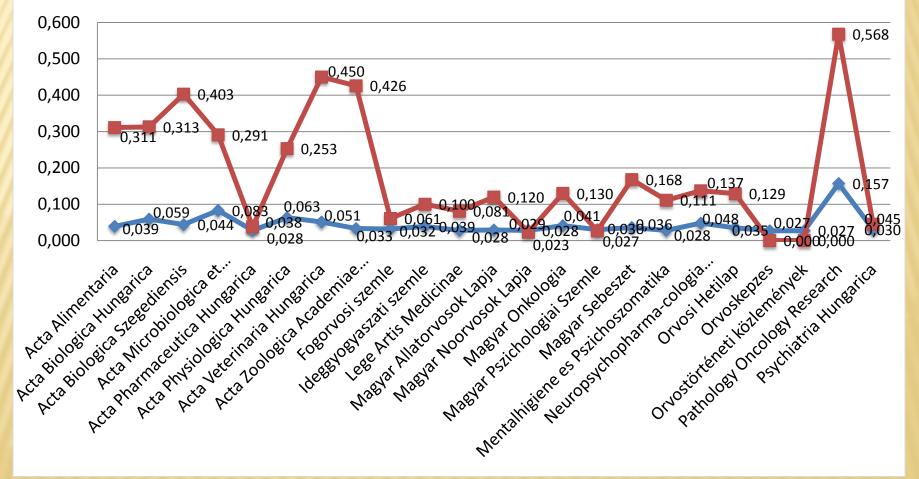
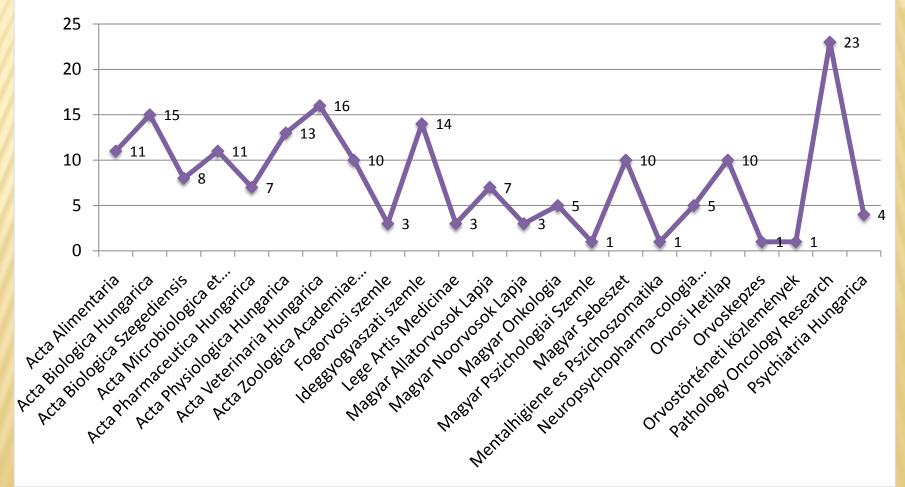


TABLE V.

Hungarian biomedical journals in Scopus - II.





DISCUSSION

Hungarian journals need...

- **×** To strengthen their qualities (e.g.):
 - + abstracts in English
 - + peer-reviewed articles
 - + regular appearance
- To be indexed in more international bibliographic databases
- To be published on-line and in bilingual (Hungarian and English)
- x To use Hungarian "indicators", e.g. Publication Points in the Doctor Schools of some Hungarian universities

CONCLUSIONS

- In Hungary the dominance of Impact Factor can be linked to two points of view:
 - + Performance of journals
 - + Performance of individuals (doctors, researchers, etc.)
- * That is the main problem. The other scientometrics indicators can become its alternatives. Or the only possibility?

THANK YOU FOR YOUR ATTENTION!

- × IF or not IF? That was the question.
- × Any other questions?

Anna Berhidi aberhidi@lib.sote.hu



Source: Academic Peer Advising [Internet]. http://www.williams.edu/dean/AcademicPee rAdvisingSite/APA_Site_Profiles.htm



Albert Apponyi programme

Established by the support of the National Office for Research and Technology.

