



HOW BIBLIOMETRICS IS AFFECTING SSH

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BIBLIOMETRICS IN LIBRARIES

- Eugene Garfield conceived the Science Index to help librarians define the **core collection**
- It was a metric conceived **for libraries**, and in fact many libraries still use bibliometrics in collection development
- Also, it was conceived **for researchers**, in order to facilitate knowledge of what is published in a field and to improve scientific communication

BIBLIOMETRICS IN A BROAD MEANING

- About ten years after the creation of the Science Index, Dieter Schmidmaier, librarian in a technical university library, explains the complexity of the **'application of mathematics and statistical methods to publications'** defined as bibliometrics.
- In his words, **besides citation counts**, bibliometrics must include other indicators, like
 - ✓ number of authors of published papers
 - ✓ time budgets involved in the research, number of staff as well as size and composition of collectives
 - ✓ funds granted or spent
 - ✓ buildings, devices, plants and machines used
 - ✓ visible tendencies and trends important for future development of research.
 - ✓ in addition, indicators about records of the **use made of published works** (usage statistics), people and the result of their work, mainly in the form of time studies, questioning of individuals and of groups of people, other sources, as records, compilations and lists of contents of published works

(D. Schmidmaier, *Application of bibliometrics in technical university libraries*, IATUL Proceedings, 1977)

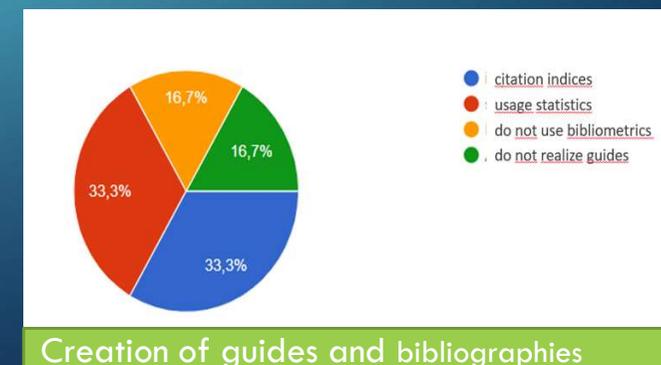
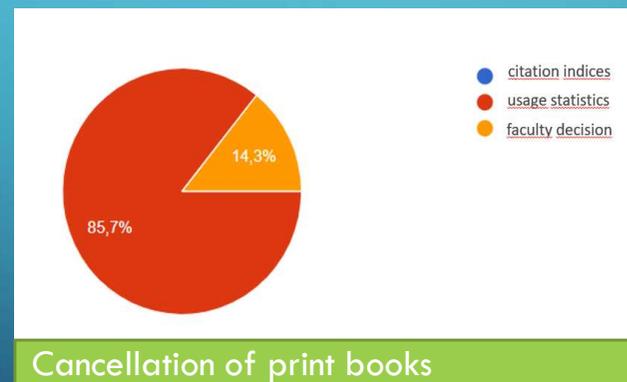
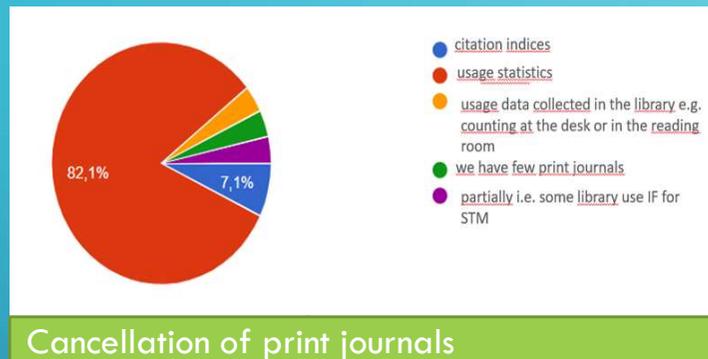
CORRELATION DOWNLOADS - CITATIONS

- Schmidmaier stressed the importance of usage statistics
- Today, many studies have shown a **positive association between downloads and citations**
- Downloads and citation have different development over time and different level of obsolescence
- Downloads count is significant in the short term while citations emerge at their peak after a few years
- Anyway, more downloaded articles from library collections are more cited
- The two indicators together can offer **greater knowledge about 'impact'**

SURVEY IN ITALIAN ACADEMIC LIBRARIES

- Survey sent in 2019 to directors of library services of **86 public universities** and got response from 70% of academic library systems
- The results of the survey generally confirm the use of quantitative methods, since only 28,6% of library systems declared they do not use metrics at all
- The **majority (91,7%)** use usage statistics for collection development, and about half of the respondents use counts about loans
- As for citation indexes, **36,1% use impact factor**, 19,4% citation counts, 5,6% quartiles.
- When asked what database they used, 71% declared Scopus, 67,7% Web of Science, 58,1% Journal Citation Reports, 29% MathSciNet, 12,9% Google Scholar, 9,7% Scimago Journal & Country Rank.

FOR **DIGITAL** THE ONLY RESPONSE IS STATISTICS WHILE FOR **PRINT** THERE IS A MIX OF METHODS INCLUDING CITATION DATABASES



BIBLIOMETRICS IN LIBRARIES

- Librarians are aware of the limits of bibliometrics, but they still use it mainly because perceived **as an easy and objective way to justify decisions** about new subscriptions and cuts in subscriptions, and **to ask for funding**
- Bibliometrics for collections in libraries **reinforces the role of bibliometrics** in scholarly publishing and the concentration of the market in the hands of few players
- Researchers must publish in journals with high metrics and libraries buy journals with high metrics, that researchers use, download and cite. It's a **vicious circle.**
- Will only the journals with high metrics survive?

BIBLIOMETRICS AFFECTING SSH

- Most of library budget is devolved to these products and little remains to support **players which are outside this game**, and are very important particularly for SSH, for example small, local publishers and vendors
- SSH research outputs are very much linked to bibliodiversity, because they have **greater diversity of formats**, there is not a prevalence of the journal article preeminent in citation databases but rather of monographs, and include book chapters, scripts, working papers, critical editions, and oral literature, for example
- In addition, they have more **diversity in publishing places and habits** since many SSH researchers in non-English speaking countries, like Italy, publish less in English and more in national language, their research is often locally based, and consequently they publish with countless small and medium publishers, not included in citation databases
- In SSH, there **different habits of research**, it is individual, the effects and impact are often not visible immediately, not even maybe after five years, sometimes it takes a whole life

BIBLIOMETRICS AFFECTING SSH

- The weight of quantitative measurement and the illusion that it represents an objective way to evaluate research impact (**proxy for impact and for quality**), are producing a separation between what is perceived can be measured and evaluated objectively, STM publications, and what is not, SSH publications
- This trend seems to **bring a change of SSH** publication habits and evaluation procedures, rather than the opposite
- In SSH the number of **monographs** published is decreasing, and the number of journal articles is increasing (also salami slicing)
- In Italy, the national evaluation agency, ANVUR, created for each SSH academic discipline some lists of journals considered “scientific” and “top class”

EQUALITY, DIVERSITY, INCLUSION

- The implications relate also to open access that traditionally show a great divide of perception between **STM and SSH**. Restraints of going open access for researchers in the humanities and social science are lack of control on quality, copyright and fear of being further **marginalized** since SSH outputs are less valuable in an objective way
- **Equality, diversity, inclusion** and open access are in the mission of the library as well as scientific research
- Librarians, together with researchers, should act to avoid favouring these trends, starting from collection development, and all consequent distortions in the research and the advancement of science.

Thank you for your attention!

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