

Knitting Together Qualitative and Quantitative Data About Your E-journals

EVALUATING THE QUALITY OF YOUR MOST HIGHLY-USED EJOURNALS

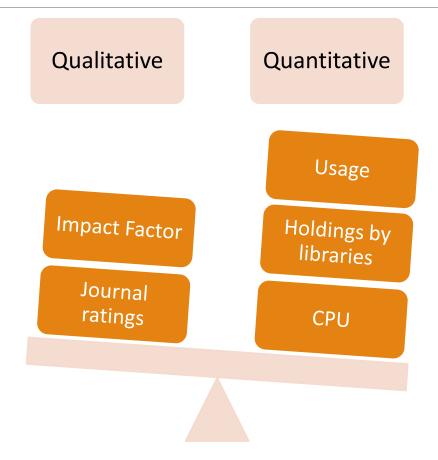
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How do you evaluate journals?





The Librarian's Perennial Conundrum

QUALITATIVE MEASURES

Based on perceptions (of quality)

Subjective

Prone to bias

Hard to find or access

Difficult to integrate with other information

QUANTITATIVE MEASURES

More accessible

Easier to understand and use

Perceived as being less biased

Often more relevant to meeting own users' needs.



The value of comparing resources by both qualitative and quantitative measures

When comparison shopping

- Which to buy?
- Which to drop?

For accreditation reviews

• We have 80% of the top-tier journals!

Collaborative selection with faculty

• Which *should* be used more?



Sources of qualitative lists

Bibliographies

Standardized journals lists

Lists of journals indexed by key literature databases

Departmental lists of journals for tenure review

Journal Citation Reports



Quick look at JCR

Original source of the "Impact Factor"

- Based on recent citations to recently published articles
- Two-year and now, 5-year

Include other metrics, including:

- # Publications
- # Citations
- Eigenfactor
- Immediacy Index

Available by subscription only

Much debate about the utility of these metrics, but...

• Assume their validity for the moment.



Qualitative measure: Overlap with JCR

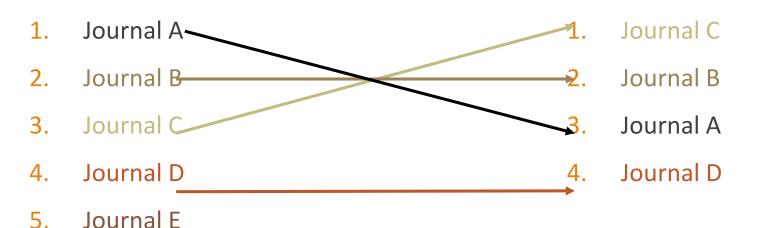
Your library's Your library's journal journal holdings oldings JCR Journals Your library's journal All Categories holdings



Comparing usage ranks with JCR ranks

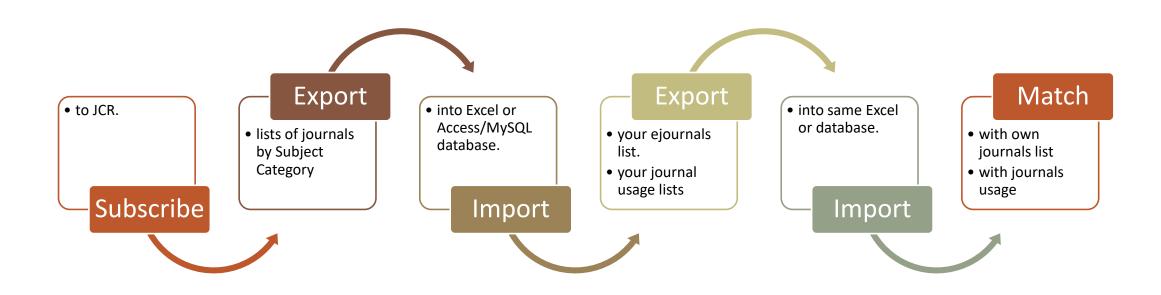
GLOBAL CITATION ANALYSIS RANK (JCR)

LOCAL JOURNAL USAGE RANK



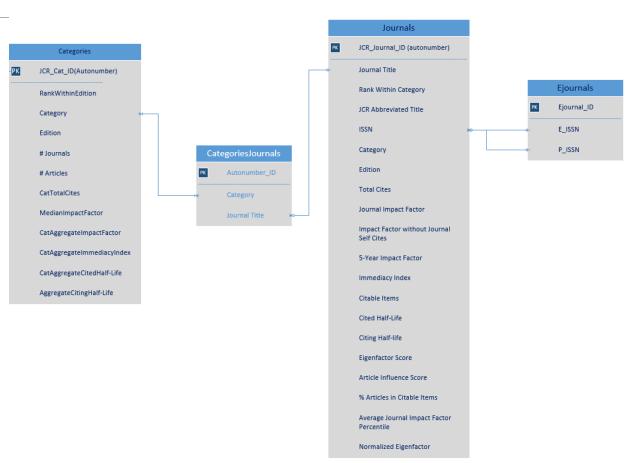


But, isn't this a lot of work?



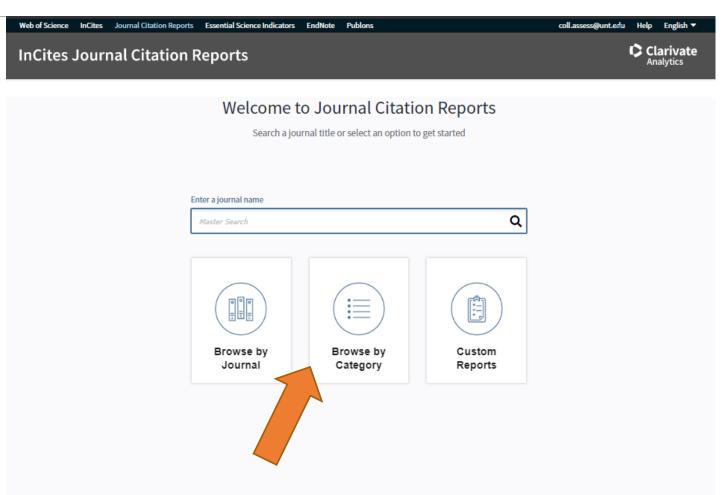
General Process for Creating JCR Database

- 1. Download Categories data and merge
- Download Journals by Category and merge
- 3. Combine Journals and Categories
- 4. Create Junction table and format
- 5. Import into database
- 6. Import ejournals table
- Create queries to compare ejournals holdings to JCR lists



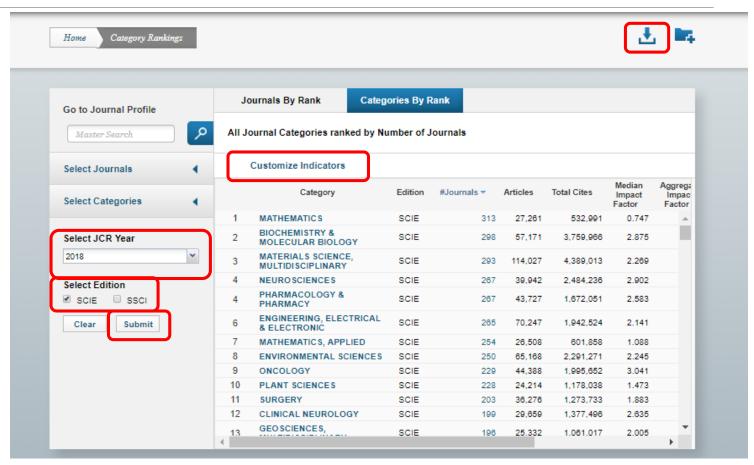
Demo exporting from JCR — Go to JCR Insights

Start from JCR Home page
Select "Browse By Category"



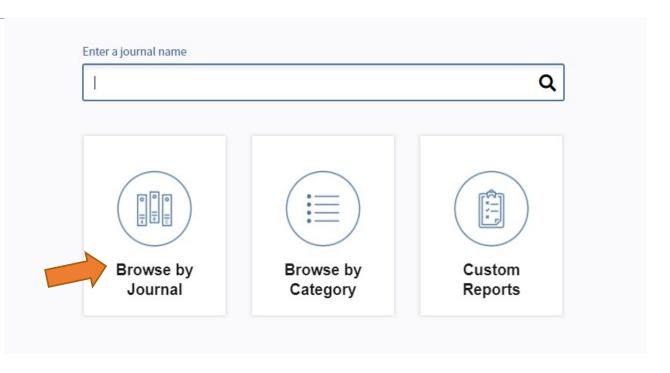
Demo exporting from JCR – Download Categories I (Configure categories)

- Select the variables you'll need
- 2. Select the correct year
- Select only "SCIE"
- 4. Submit
- Download your data
- Repeat with "SSCI" instead of "SCIE"



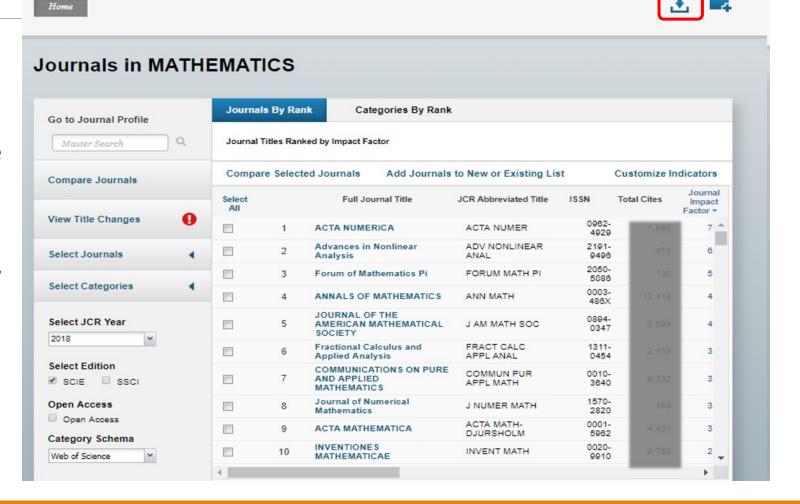
Demo exporting from JCR — downloading all Journals lists

Return to the Clarivate homepage and select "Browse by Journal"



Demo exporting from JCR – downloading all Journals lists

- Select the correct year and only "SCIE", then submit.
- 2. For each JCR Category, select the "#Journals" value and then download the data there.
- 3. Download journal list for every JCR Category, for both the "SCIE" and "SSCI" editions.



Demo exporting from JCR – Combine the two Categories workbooks

For each Categories and Journals CSV files:

- Delete the top row above headers (download information)
- Delete the last two rows below data (copyright statement)

Wherever a category is present in both SSCI and SCIE, append "(SSCI)" to the end of the SSCI version.

• Example:

Category	Key	Edition	Category	Key	Edition
GREEN & SUSTAINABLE SCIENCE & TECHNOLOGY	97	SSCI	 GREEN & SUSTAINABLE SCIENCE & TECHNOLOGY (SSCI)	97	SSCI
GREEN & SUSTAINABLE SCIENCE & TECHNOLOGY	98	SCIE	GREEN & SUSTAINABLE SCIENCE & TECHNOLOGY	98	SCIE

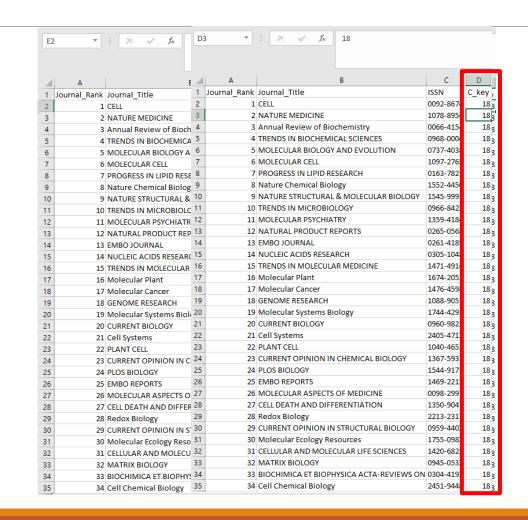
Create Junction table

Create a new sheet and copy over the complete Journal Rank, Journal Title, and Category columns from the Journals sheet

4	Α	В	С	D
1	Journal_Rank	Journal_Title	ISSN	Category
2	1	CELL	0092-8674	BIOCHEMISTRY & MOLECULAR BIOLOGY
3	2	NATURE MEDICINE	1078-8956	BIOCHEMISTRY & MOLECULAR BIOLOGY
4	3	Annual Review of Biochemistry	0066-4154	BIOCHEMISTRY & MOLECULAR BIOLOGY
5	4	TRENDS IN BIOCHEMICAL SCIENCES	0968-0004	BIOCHEMISTRY & MOLECULAR BIOLOGY
6	5	MOLECULAR BIOLOGY AND EVOLUTION	0737-4038	BIOCHEMISTRY & MOLECULAR BIOLOGY
7	6	MOLECULAR CELL	1097-2765	BIOCHEMISTRY & MOLECULAR BIOLOGY
8	7	PROGRESS IN LIPID RESEARCH	0163-7827	BIOCHEMISTRY & MOLECULAR BIOLOGY
9	8	Nature Chemical Biology	1552-4450	BIOCHEMISTRY & MOLECULAR BIOLOGY
0	9	NATURE STRUCTURAL & MOLECULAR BIOLOGY	1545-9993	BIOCHEMISTRY & MOLECULAR BIOLOGY
1	10	TRENDS IN MICROBIOLOGY	0966-842X	BIOCHEMISTRY & MOLECULAR BIOLOGY
2	11	MOLECULAR PSYCHIATRY	1359-4184	BIOCHEMISTRY & MOLECULAR BIOLOGY
13	12	NATURAL PRODUCT REPORTS	0265-0568	BIOCHEMISTRY & MOLECULAR BIOLOGY
4	13	EMBO JOURNAL	0261-4189	BIOCHEMISTRY & MOLECULAR BIOLOGY
15	14	NUCLEIC ACIDS RESEARCH	0305-1048	BIOCHEMISTRY & MOLECULAR BIOLOGY
6	15	TRENDS IN MOLECULAR MEDICINE	1471-4914	BIOCHEMISTRY & MOLECULAR BIOLOGY
7	16	Molecular Plant	1674-2052	BIOCHEMISTRY & MOLECULAR BIOLOGY
8	17	Molecular Cancer	1476-4598	BIOCHEMISTRY & MOLECULAR BIOLOGY
9	18	GENOME RESEARCH	1088-9051	BIOCHEMISTRY & MOLECULAR BIOLOGY
20	19	Molecular Systems Biology	1744-4292	BIOCHEMISTRY & MOLECULAR BIOLOGY
21	20	CURRENT BIOLOGY	0960-9822	BIOCHEMISTRY & MOLECULAR BIOLOGY
22	21	Cell Systems	2405-4712	BIOCHEMISTRY & MOLECULAR BIOLOGY
23	22	PLANT CELL	1040-4651	BIOCHEMISTRY & MOLECULAR BIOLOGY
24	23	CURRENT OPINION IN CHEMICAL BIOLOGY	1367-5931	BIOCHEMISTRY & MOLECULAR BIOLOGY
25	24	PLOS BIOLOGY	1544-9173	BIOCHEMISTRY & MOLECULAR BIOLOGY
26	25	EMBO REPORTS	1469-221X	BIOCHEMISTRY & MOLECULAR BIOLOGY
27	26	MOLECULAR ASPECTS OF MEDICINE	0098-2997	BIOCHEMISTRY & MOLECULAR BIOLOGY
28	27	CELL DEATH AND DIFFERENTIATION	1350-9047	BIOCHEMISTRY & MOLECULAR BIOLOGY
29	28	Redox Biology	2213-2317	BIOCHEMISTRY & MOLECULAR BIOLOGY
30	29	CURRENT OPINION IN STRUCTURAL BIOLOGY	0959-440X	BIOCHEMISTRY & MOLECULAR BIOLOGY
31	30	Molecular Ecology Resources	1755-098X	BIOCHEMISTRY & MOLECULAR BIOLOGY
32	31	CELLULAR AND MOLECULAR LIFE SCIENCES	1420-682X	BIOCHEMISTRY & MOLECULAR BIOLOGY
33	32	MATRIX BIOLOGY	0945-053X	BIOCHEMISTRY & MOLECULAR BIOLOGY
34	33	BIOCHIMICA ET BIOPHYSICA ACTA-REVIEWS ON CANCER	0304-419X	BIOCHEMISTRY & MOLECULAR BIOLOGY
35	34	Cell Chemical Biology	2451-9448	BIOCHEMISTRY & MOLECULAR BIOLOGY
36	35	ONCOGENE	0950-9232	BIOCHEMISTRY & MOLECULAR BIOLOGY

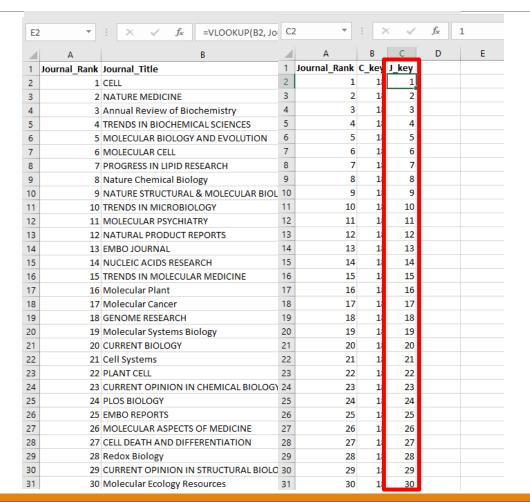
Formatting Categories table

- Add Key column
- Create "C_Key" column in Junction sheet and add vlookup to junction table
- 3. Copy and paste keys column in Junction sheet as static values
- Delete Categories column from Junction sheet



Formatting the Journals Table

- Delete Category and Rank columns from Journals sheet, then remove duplicates from Journals sheet
- Create a new Key column in the Journals table, just like the Categories sheet
- Add J_Key column to Junction sheet, and import the key values based on Journal title
- C/P J_Key column as static values and delete the Journal Title column



Notes on Analyzing/Summarizing JCR Data

In the Categories sheet, some fields use ">10.0" for values outside the range.

Replace these values with 11.0

	D	E	r	
	Category	Aggregate Cited Half-Life	Aggregate Citing Half-Life	# Jc
5	AGRONOMY	>10.0	3.5	
6	ALLERGY	8.7	>10.0	
8	GREEN & SUSTAINA	3	7.3	

	В	E	F	
	Category	Aggregate Cited Half-Life	Aggregate Citing Half-Life	#]
55	AGRONOMY	11	3.5	
16	ALLERGY	8.7	11	
8	GREEN & SUSTAINA	3	7.3	

In the Journals sheet, some fields use "Not Available", which must be removed for analysis

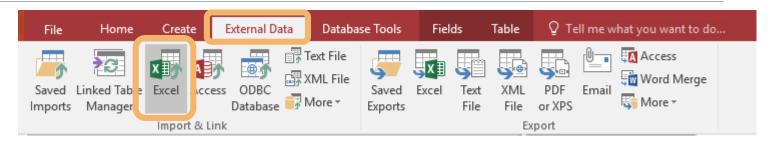
 Delete these values and leave the cell blank.

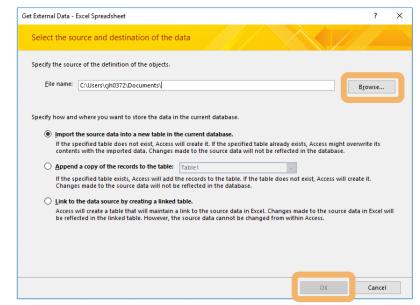
Full Journal Title	Category	5-Year Impact Factor
Antioxidants	BIOCHEMISTRY	Not Available
Biomolecules	BIOCHEMISTRY	Not Available

Full Journal Title	Category	5-Year Impact Factor
Antioxidants	BIOCHEMISTRY	
Biomolecules	BIOCHEMISTRY	

Creating Database Tables

- Create a new, blank database in Access for your JCR content.
- Under "External Data" in the ribbon, select "Excel"
- In the first window, click "Browse", navigate to the folder your JCR workbooks are save in, and open your combined categories workbook.
- 4. The rest of the defaults for importing the Excel sheet into a table are fine.

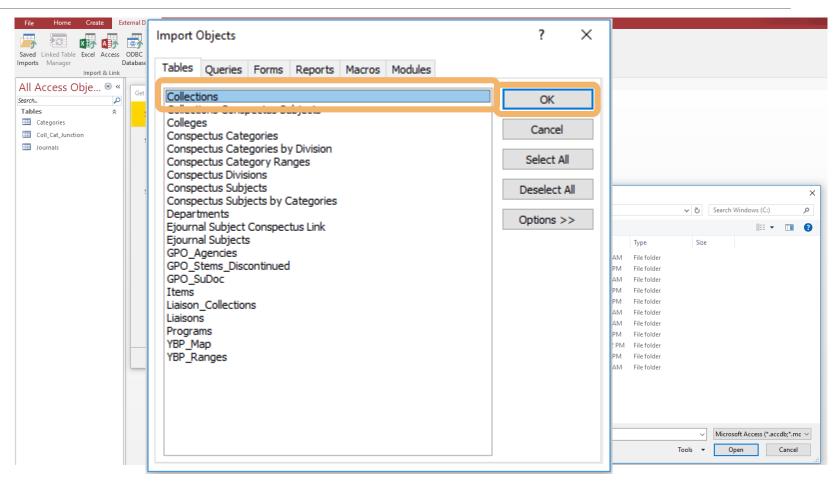






Importing Ejournals List

- In the "External Data" ribbon, select "Access"
- Open the database where you store your e-journals holdings
- 3. Import the table(s) where you store your holdings, including their eISSN/pISSN identifiers.





Queries to match

For querying this new JCR database, you'll want to select from the Journals table as your base table, then join to

- The Collections/Journals junction table on the J_Key identifier
- The Collections table from the junction table on the C_Key identifier
- The Collections table by using an OR to join based on the holdings
 - Ex. INNER JOIN on ISSN = holdings.eISSN UNION

INNER JOIN on ISSN = holdings.pISSN WHERE holdings.eISSN <> holdings.pISSN

Examples of our queries are available on the UNT Libraries Github



Excel Features & Functions Used

Formatting as Tables

ease in labeling & referencing

VLOOKUP()

to match with Ejournals list

If() & ISERROR()

to label matched titles If() & OR()

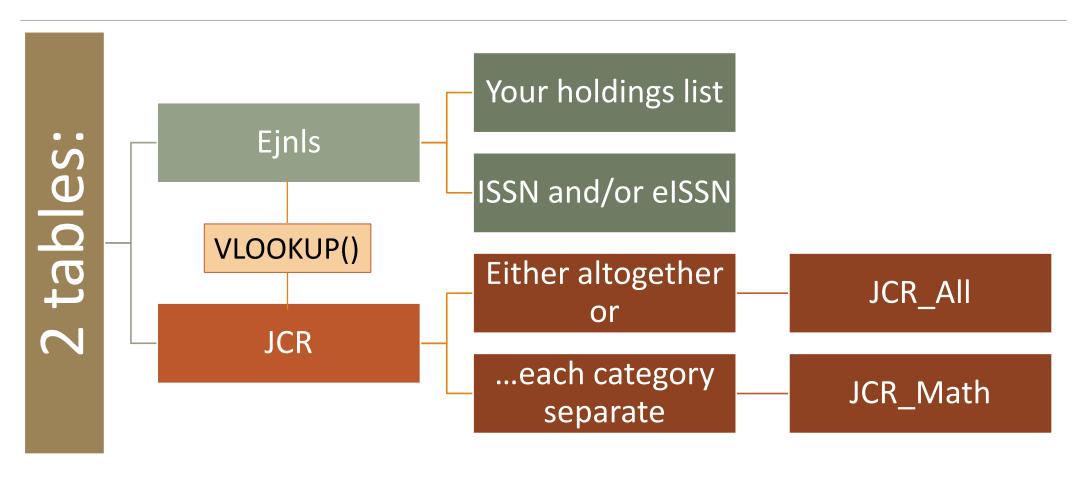
to identify all titles that matched

Pivot table

to summarize total by category



Excel Structure & Format





Starting point

JCR JOURNALS

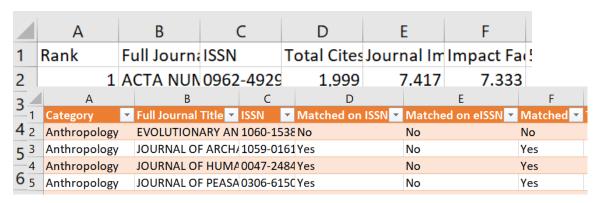


Table name: JCRTablethame: JCR_All

OWN EJOURNALS

	Туре	*	Title			*	ISSN	-	elSSN	-
7895	Journal		Acta	of bioer	nginee	rir	1509-	409X		
7898	Journal		Acta	oncolog	ica		0284-	186X	1651-2	226X
7899	Journal		Acta	oncolog	ica		0284-	186X	1651-2	226X
7900	Journal		Acta	oncolog	gica (St	toc	1100-	1704		
7904	Journal		Acta	ophthal	molog	gica	1755-	375X	1755-3	3768
7906	Journal		Acta	ophthal	molog	gica	1395-	3907	1600-0	0420
7907	Journal		Acta	oriental	ia (Kø	be	0001-	6438		
7909	Journal		Acta	orthopa	edica		1745-	3674	1745-3	3682
7914	Journal		Acta	orthopa	edica		1745-	3674	1745-3	3682
7915	Journal		Acta	orthopa	edica		1745-	3674	1745-3	3682

Table name: **Ejnls**



Matching steps

In the JCR table(s), add 3 columns:

- Matched on ISSN
- Matched on elSSN
- Matched



Matching Formulae

Use these formulae for the respective columns:

- Matched on ISSN:
 - =IF(ISERROR(VLOOKUP([@ISSN],Ejnls[ISSN],1,FALSE)),"No","Yes")
- Matched on eISSN:
 - =IF(ISERROR(VLOOKUP([@ISSN],Ejnls[eISSN],1,FALSE)),"No","Yes")
- Matched:
 - =IF(OR([@[Matched with Ejnls on ISSN]]="Yes",[@[Matched on eISSN]]="Yes"),"Yes","No")



Summarize by Category

IF ALL JCR LISTS IN ONE WORKSHEET...

IF EACH CATEGORY IS A WORKSHEET...

Insert a pivot table

- Rows: Category
- Columns: Matched
- Values: COUNT(Title)

Count Matches

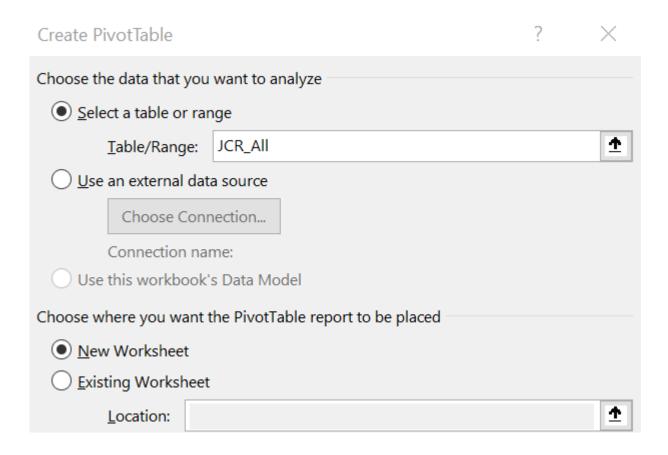
- Table ribbon -> Design tab
- Check: Total Row
- Scroll to bottom of table
- In the **Total** cell for the **Matched** column, use this formula:
 =COUNTIF([Matched], "Yes")



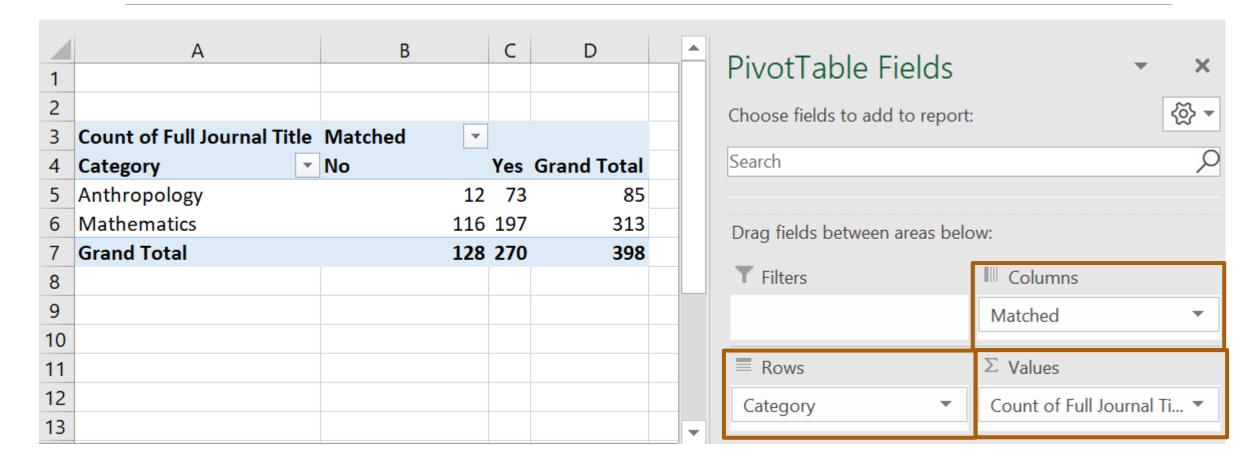
	А	В	C	D	E	F
1	Category T	Full Journal Title 🔻	ISSN 💌	Matched on ISSN ▼	Matched on eISSN 🔻	Matched 💌
2	Anthropology	EVOLUTIONARY AN	1060-1538	No	No	No
3	Anthropology	JOURNAL OF ARCH	1059-0161	Yes	No	Yes
4	Anthropology	JOURNAL OF HUMA	0047-2484	Yes	No	Yes
5	Anthropology	JOURNAL OF PEASA	0306-6150	Yes	No	Yes

Table name: JCR_All

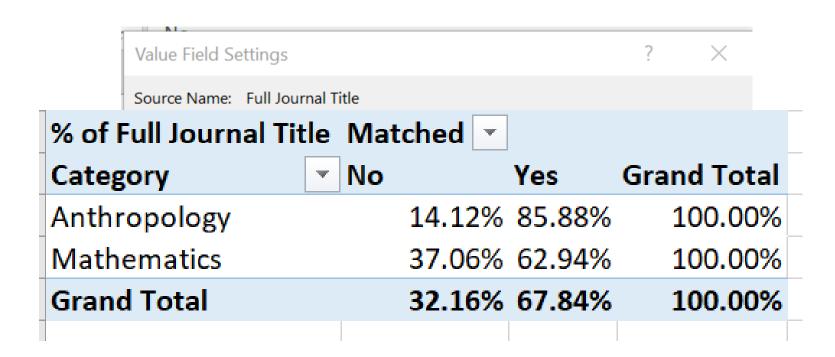














Limitations

Going to be errors/mismatches

Review lists carefully



Extensions

% of top x% by metric

Map the subject categories to subject-based collections



Appendix

More queries

Detailed ERMs Links to
GitHub
stuff