EVALUATING JOURNAL PERFORMANCE

3 September 2012

KOH AI PENG LIBRARIAN

EVALUATING JOURNAL PERFORMANCE

This workshop will give you hands-on to evaluate your journals using two evaluation tools, namely JCR and SCImago.

Journal Citation Reports (JCR) is to evaluate journals indexed in ISI Web of Science and SCImago is for journals indexed in Scopus.

What if your journals are not indexed in ISI Web of Science or in Scopus? You will be shown how to evaluate your journal performance using the cited references in ISI Web of Science.

JOURNAL PERFORMANCE

CHARACTERICS OF A QUALITY JOURNAL

- High standards for acceptance of manuscripts (acceptance / rejection rate)
- A broadly representative editorial board (expertise / diversity / internationalization)
- A critical refereeing system
- Coverage by major abstracting & indexing services
- High confidence level of scientists in the contents (Reputation EIC, publisher, publishing community)
- High frequency of citation by other journals / articles (citation analysis)

http://thomsonreuters.com/products_services/science/free/essays/journal_selection_p rocess/

HOW TO MEASURE JOURNAL PERFORMANCE

1. QUALITATIVE METHODS 2. QUANTITATIVE METHODS

QUALITATIVE METHODS

Expert Surveys – panels of a group of expert scientists.

Eg. The Association of Business Schools' academic Journal Quality Guide, Excellence in Research for Australia (ERA) <u>http://www.arc.gov.au/era/era_2012/era_journal_list.htm</u>

Peer Reviews

Prestige of Journals – EIC, publisher, publishing community

QUANTITATIVE METHODS

> & ...

- Circulation & Usage statistics readership testify quality
- Acceptance & Rejection Rates high rejection rate > prestigous

Quantitative Methods

Reprinted from :Science, (178):471-479, 1972 Essays of an Information Scientist, Vol1, p.527-544, 1962-73

Citation Analysis as a Tool in Journal Evaluation

Journals can be ranked by frequency and impact of citations for science policy studies. Also see: Citation frequency and citation impact -- and the role they play in journal

Eugene Garfield

(NOTE: The article reprinted here was referenced in the essay which begins on page 409 in Volume 1. Its inadvertent omission was discovered too late to include it at its proper location, immediately following the essay.)

As a communications system, the net- | quinquennially, but the data base from work of journals that play a paramount which the volumes are compiled is

selection for Current Contents and other ISI services.

Quantitative Methods - Citation Metrics

a. **Journal Citation Reports** (JCR) – journals indexed in Web of Science (Impact Factor, Journal Immediacy index, Eigenfactor, Article Influence)

b. SCIMago Journal Rank Indicator (SJR) – journals indexed in Scopus (SJR, h-index)

c. Publish or Perish – Google Scholar

- Journals indexed in Web of Science
- Publish yearly
- Fee based subscription
- Main indicator: Impact Factor, Immediacy Index, Eigenfactor, Article Influence

Web-based research tool publish by Thomson Reuters that allows you to evaluate and compare journals using citation data drawn from approximately 12,000 scholarly and technical journals and conference proceedings from more than 3,300 publishers in over 60 countries.

http://webofknowledge.com Click on Additional Resources, under Analytical Tools - choose Journal Citation Reports

The Welcome page is the starting point for finding the journals that you want to analyze. Select a JCR edition, a year to search, and a journal search option. The options you select from this page determine which page appears next.

Journal Citation Reports®

Information for Ne

Select a JCR edition and year:	Select an option:
 JCR Science Edition 2011 • JCR Social Sciences Edition 2011 • 	 View a group of journals by Search for a specific journal View all journals Country/Territory Country/Territory
SUBI	ИІТ

Journal Impact Factor: the average number of times articles from the journal published in the past two years have been cited in the JCR year.

Immediacy Index is the average number of times an article is cited in the year it is published.

-- indicates how quickly articles in a journal are cited

Eigenfactor Score calculation is based on the number of times articles from the journal published in the past five years have been cited in the JCR year, but it also considers which journals have contributed these citations so that highly cited journals will influence the network more than lesser cited journals. -- Journal self-citation excluded

Article Influence determines the average influence of a journal's articles over the first five years after publication. It is calculated by dividing a journal's Eigenfactor Score by the number of articles in the journal, normalized as a fraction of all articles in all publications. The mean Article Influence Score is 1.00.

Exercise 1. View a Group of Journal by Subject category: "SURGERY"

- 1. How many journal in this subject category?
- 2. Which journal with the highest impact factor (IF)? [sorted by IF]
- 3. What is the aggregate Impact Factor of this subject category? [view category summary list]
- Which journal ranked 2nd in terms of Eigenfactor score? [sorted by Eigenfactor Score]
- 5. What is the Journal Self Cites rate to Years Used in Impact Factor Calculation for "Journal of Trauma"? [click on J Trauma]
- 6. Which journal has the strongest relationship with "Journal of Trauma"? [Related journals]
- 7. Ranking of "Journal of Trauma" in this subject category [Journal ranking]

Exercise 2. Search with a specific journal title

Search Full Journal Title for 'ENERGY EDUCATION SCIENCE AND TECHNOLOGY'

- What is the Impact Factor & Eigenfactor Score of this journal?
- 2. What is the Journal Self Cites rate to Years Used in Impact Factor Calculation? [click on the hyperlink under Abbreviated Journal Title]
- 3. Who is the publisher of this journal?

Select a JCR edition and year:	Select an option:
 JCR Science Edition 2011 JCR Social Sciences Edition 2011 	 View a group of journals by Subject Category Search for a specific journal View all journals
	1) Search by: 2) Type search term:
	Full Journal Title
	Search Examples: Full Journal Title: Enter JOURNAL OF CELLULAR PHYSIOLOGY or JOURNAL OF CELL* (<u>more examples</u>) Abbreviated Journal Title: Enter J CELL PHYSIOL or J CELL * (<u>more examples</u>) Title Word: Enter CELLULAR or CELL* (<u>more examples</u>) ISSN: Enter 0021-9541 or other ISSN (<u>more examples</u>)

USING JOURNAL CITATION REPORTS WISELY

You should not depend solely on citation data of your journal evaluations.

Citation data are not meant to replace informed peer review. Careful attention should be paid to the many conditions that can influence citation rates such as language, journal history and format, publication schedule, and subject specialty.

- Journals indexed in Scopus
- Refreshed twice a year
- Freely accessible
- Main indicator: SJR, h-index

SCImago Journal & Country Rank

http://www.scimagojr.com/journalrank.php

The **SCImago Journal & Country Rank** is a portal that includes the journals and country scientific indicators developed from the information contained in the <u>Scopus</u> database

27 major thematic categories, 313 specific subject categories

SJR (SCImago Journal Rank) indicator

It expresses the average number of weighted citations received in the selected year by the documents published in the selected journal in the three previous years It measures the scientific influence of the average article in a journal

h-index

It expresses the journal's number of articles (h) that have received at least h citations. It quantifies both journal scientific productivity and scientific impact

International Collaboration:

Document ratio whose affiliation includes more than one country address



Home

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Journal Rankings	Ranking Parameters			
Journal Search	Subject Area:	All	•	
Country Rankings	Subject Category:	All		•
Country Search	Country:	All	•	Year: 2011 👻
-	Order By:	SJR 💌		
Compare	Display journals with at least:	0 Citable Docs. (3 years)		Refresh
Map Generator				
Help	Complete list (2011).			
About Us			Download data	in MS Excel format (4162 Kb)

1 - 50 of 18854 << First | < Previous | Next > | Last >>

How to cite this website?		Title	SJR	H index	Total Docs. (2011)	Total Docs. (3years)	Total Refs.	Total Cites (3years)	Citable Docs. (3years)	Cites / Doc. (2years)	Ref. / Doc.	Country
SJR is developed by:	1	Laser Physics Letters	63,545	29	106	451	3.531	1.668	449	4,54	33,31	
	2	Laser Physics	24,501	29	339	941	9.244	1.274	880	1,79	27,27	-
SCIMAGO	3	Annual Review of Immunology	12,434	204	23	70	4.559	1.979	69	31,89	198,22	-
	4	Ca-A Cancer Journal for	9.895	83	21	111	840	3,499	63	61.57	40.00	

EXERCISE 3: Journal Search - "Cell"



- I. What is the SJR of this journal?
- 2. What is the h-index of this journal?
- 3. What is the cites / doc (2 years)?
- 4. What is the % international collaboration in 2011?

Exercise 4. Click on journal rankings. Search under Subject Area – Medicine, Subject Category – Oncology as below

SJR SCIma Journa Rank	ago al & Country	EST MODUS IN REBUS Horatio (Satire 1,1,106)
Home Journal Rankings Journal Search Country Rankings Country Search Compare Map Generator	Subject Area: Subject Category: Oncology Country: All Order By: SJR Display journals with at least: 0 Citable Docs. (3 years)	▼ Year: 2011 ▼ Refresh
Help About Us	Subject Area: Medicine. Subject Category: Oncology. Year: 2011.	

Exercise 4. Click on journal rankings. Search under Subject Area – Medicine, Subject Category – Oncology; Year: 2011

- I. Which journal has the highest SJR?
- 2. Which journal has the highest h-index?
- 3. Which journal has the highest Cites / Doc. (2 years)?



h-index

	Author 1		Author 2		Author 3		
	Citations	Papers	Citations	Papers	Citations	Papers	
	300	P1	100	P1	10	P1	
	200	P2	50	P2	10	P2	
	200	P3	50	P3	10	P3	
	100	P4	50	P4	10	P4	
	50	P5	50	P5	10	P5	
	50	P6	50	P6	10	P6	
	40	P7	40	P7	10	P7	
	30	P8	30	P8	10	P8	
	20	P9	20	P9	10	P9	
	10	P10	10	P10	10	P10	
TOTAL	1000		500		100		
h-index	10		10		10		

EXERCISE 5: COMPARE JOURNALS IN THE FOLLOWING COUNTRIES FOR THE SUBJECT AREA & SUBJECT CATEGORY AS BELOW

SCImac Journal Rank	& Country EST MODUS IN REBU Horatio (Satire 1,1,1
Home	Compare
Journal Rankings	Countries Journals
Journal Search	Select countries or regions to compare
Country Rankings	
Country Search	Malaysia •+ Thailand •+ Indonesia •+ South Korea •
Compare	Subject Area: Subject Category: Medicine Infectious Diseases
Map Generator	
Help	Compare
About Us	
	Documents Citable Documents Cites Self Cites Cites per Document (Cites-Self cites) per Document
How to cite this website?	H Index % cited documents International collaboration



EXERCISE 5: COMPARE JOURNALS IN THE FOLLOWING COUNTRIES FOR THE SUBJECT AREA & SUBJECT CATEGORY

- Which country published the highest documents in 2010?
- 2. Which country received the highest citations?
- B. Which country has the highest cites per doc?

JOURNALMETRICS & CWTS JOURNAL INDICATORS

- Journals indexed in Scopus
- Refreshed twice a year
- Freely accessible
- Main indicator: **SNIP**, SJR

JOURNALMETRICS & CWTS JOURNAL INDICATORS

SOURCE-NORMALIZED IMPACT PER PAPER (SNIP) - PROF. HENK MOED (CWTS, UNIVERSITY OF LEIDEN)

→ measures contextual citation impact by weighting citations based on the total number of citations in a subject field

- JOURNAL METRICS <u>http://www.journalmetrics.com</u>
- CWTS JOURNAL INDICATORS <u>http://www.journalindicators.com</u>

JOURNALMETRICS JournalMatrics

Research analytics redefined

ABOUT SCOPUS

HOME THE VISION ABOUT JOURNAL METRICS JOURNAL METRICS VALUES RESOURCE LIBRARY

The academic community has long been demanding more transparency, choice and accuracy in journal assessment. Currently, the majority of academic output is evaluated based on a single ranking of journal impact. Bibliometricians have been exploring new methods to provide deeper insight. Within the field of journal evaluation, two of the most exciting are Source Normalized Impact per Paper (SNIP) and SCImago Journal Rank (SJR), those values are provided here free of charge.

Journal Metrics November release: Introducing the world first rolling year journal metric calculation for 2011!

On November 10, refreshed journal metrics for SNIP and SJR were released. The normal release schedule for SNIP and SJR used to be a bi-yearly one. This is the first release that now includes the world first rolling year metric for SNIP and SJR.

This rolling metric is introduced based on extensive user feedback indicating the wish for having the highest metric currency possible. We're now able to publish a metric for 2011 even though 2011 is not yet completed. The 2011 metric will be based on a complete year's Scopus data from 1 June 2010 to 31 May 2011. There is a 3 month difference between data loading in Scopus and final publishing in Scopus and on Journal Metrics.com. The metrics for 1999-2010 are calendar year metrics as normal.

About Journal Metrics	Journal Search	Download
	Search the entire collection of journals covered by Scopus along with their SNIP and SJR metrics going back to 2007. Enter one or more terms from the journal title (s), e.g. gene, america journal, etc. <i>Keywords</i> Sort by Source Title	SJR & SNIP journal metrics new in Scopus This papers introduces SNIP and SJR and underlines important points to keep in mind when using journal metrics. It presents comparisons between these and other metrics.
And a set of the set o	Ordered Ascending Search Download SNIP & SJR values	Measuring contextual citation impact of scientific journals This paper by Professor Henk Moed explores the methodology behind Source -Normalized Impact per Paper (SNIP).

CWTS JOURNAL INDICATORS

CWTS Journal Indicators



Home

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Search field

Documentation

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Universiteit Leiden



Welcome to the CWTS Journal Indicators website

This website is dedicated to the development, dissemination and discussion of journal indicators. Such indicators are being developed to assess the quality and impact of scholarly journals within the scientific community. The pioneeering one is the journal impact factor developed by Eugene Garfield at the Institute for Scientific Information (ISI), nowadays Thomson Reuters.

Recently, the **Centre for Science and Technology Studies (CWTS)** of Leiden University developed for Elsevier Scopus an indicator called the source normalized impact per paper (SNIP, see **Moed**, **2009**). This indicator can be seen as an important alternative to the impact factor. More information is available in the Documentation section. Currently, the SNIP is being produced by CWTS exclusively for Scopus. 3

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Cited Reference Search (WoS)

-- A process where you start with a reference

-- Search for citations of a journal in Web of Science (WoS) even though the journal is not indexed in WoS



Cited Reference Search

EXERCISE 6: Search for citations of "Malaysian Journal of Pathology" in WoS

WEB OF KNOWLEDGE[™]

DISCOVERY STARTS HERE

Go to mobile site	Sign In Marked List (0) My EndNote Web My ResearcherID						
All Databases Select a Database Web of Science	Additional Resources						
Search Author Finder Cited Reference Search Advanced Search	ch Search History						

Web of Science®

Cited Reference Search (Find the articles that cite a person's work)

Step 1: Enter information about the cited work. Fields are combined with the Boolean AND operator.

* Note: Entering the title, volume, issue, or page in combination with other fields may reduce the number of cited reference variants found.

	in	Cited Author	•	٩
Example: O'Brian C* OR OBrian C*				
mal* j path*	in	Cited Work	•	٩
Example: J Comp' Appl' Math' (journal abbreviation list)				
	in	Cited Year(s)	•	
Example: 1943 or 1943-1945				
Add Another Field >>				
Search Clear Searches must be in English				

Cited Reference Search

EXERCISE 6: Search for citations of "Malaysian Journal of Pathology" in WoS

I. How many articles being cited in WoS?
2. How many articles in WoS cited articles in Malaysian Journal of Pathology? [Select all, click Finish Search]

Cited Reference Search (Find the articles that cite a person's work)

Step 2: Select cited references and click "Finish Search."

Hint: Look for cited reference variants (sometimes different pages of the same article are cited or papers are cited incorrectly).

C F	CITED F Referen	REFERENCE INDEX ces: 1 - 50 of 302		Pag	e 1	of 7 Go				
Select Page Select All* Clear All Finish Search										
	Select	Cited Author	Cited Work [SHOW EXPANDED TITLES]	Year	Volume	Issue	Page	Identifier	Citing Articles **	View Record
		Abubakar, Sazaly ⊞[Show all authors]	Malays J Pathol	2002	24	1	29		2	
		Abubakar, Sazaly ⊞[Show all authors]	Malays J Pathol	2002	24	1	23		3	
	V	Abubakar, S ⊡⊡[Show all authors]	Malays J Pathol	1998	20	2	71		2	

Cited Reference Search

Results Cited Work=(mal* j path*)

Timespan=All Years. Databases=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH.

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Results: 688		A age 1 of 69 Go >>	Sort by: Publication Date newest to oldest
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Search within results for Search Web of Science Categories Refine PATHOLOGY (85) INFECTIOUS DISEASES (58) ONCOLOGY (54)	□ 1.	Title: Real-time monitoring of adherent Vero cell density and apoptosis in bioreactor process Author(s): Petiot, Emma; El-Wajgali, Amal; Esteban, Geoffrey; et al. Source: CYTOTECHNOLOGY Volume: 64 Issue: 4 Pages: 429-441 DOI: 10.1007/s10616-011-9421-2 Times Cited: 0 (from Web of Science)	sses Published: AUG 2012
MICROBIOLOGY (51) IMMUNOLOGY (38) more options / values	2.	Title: Molecular study and genotype/phenotype correlation of beta thalassemia in Malaysia Author(s): Sivalingam, M.; Looi, M. L.; Zakaria, S. Z. S.; et al. Source: INTERNATIONAL JOURNAL OF LABORATORY HEMATOLOGY Volume: 34 Issue: 4 Pages: 3 553X.2012.01405.x Published: AUG 2012 Times Cited: 0 (from Web of Science)	377-382 DOI: 10.1111/j.1751-
Document Types ARTICLE (545) REVIEW (103) PROCEEDINGS PAPER (19) EDITORIAL MATERIAL (17) LETTER (14) more options / values	□ 3.	→ Full Text [View abstract] Title: A Unique Cause of a Rare Disorder, Unilateral Macromastia Due to Lymphangiomatos Author(s): Hynes, Sean O.; McLaughlin, Ray; Kerin, Michael; et al. Source: BREAST JOURNAL Volume: 18 Issue: 4 Pages: 367-370 DOI: 10.1111/j.1524-4741.2012.012 Times Cited: 0 (from Web of Science)	is of the Breast: A Case Report 256.x Published: JUL-AUG 2012
 Research Areas Authors Group Authors Editors 	. 4.	Title: Antibiotic Use and Resistance in Long-Term Care Facilities Author(s): van Buul, Laura W.; van der Steen, Jenny T.; Veenhuizen, Ruth B.; et al. Source: JOURNAL OF THE AMERICAN MEDICAL DIRECTORS ASSOCIATION Volume: 13 Issue: 6 JUL 2012 Times Cited: 0 (from Web of Science)	DOI: 10.1016/j.jamda.2012.04.004 Published:
 Source Titles Book Series Titles 		→ Full Text [
Conference Titles Publication Years Organizations-Enhanced	5.	Title: Evaluation of nutrient agar for the culture of Mycobacterium tuberculosis using the m Author(s): Satti, L.; Abbasi, S.; Faiz, U. Source: INTERNATIONAL JOURNAL OF TUBERCULOSIS AND LUNG DISEASE Volume: 16 Issue: 7 Published: JUL 2012 Times Cited: 0 (from Web of Science)	icrocolony detection method Pages: 908-910 DOI: 10.5588/ijtld.11.0849

PUBLISH OR PERISH

Publish or Perish is a software program that retrieves and analyzes academic citations. It uses <u>Google Scholar</u> to obtain the raw citations, then analyzes these and calculates a series of <u>citation metrics</u>.

http://www.harzing.com/pop_win.htm

PUBLISH OR PERISH

2. Download the Publish or Perish software installer from the Harzing.com web site:

Version 3.7.4564 - 29 June 2012 - What's new?

Start the PoPSetup.exe installer by double-clicking on the file that you just downloaded. On most systems, a security
warning dialog box will now appear that looks like one of the following.

Windows XP

Windows Vista

UO ye	u want to run this file?
-	Name: PoPSetup.exe
	Publisher: Tarma Software Research Pty Ltd
	Type: Application
	From: \\d\temp
	Run Cancel
AN	ays ask before opening this file
	Dutenkaw nami your computer. Univ run sonware from publishers
~	you trust. What's the risk?
ccount	you trust. What's the risk?
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Publish or Perish

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	Journal impact analysis - Perform a citation analysis for one or more journals						
Journal impact analysis	Journal title:						
General citation search Multi-guesy center	Exclude these words	s:					
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Program maintenance							
Check for updates	NOTE: Subject area selection is currently non-functional						
t Hala magumaa	Results						
Help contents	Papers: Citations:	Cites/paper: Cites/author:	h-index: a-index:				
What's new?	Years:	Papers/author:	hc-index:				
2-Minute introduction	Cites/year:	Authors/paper:	hI,norm:				
Frequently Asked Questions	Cites	Per vear Rank Authors	Title	Year	Publication		

Accuracy of the results?



Open in browser...

Version information

Publish or Perish home page The Publish or Perish Book

"The Publish or Perish Book is more than just a guide to the software. It is a tremendously accessible introduction to bibliometrics and

Amazon customer review

citation analysis..."

Comparison table of SCImago Journal Rank (SJR), Article Influence (AI), Source-Normalized Impact per Paper (SNIP), Impact Factor (IF)

	Publication window	Citation window	Inclusion of journal self- citations	Subject field normalization	Document types used in numerator	Document types used in denominator	Role of 'status' of citing source	Underlying database	Effect of extent of database coverage				
SJR	3 years	l year	Limited to a maximum of 33%	Yes, distribution of prestige accounts for different numbers of	Articles, conference papers & reviews	Articles, conference papers & reviews	Weights citations on the basis of prestige of the journal issuing them	Scopus	Prestige values are redistributed, with more prestige being represented in fields where the database coverage is more complete				
AI	5 years		Νο	references in different fields	All items	Articles, letters & reviews		WoS/JCR					
SNIP	3 years						Yes	Yes, based on citations originating from citing journals	Articles, conference papers & reviews	Articles, conference papers & reviews	No role	Scopus	Corrects for differences in database coverage across subject fields
IF	2 years					Νο	All items	Articles, letters & reviews		WoS/JCR	Does not correct for differences in database coverage across subject fields		

Thank you