

“The use of bibliometric data as the basis for performance indicators of Finnish universities”

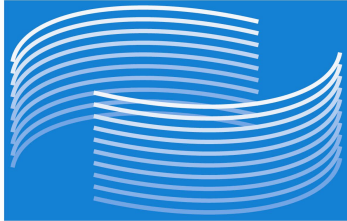
The presentation is based on the project

“Applicability of the bibliometric data of KOTA-database as funding criteria”

- The aim of the study was to view some of the issues that should be taken into account if applying bibliometric indicators as criteria for funding of the universities
- Funded by the Finnish Ministry of Education
- Study report in Finnish forthcoming in October 2006

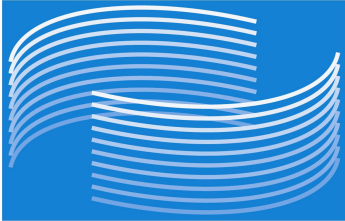
Contents of the presentation:

- Reliability problems of the KOTA publication database
- Disciplinary differences in publishing practices



Reliability problems of the KOTA publication database

- The national KOTA database contains statistics of Finnish universities' higher education and research activities since 1981 (publication statistics since 1994)
- The counts of four forms of publications are available by university and discipline:
 - 1) articles in refereed journals
 - 2) articles in edited books or conference books
 - 3) monographs
 - 4) publications in university series
- A detailed examination of the publication data revealed following problems which question the reliability of the data and the comparability of universities based on it:
 - heterogeneous methods of data collection in the universities
 - inadequate definitions of publication types
 - defective classifications of disciplines



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Disciplinary differences in publishing practices

- Examinations of disciplinary publishing practices are needed in order to solve which forms of publications are essential in each discipline and to be able to weight different types of publications in relation to others
- Publishing practices differ in terms of the use of different types of publications, international publishing, popular science publishing, co-authorship as well as frequency and length of publications
- Publishing practices are related to both internal (cognitive) and external (social) factors of the disciplines

See:

- Kyvik, Svein (1991): *Productivity in academia. Scientific publishing at Norwegian universities*. Oslo: Universitetsforlaget.
- Becher, Tony (1989): *Academic Tribes and Territories*. Milton and Keynes: The Society for Research into Higher Education & Open University Press.

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Hanna-Mari Pasanen

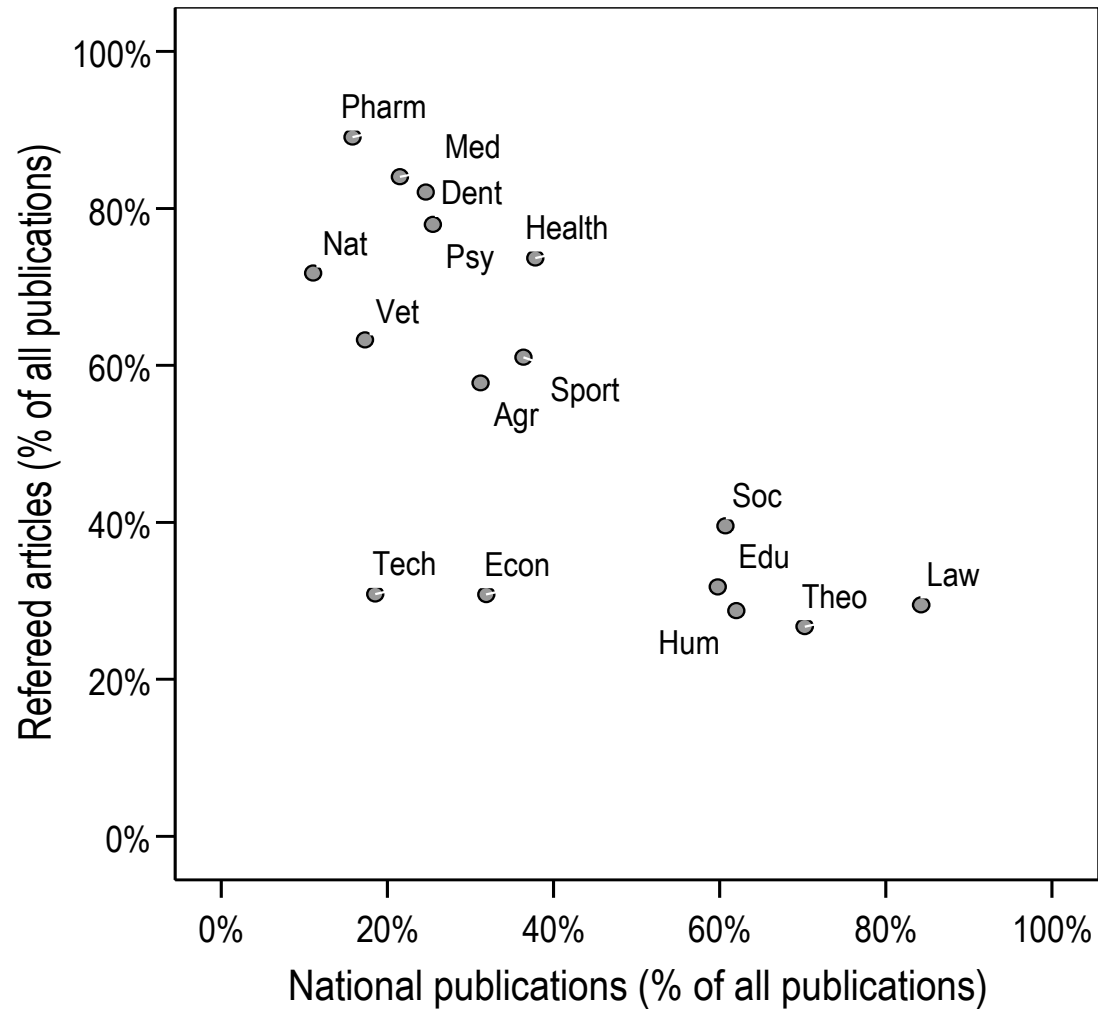
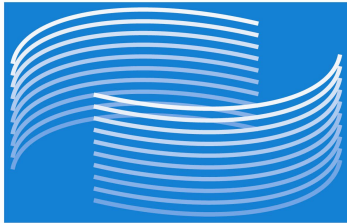
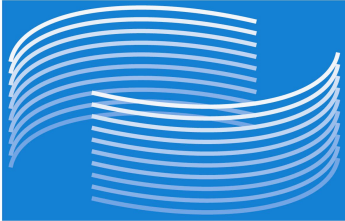


Figure 1. Percentages of refereed articles and national publications by discipline (source of data: KOTA 2000-2004).



Modeling publishing practices at Finnish universities

Our next objective is to collect an author-level data set covering all the disciplines in three to four Finnish universities and to study factors related to publishing practices and publishing activity of the researchers.

Some preliminary research questions:

- How many publications does an average researcher produce within a certain time period in each discipline?
- How much variation in productivity is there between and within disciplines?
- What is the role of different types of publications in each discipline (articles, books, reports, conference papers, popular science publishing)?
- To what extent are the author-level factors (e.g. gender, position, years of service) and department-level factors (e.g. funding sources, position structure, orientation in teaching) associated with publishing activity (number of publications, forms of publishing, language)?