Accessing Scopus (Q1 & Q2) Journals for Publication and How to publish in Impact Journals

Prof Oluwadiya S Kehinde   www.oluwadiya.com
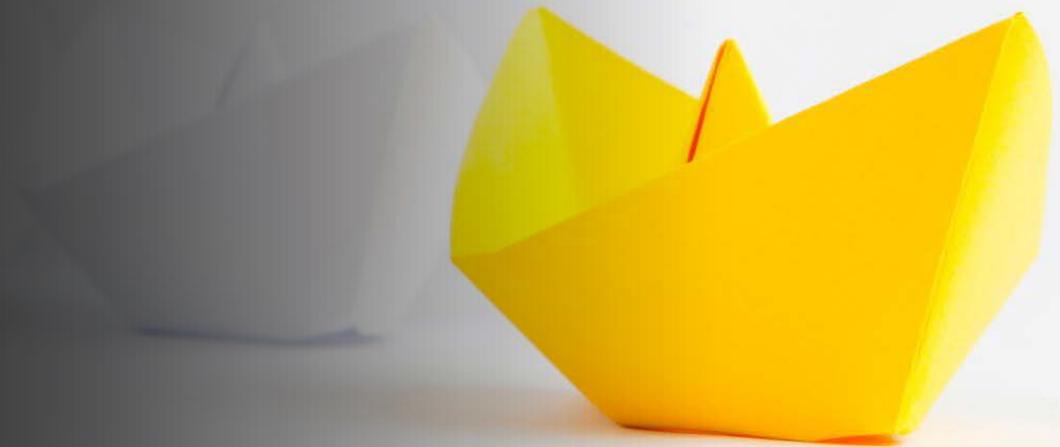
Outline

- Brief introduction to academic publication
- Impact and impact journals
- Identifying Scopus Q1 and Q2 Journals
- Getting Published in Q1 & Q2 Journals

Outline 1

Brief introduction to academic publication

Plan your life as if you will live to be 100 years old and healthy

A brief history of academic publication

First two Scientific Journals

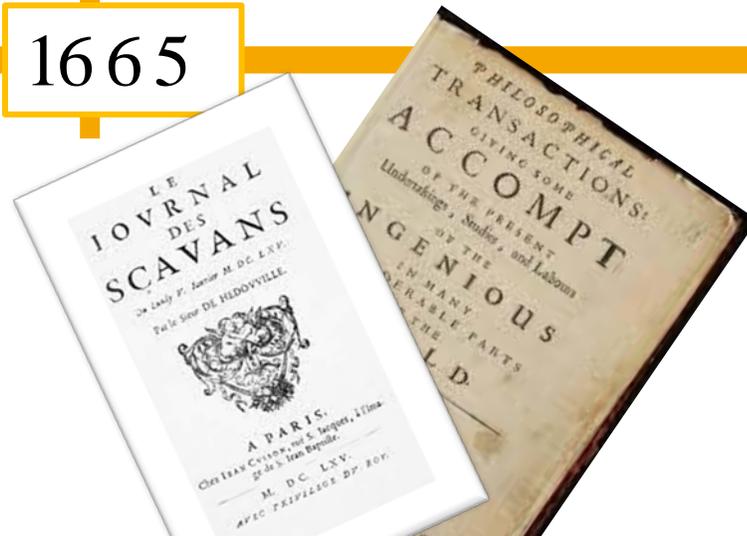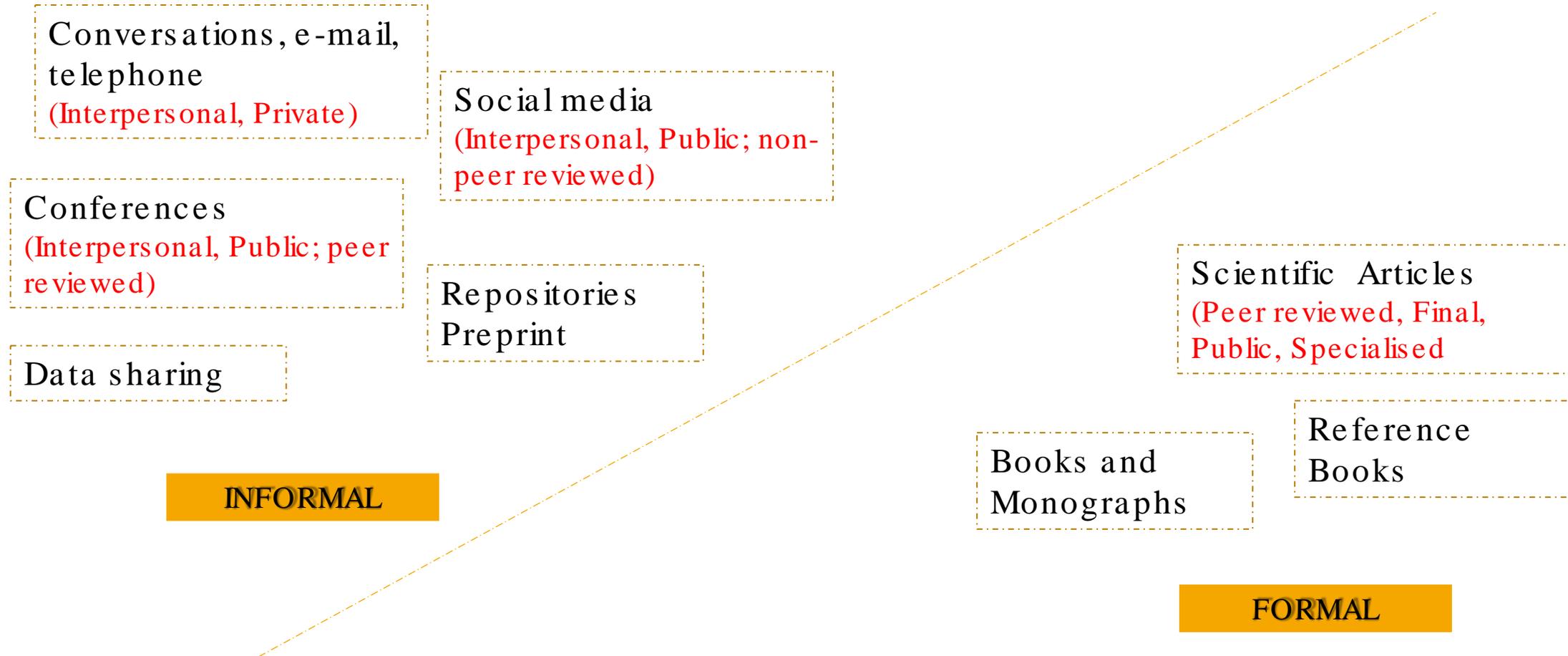Books were the only scientific publications

1665

1950

2021

Exponential increase in Scientific Journals

How do researchers communicate

Conversations, e-mail, telephone
(Interpersonal, Private)

Social media
(Interpersonal, Public; non-peer reviewed)

Conferences
(Interpersonal, Public; peer reviewed)

Repositories
Preprint

Data sharing

Scientific Articles
(Peer reviewed, Final, Public, Specialised

Reference Books

Books and Monographs

INFORMAL

FORMAL

How do researchers communicate?

From an uncontrolled environment

(Interpersonal, Private)

Social media
(Interpersonal, Public; non-peer reviewed)

Conferences
(Interpersonal, Public; peer reviewed)
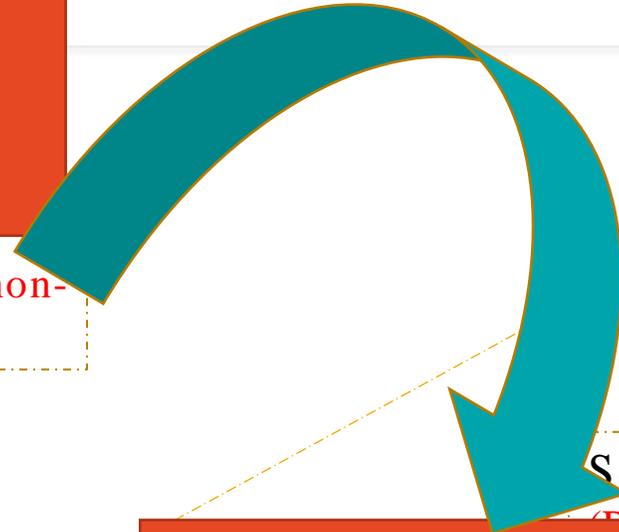
Repositories
Preprint

Data sharing

Scientific Articles

To a transparent and controlled one

Monographs

INFORMAL

FORMAL

What is the gold standard of academic communication?

Scientific Articles

Why are scientific publications so highly valued?

Scientific Articles
(Peer reviewed, Final, Public, Specialized

Article Level Matrix

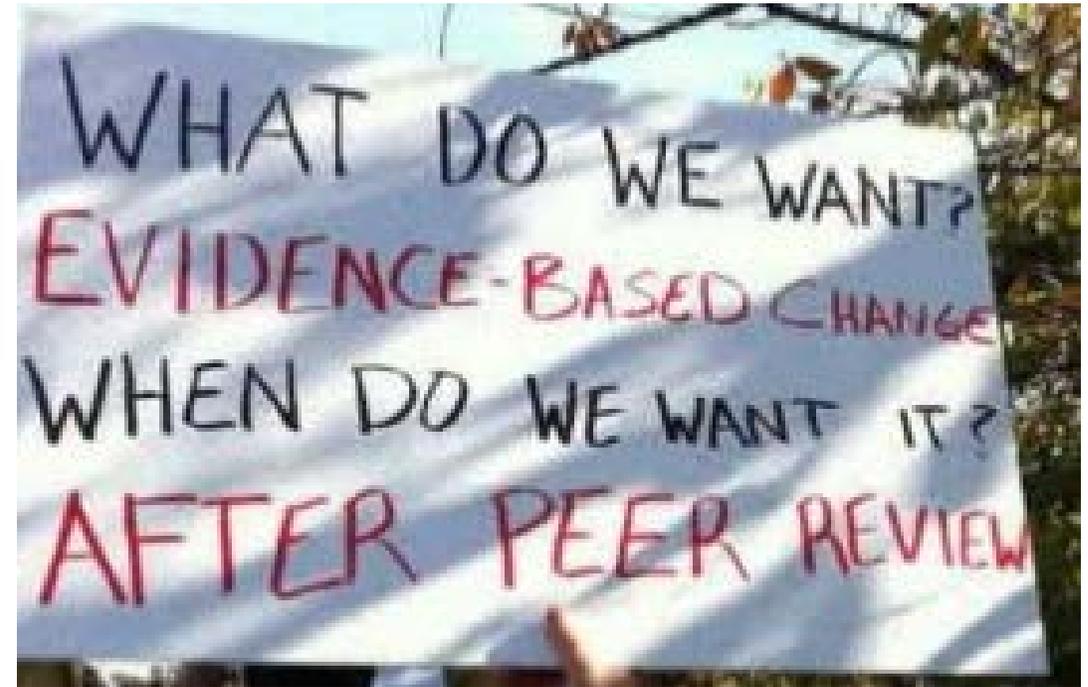Peer Review

Scientific Journals
(Impact factors, Journal Rankings, Visibility)

Article Level Matrix

Peer review process ensures credibility

Peer review is the principal mechanism for quality control in most scientific disciplines. By assessing the quality of research, peer review determines what scientific research receives funding and what research results are published. This review of the literature...

WHAT DO WE WANT?
EVIDENCE-BASED CHANGE
WHEN DO WE WANT IT?
AFTER PEER REVIEW

Bornmann, L. (2011). *Scientific peer review. Annual Review of Information Science and Technology, 45(1), 197–245.* doi:10.1002/aris.2011.1440450112

Who won't like to be published in any of these journals?
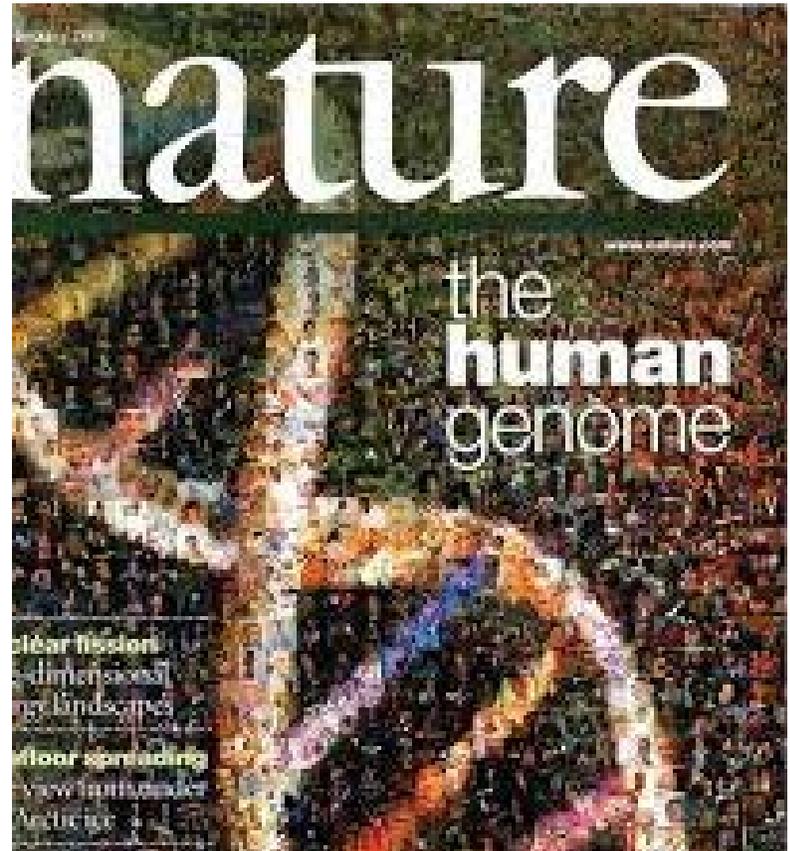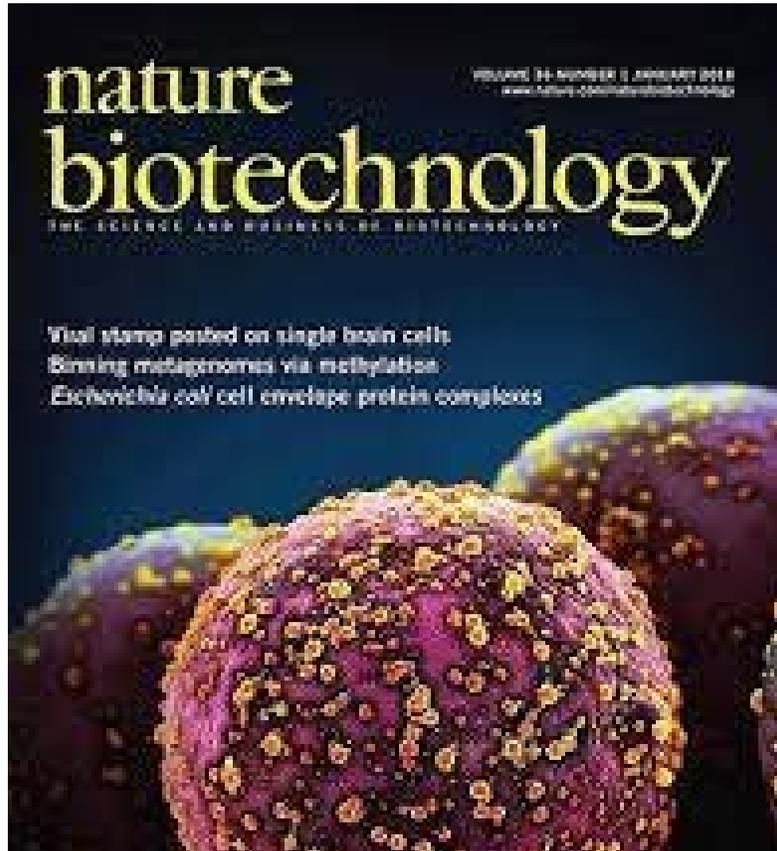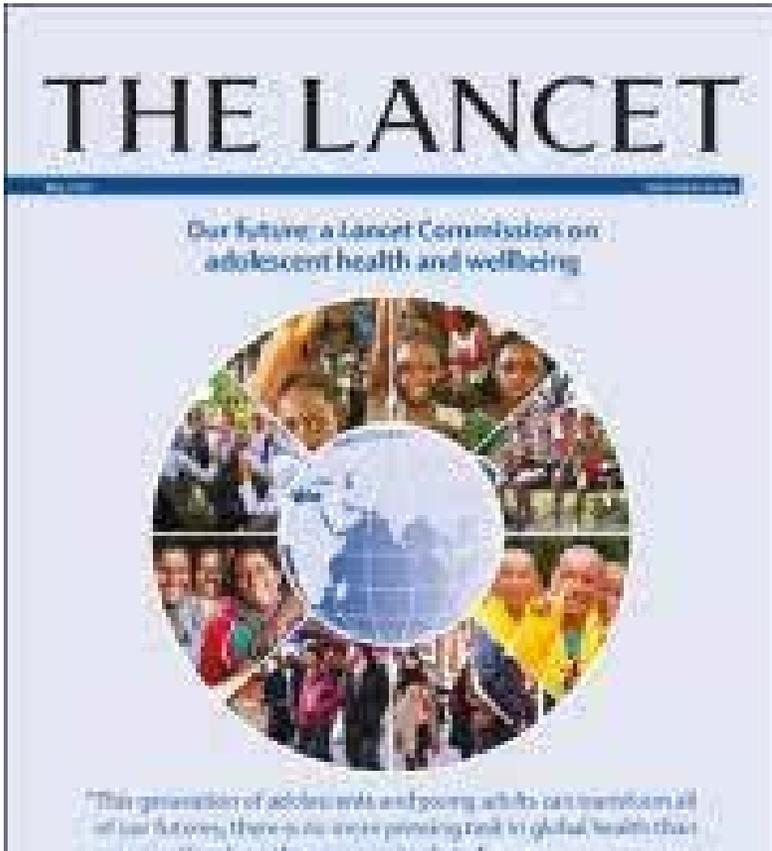
Scientific publication include references to previous studies (citation)
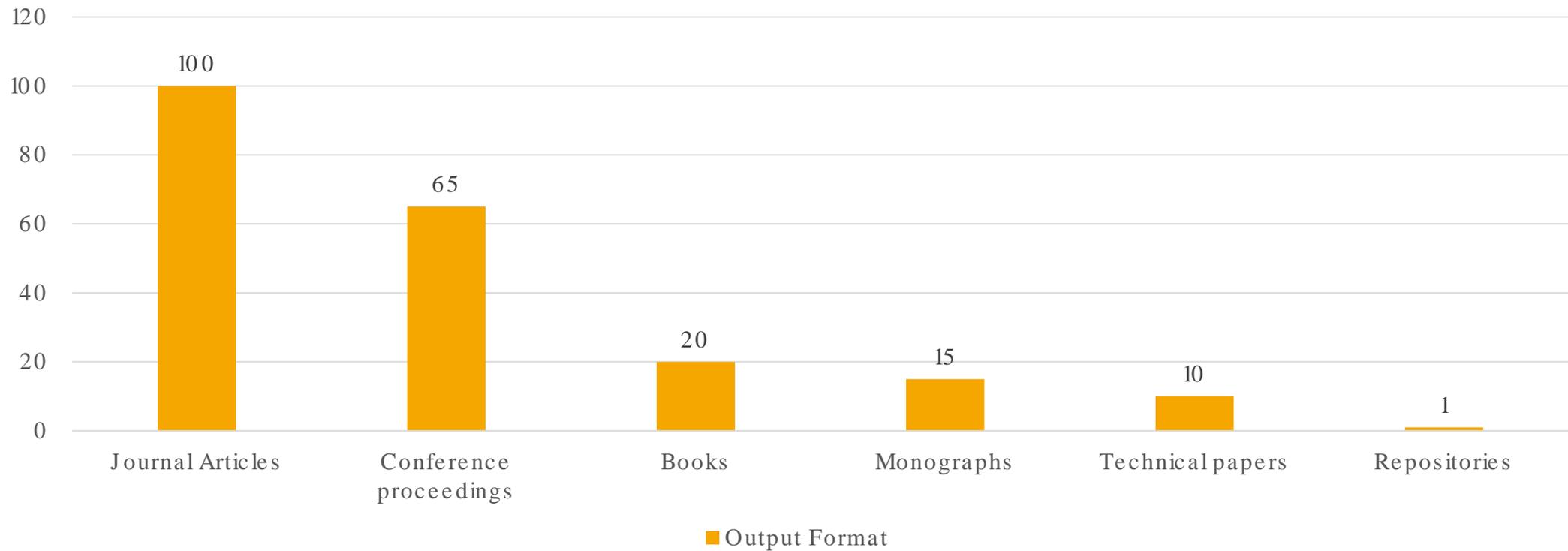
Citations cite important papers

They ensure virtual immortalities for the authors being referenced

They are a snapshot of the subjects they cite

Scholarly output format among academics

120	
100	100
80	65
60	
40	
20	20 15 10 1
0	Journal Articles Conference proceedings Books Monographs Technical papers Repositories

■ Output Format

Academic's opinion of importance of each publishing format

Channel (no. of responses)	Very important (%)	Quite important (%)	Not important (%)
Peer reviewed journals journals (843)	94		0.1
Conference presentations/ posters (843)	34	52	13
Monographs (819)	34		32
Book chapters (836)	23	60	
Professional journals (821)	19	30	36
Open access repository (816)	10	28	41
Reports (828)	9	35	44
Datasets (819)	8	20	39
Working papers (821)	5	27	51
Creative works (including exhibitions & performances) (818)	3	8	40
Internet blog/forum (816)	2	10	70
Other (621)	7	5	19

Sources of journal article author's citation

Source of citation	Number	Percentage
Journal articles	243	72.3
Books	55	16.4
Conference proceedings	8	2.4
Grey literature	12	3.6
Websites	3	0.9
Theses	2	0.6
In press	1	0.3
Others	12	3.6
Total	336	100

But citation sources are not the same across specialties
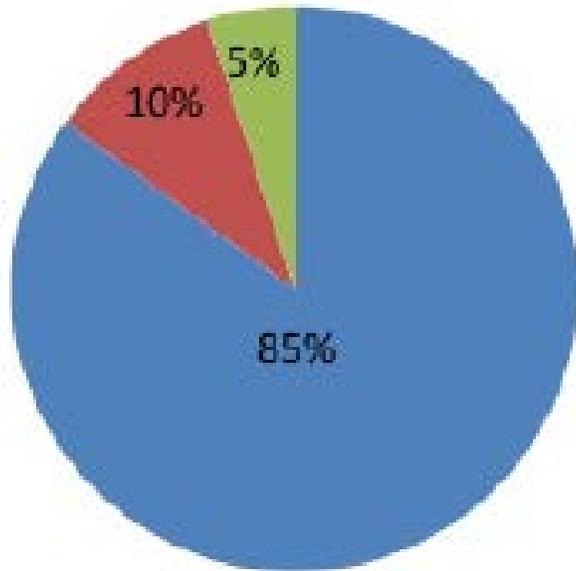
Experimental Sciences | Social Sciences | Humanities

Experimental Sciences: 85%, 10%, 5%
Social Sciences: 50%, 40%, 10%
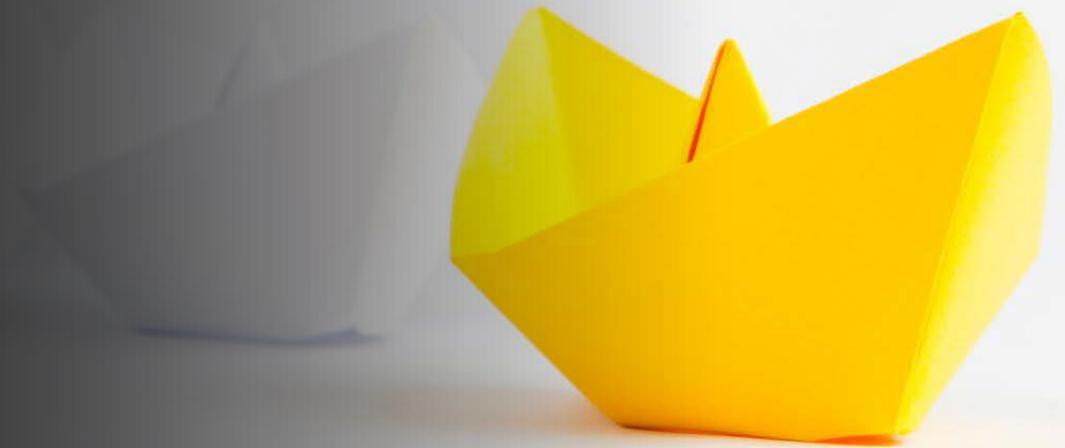Humanities: 30%, 60%, 10%
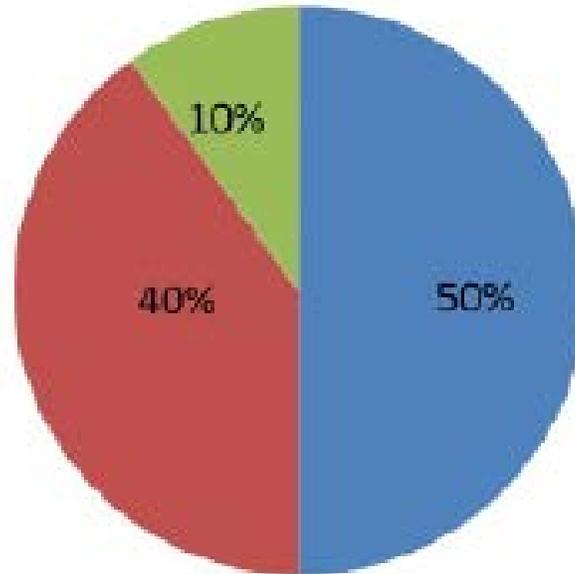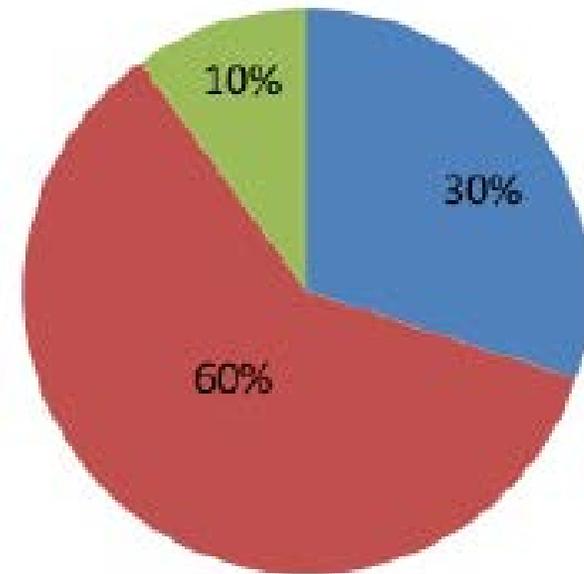
Journals ■ Books ■ Others

Outline 2
Impact and Impact Factor

What is impact?

impact noun

Save Word
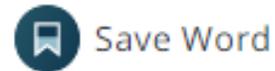
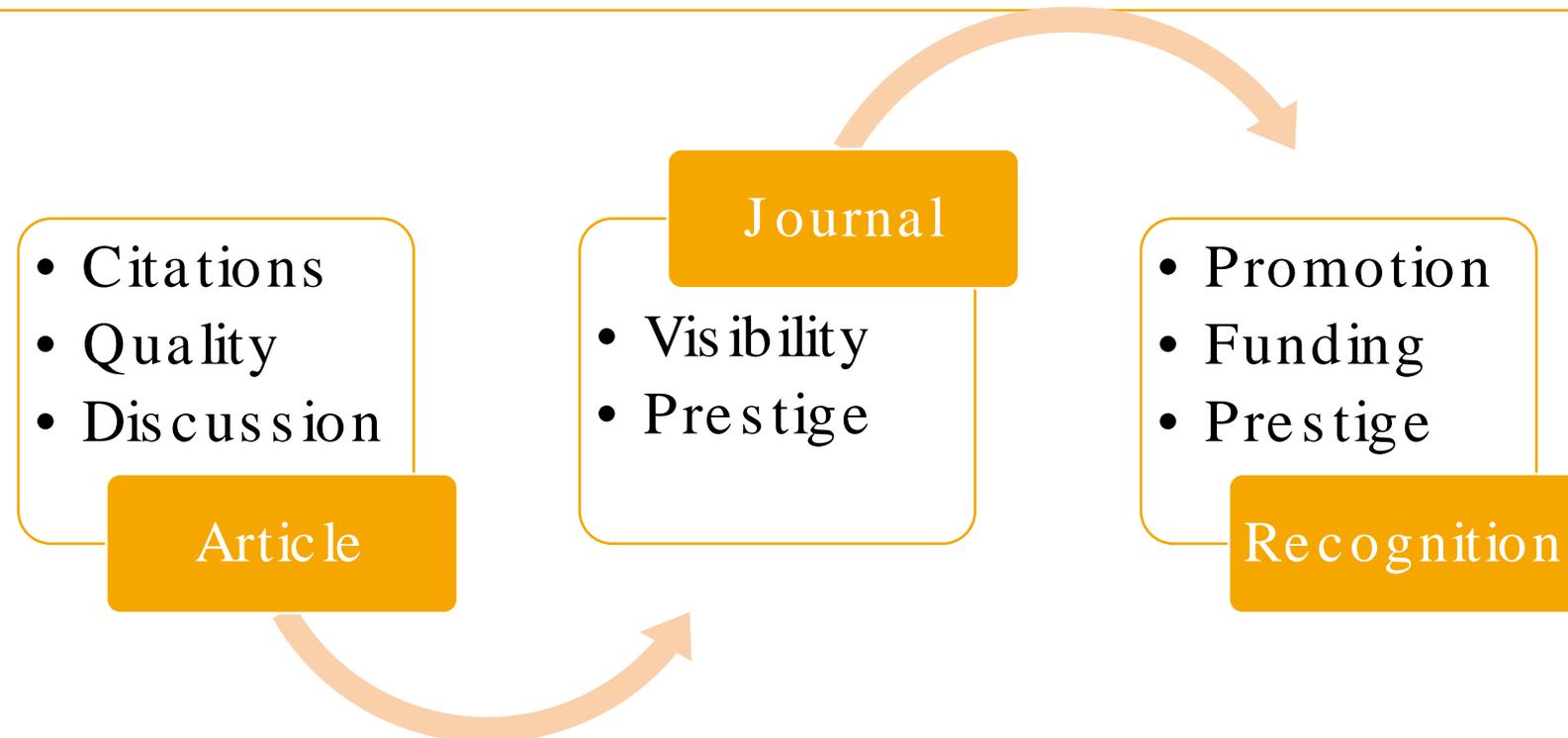im·pact | \ ˈim-ˌpakt \
plural **impacts**

Definition of *impact* (Entry 1 of 2)

1 **a** : an impinging or striking especially of one body against another

   b : a forceful contact or onset

     also : the impetus communicated in or as if in such a contact

2 : the force of impression of one thing on another : a significant or major effect
// the *impact* of science on our society

// a study outlining the potential environmental *impacts* of the construction project

What is scientific impact?

Scientific impact reflects the influence that a finding or publication has on science or on society. Such impact can be short term or long term

- Citations
- Quality
- Discussion

Article

Journal

- Visibility
- Prestige

- Promotion
- Funding
- Prestige

Recognition

How is impact factor measured?

- Google scholar showing the number of times an article is cited
- This is a crude way of showing the impact of individual articles?
- But what if you want to measure the impact of an entire journal
- Or you want to measure the total impact of a researcher

How is impact factor measured?

Two popular methods:

- Garfield's impact factor for journals (Became Web of Science's Impact Factor)
- Hirsch's h index for individual researchers

We will be focusing on Journal Impact factor

What does Journal Impact Factor signify?

- The Journal Impact Factor, as calculated by Thomson Reuters was originally created as a tool lo help librarians identify journals to purchase, not as a measure of the scientific quality of research in an article

Journal Impact
≠
Article Impact

What does the impact factor measure ?

- All researchers aim at and need to publish most of their research output in "Impact Journals"

- These are international journals: you compete with researchers from all over the world

- They receive lots of manuscripts and therefore, they reject many

- The peer review process is harder

> Impact factor is therefore a measure of COMPETITIVENESS

Why publish in impact journals?

Visibility : You will be cited more

Influence : Guidelines and policy guidelines are more likely to be based on articles from impact journals

Success : You will get promoted and find it easier to access grant

Why publish in impact journals?

Your university's will become more visible as its webometric ranking will improve

Why publish in impact journals ?

You become a member of an international community of researchers:

- You are more likely to be invited to international conferences and workshops
- You are kore likely to be invited to participate in international collaborations

Why are academics not publishing in impact journals?

Funding:
- Poor funding affects quality of research

Time:
- Impact journals take too long to publish

Scope:
- My research line and my articles are of national interest

Lack of motivation:
- In my research area books and book chapters are more important

Scarcity:
- There are no impact journals covering my research interests

Outline 3
Finding Q1 or
Q2 journals in
your specialty
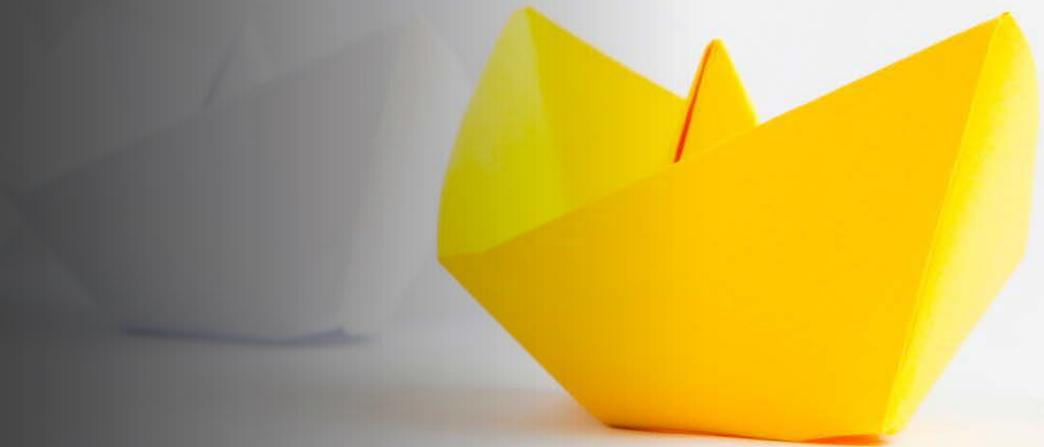
What are the different methods of measuring Impact factor

There are many methods

But two are widely used:

Journal Citations Reports (JCR)

Scopus

For this lecture, we will be focusing on SCOPUS

What is Scopus?

- Scopus is a multidisciplinary bibliometric database of peer-reviewed academic journals, books and conference proceedings.

- It is owned by Elsevier

- Scopus provides four metrics of Journal Impact:
  - h-Index,
  - CiteScore
  - SNIP (Source Normalized Impact per Paper)
  - SJR (SCImago Journal Rank)

What is the CiteScore?

The CiteScore measures average citations received per document published in the journal

It is useful for comparing journals within the same field, ranking them in subject categories and indicating their Q Index, which is the percentile they fall into:

- Q1: the journal ranks in the top 25% in that field
- Q2: the journal ranks in the 50-75% group in that field
- Q3: the journal ranks in the 25-50% group in that field
- Q4: the journal ranks in the lowest 25% group in that field

You should not use Citescore for comparing journals from different fields because citation behaviour differs across fields. For example, a Q1 journal in a field with low citation rate like humanities may have a lower Citescore than a Q3 journal in a field like medicine with high citation rates.

SJR (*SCImago* Journal Rank)

- Measures citations weighted by prestige.

- It is useful for comparing journals within the same field

- It is the basis of the subject category ranking.

- Q1 journals are cited more often and by more prestigious journals than those in the other quartiles.

- It is presented on a separate webpage to Scopus

The Scimago Journal Rank (SJR) is based on the transfer of prestige from a journal to another one; such prestige is tranfered through the references that a journal do to the rest of the journals and to itself.

The calculation of the final prestige of a journal is an iterative process, in which the prestige in the stage *i* of a journal depends on the prestige of the set of journals in stage *i-1*.

$$SJR_i = \frac{(1-d-e)}{N} + e \cdot \frac{Art_i}{\sum_{j=1}^{N} Art_j} + d \cdot \sum_{j=1}^{N} \frac{C_{ji} \cdot SJR_j}{C_j} \cdot \frac{1 - \left(\frac{\sum_{k \in \{Dangling-nodes\}} SJR_k}{\sum_{h=1}^{N} \sum_{k=1}^{N} \frac{C_{kh} \cdot SJR_k}{C_k}} \right)}{} + d \cdot \left[\sum_{k \in \{Dangling-nodes\}} \frac{SJR_k}{N} \right] \frac{Art_i}{\sum_{j=1}^{N} Art_j}$$

$$SJRQ_i = \frac{SJR_i}{Art_i}$$

SJR_i - Scimago Journal Rank of the Journal *i*.

C_{ji} - Citation from journal j to journal *i*.

C_j - Number of References of journal *j*.

d - Constant, normally 0.85.

e - Constant, normally 0.10.

N - Number of Journals

Art_j - Number of Articles of journal *j*

SNIP (Source Normalized Impact per Paper)

| measures citations weighted by the subject field. | → | It is useful for comparing journals not just within the same field but also across disciplines. | → | A SNIP of 1.0 means that a journal's articles are cited at the average rate for all journals in the same subject area; anything over 1.0 indicates more citations than average in the field while a SNIP of less than 1.0 is below the average. | → | A SNIP of more than 1.5 generally indicates a very well-cited journal. |

So how can you find a Q1 and Q2 Journal for a particular subject area?

Five Common Scenarios:

1. You have a journal in mind, and you want to know its Q Index
2. You want to see all the Q1 and Q2 journals in your subject area
3. You want to see all the Q1 and Q2 journals in any particular country or continent in your subject area
4. You want to compare journals or countries
5. You just want to explore for fun

Scenario 1: You have a journal in mind, and you want to know its Q Index

1. Go to www.scopus.com

2. Click on "Sources"

Supposing I wish to look for the Q Index of the journal, "Computer and Education"

Scenario 1: You have a journal in mind, and you want to know its Q Index

6. Click Find Sources

1. Click here to search by title, subject area, publisher or ISSN.
2. Select Title

3. Use the Enter title area to enter the name of the journal.

4. Pick the journal name from the list of journals that comes up
5. Here we have selected Computers and Education

Scopus Preview

Author search   Sources

Create account   Sign in

Sources

Title

Enter title

Computers and Education   ×   Find sources

Journal of Computers in Education

Computers in Education Journal

42,180 results

Computers and Education   ⬇ Download Scopus Source List   ⓘ Learn more about Scopus Source List

☐ All ⌄   📊 Export to Excel   💾 Save to source list

View metrics for year: 2020

Source title ↓	CiteScore ↓	Highest percentile ↓	Citations 2017-20 ↓	Documents 2017-20 ↓	% Cited ↓	SNIP ↓	SJR ↓	Publisher ↓
☐ 1 Ca-A Cancer Journal for Clinicians	463.2	99% 1/340 Oncology	50,948	110	92	143.645	62.937	Wiley-Blackwell
☐ 2 Nature Reviews Materials	115.7	99% 1/292 Materials Chemistry	21,170	183	98	13.053	32.011	Springer Nature
☐ 3 Nature Reviews Molecular Cell Biology	99.7	99% 1/382 Molecular	21,027	211	88	14.535	37.461	Springer Nature

Scenario 1: You have a journal in mind, and you want to know its Q Index

Three search results.

3 results

⬇ Download Scopus Source List   ⓘ Learn more about Scopus Source List

☐ All ⌄   ▣ Export to Excel   💾 Save to source list

View metrics for year: 2020

Our journal is the first on the list

Percentile is 99, which means it's a Q1 journal

	Source title ↓	CiteScore ↓	Highest percentile ↓	Citations 2017-20 ↓	Documents 2017-20 ↓	% Cited ↓	SNIP ↓	SJR ↓	Publisher ↓
🔲 1	Computers and Education	14.4	99% 4/1319 Education	11,296	784	92	4.411	3.026	Elsevier
☐ 2	Journal of Computers in Education	2.7	75% 324/1319 Education	123	46	70	1.45	0.447	Springer Nature
☐ 3	Computers in Education Journal	1.0	39% 804/1319 Education	57	56	32	0.258	0.136	American Society for Engineering Education

⌃ Top of page

Scenario 2: You want to see all the Q1 and Q2 journals in your subject area

Sources

Subject area

Enter subject area

Filter refine list

Apply   Clear filters

Display options

☐ Display only Open Access journals

Counts for 4-year timeframe

◉ No minimum selected

○ Minimum citations _____

○ Minimum documents _____

Citescore highest quartile

☐ Show only titles in top 10 percent

☑ 1st quartile

☐ 2nd quartile

☐ 3rd quartile

☐ 4th quartile

Source type   ⌄

Business, Management and Accounting

⌄ ☐ Chemical Engineering

⌄ ☐ Chemistry

⌃ ☐ Computer Science

   ☐ Artificial Intelligence

   ☐ Computational Theory and Mathematics

   ☐ Computer Graphics and Computer-Aided Design

   ☐ Computer Networks and Communications

   ☑ Computer Science (miscellaneous)

   ☐ Computer Science Applications

   ☐ Computer Vision and Pattern Recognition

   ☐ General Computer Science

«

Apply

☐ 3 Nature Reviews Molecular Cell Biology   99.7

☐ 4 Chemical Reviews   96.9

☐ 5 The Lancet   91.5

Supposing you want to see all Q1 & Q2 journals in Computer Science

1. Go back to the Source page

2. In the Display Options area
3. Go to **Citescore highest quartile**
4. Click on **1st and 2nd quantiles**

5. Select Subject Area

Click in the Enter Subject Area to open a scroll down list
Scroll down to Computer Science section and select Computer Science (Miscellaneous) [or start typing]

Scenario 2: You want to see all the Q1 and Q2 journals in your subject area

The subject area searched for is here

There are 42 Q1 & Q2 journals in Computer Science

The journals are ranked according to their percentile score

Sources

Subject area   Enter subject area

Subject: Computer Science (MIscellaneous) ×

Filter refine list   42 results   ⬇ Download Scopus Source List   ⓘ Learn more about Scopus Source List

[Apply]   Clear filters

☐ All ⌄   ⬛ Export to Excel   ⬛ Save to source list   2020 🔽
                                                                                                                    View metrics for year:

Display options ⌃	Source title ↓	CiteScore↓	Highest percentile ↓	Citations 2017-20 ↓	Documents 2017-20 ↓	% Cited ↓	>
☐ Display only Open Access journals							
Counts for 4-year timeframe	☐ 1 Foundations and Trends in Information Retrieval	20.0	99% 1/69 Computer Science (miscellaneous)	300	15	87	
⦿ No minimum selected							
◯ Minimum citations _____	☐ 2 IEEE Transactions on Emerging Topics in Computing	10.5	97% 2/69 Computer Science (miscellaneous)	2,239	213	87	
◯ Minimum documents _____							
Citescore highest quartile	☐ 3 npj Quantum Information *Open Access*	9.8	96% 3/69 Computer Science (miscellaneous)	2,990	304	86	
☐ Show only titles in top 10 percent							
⬛ 1st quartile	☐ 4 IEEE/ACM Transactions on Audio Speech and Language Processing	9.1	96% 2/43	7,322	802	79	
⬛ 2nd quartile							
☐ 3rd quartile							
☐ 4th quartile							

Scenario 2: You want to see all the Q1 and Q2 journals in your subject area (A 2ⁿᵈ method)

Perhaps an easier way to do this is through the SCImago website:
https://www.scimagojr.com/

Then Click on either Journal Rankings or Explore under Journal Ranks as shown

Scenario 2: You want to see all the Q1 and Q2 journals in your subject area (A 2ⁿᵈ method)

Pick Computer Science in the All subject Areas dropdown menu

Click Journal in the All types area. Then click Apply

There are 269 hits! This is because it includes Q1-Q4 journals

The Q Index is indicated under the SJR column and is in descending orders

Scenario 3: You want to see all the Q1 and Q2 journals in a particular country or continent in your subject area

Supposing you want to see all Q1 & Q2 journals in medicine in Nigeria

1. Enter Medicine in the All subjects category slot
2. Enter Nigeria in the All regions/countries slot
3. Enter Journal in the All types slot
4. Click Apply

There are just seven of them!

And none is in Q1 or Q2 😔 😔 😔

Scenario 4: You want to compare impact of journals or countries

Supposing you want compare the impact rubrics of the Nigerian Journal of Clinical Practice and the Nigerian Postgraduate Medical Journal

| Journal Rankings | Country Rankings | Viz Tools | Help | About Us |

SJR
Scimago Journal & Country Rank

1. Go back to the SCImago homepage: https://www.scimagojr.com/

2. Click on Viz Tool

Scenario 4: You want to compare impact of journals

COMPARE

With this function, publications and countries can be analyzed comparatively using different indicators graphically represented. In fact, this function allows you to choose a total of up to 6 publications or countries from which a set of indicators that facilitate comparative analysis will be displayed. The indicators shown in the comparison are part of those that appear when accessing the individual registries of publications and countries.

[COMPARE JOURNALS] [COMPARE COUNTRIES]

- On the Viz Tool page, scroll down to the section labeled Compare and click Compare Journals

Scenario 4a: You want to compare impact of journals

- On the Journal Comparison page, Enter the name of the first journal in the enter journal name to compare.

- In the example shown, we have entered Nigerian Journal of Clinical Practice

- Now enter the Nigerian Postgraduate Medical Journal as the 2nd journal to compare

Home   Journal Rankings   Country Rankings   Viz Tools   Help   About Us

Journal Comparison

enter journal name to compare

● Nigerian Journal of Clinical Practi ✕

Scenario 4: You want to compare impact of journals

A series of graphs comparing many measures including SJR, H-Indexes, Cites etc has been produced
This type of comparison can help you decide on the journal you pick
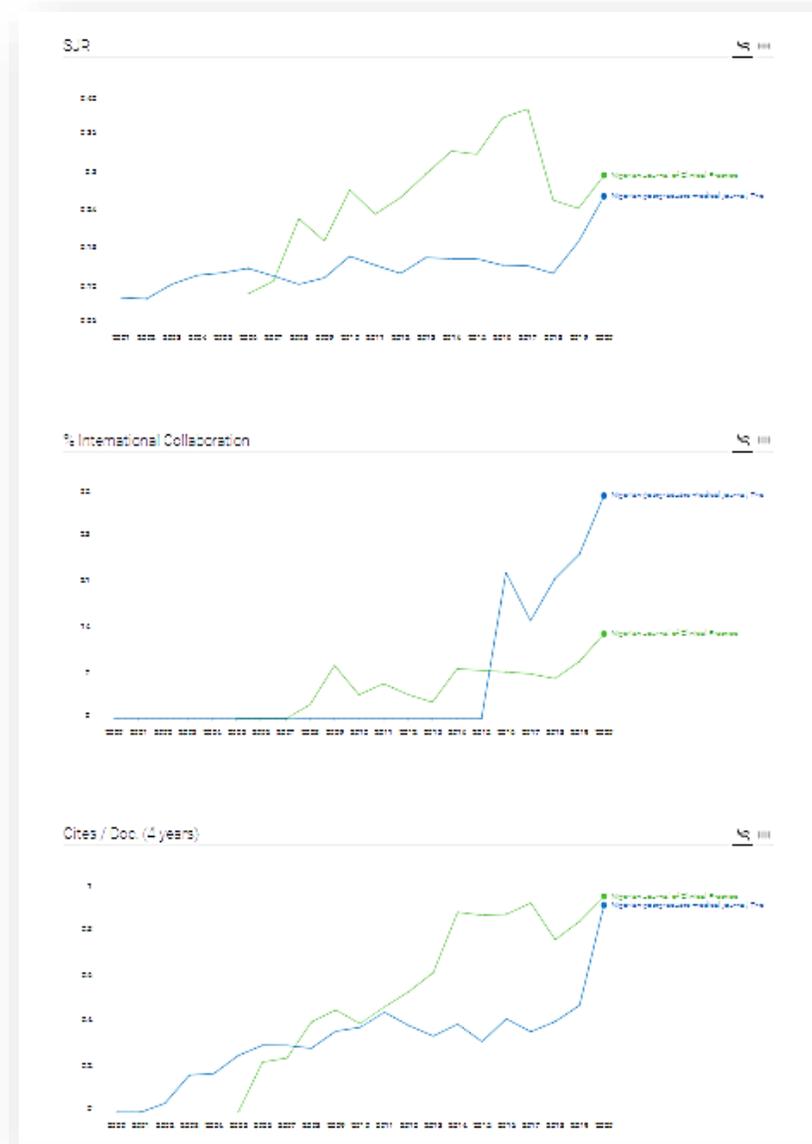
Scenario 4b: You want to compare impact of Countries

- The process is similar to the procedure for comparing journals

- Just select Compare Countries instead of Compare Journals on the Viz Tools landing page

Scenario 5: You just want to explore for fun

- Why would you want to do this?
- Because exploring will improve both your skill and knowledge
- Because all works and no play…..
- The Viz Tools page of the Scimago home page is designed for this…
- Happy exploration

Outline 5

Getting Published: the How to Guide
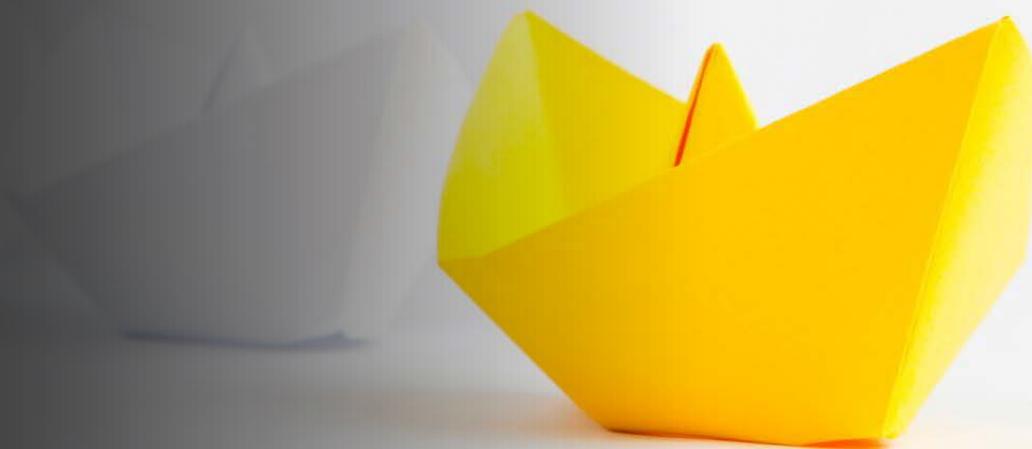
You want to Publish in High Impact Journals? It's the idea that matters
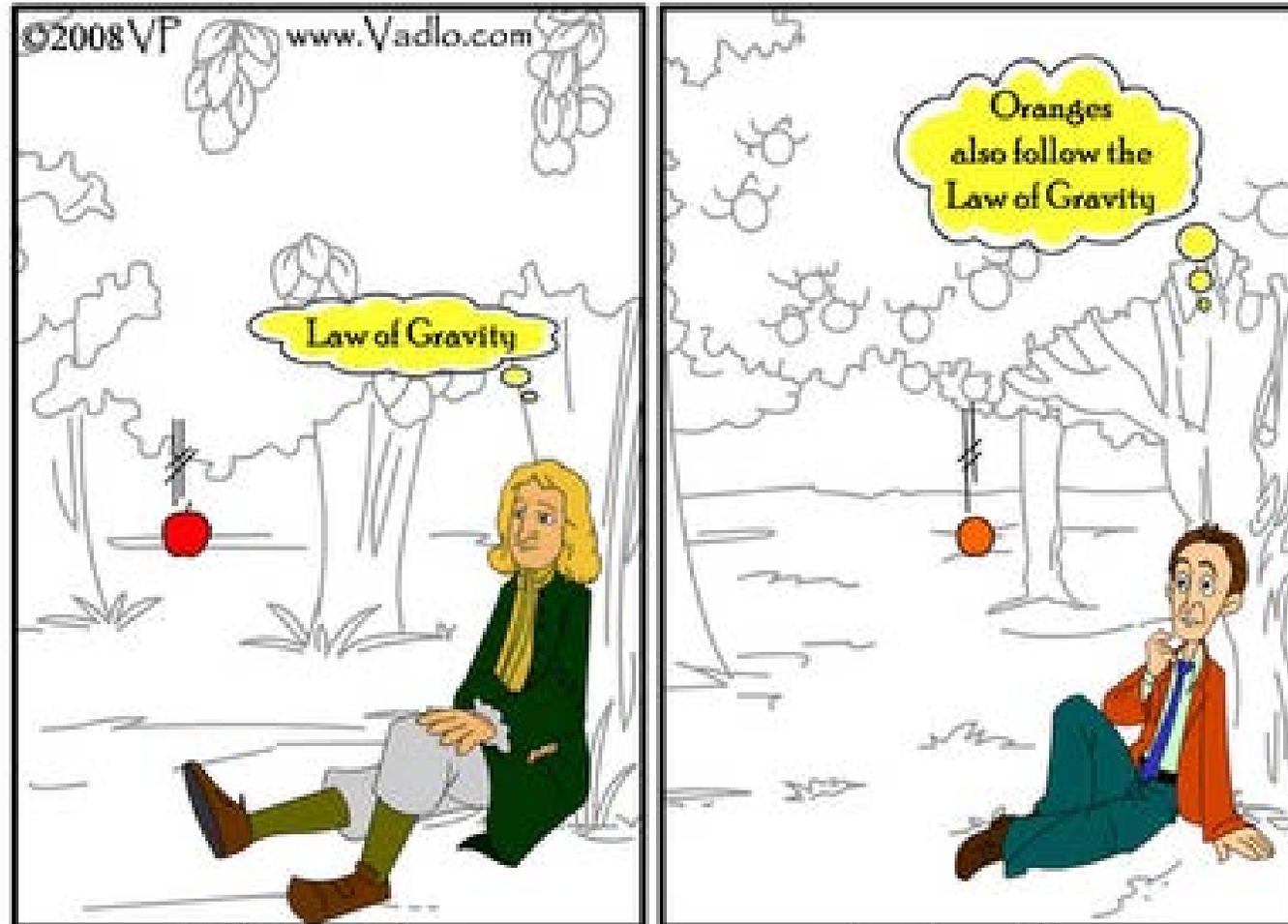
High Impact Paper   Low Impact Paper

What is Peer Review Process?

- Exciting the reviewer's mind is far more important then exciting the reader's mind.

- It is likely that no one will ever read your paper more thoroughly than the reviewer.

- Suggest referees that appreciate your work (political)
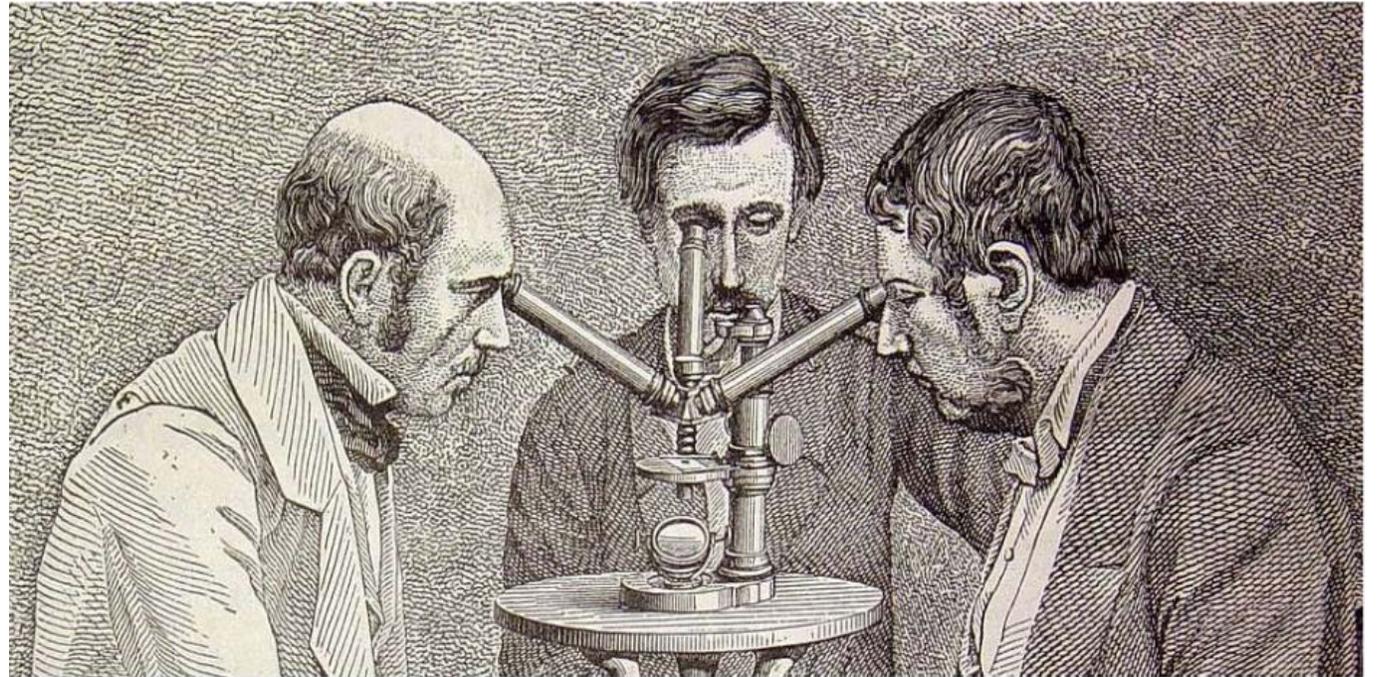
Sad Fact

Writing is a critical step in science although scientists are not trained to write.

Even very creative experiments and novel results will have dull impact if the manuscript is not written well.

Four Questions of Manuscript Writing

What is the?   INTRODUCTION

What did you do?   METHODS

What did you find?   RESULTS

What does that mean?   DISCUSSION

Components of a manuscript

Section	Purpose
Title	Clearly describes contents
Authors	Ensures recognition for the writer(s)
Abstract	Describes what was done
Key Words	Ensures the article is correctly identified in abstracting and indexing services
Introduction	Explains the problem
Methods	Explains how the data were collected
Results	Describes what was discovered
Discussion	Discusses the implications of the findings
Acknowledgements	Ensures those who helped in the research are recognised
References	Ensures previously published work is recognised
Appendices (some journals)	Provides supplemental data for the expert reader

How Important is the Title?

- Most published articles are not cited- the title play a vital role

- Construction of an article title has a significant impact on citation frequency.

- According to Jacques and Sebire, there was a strong association between increasing title length and citation rate.

Abstract- Most Critical Part of Paper

- Should be informative, indicative and reflects the main 'story' of the article.

- The only chance you have to get the reader's attention.

- Should be crisp, concise and accurate.

- Gives the quick idea of the contents (Stand alone).

- What and how was done

- Provide a brief conclusions

Results

- Use descriptive headings that concisely state the results.

- Data representation-concise and accurate.

- Short and easy to understand

- Consistent with the abstract and introduction

- Give tables and figures where needed

  - With sufficient information so that minimum text is required.

  - Don't repeat information in graphics and text.

Results

- Appropriate numbering of figures and table mentioned in the text.

- Use significant figures where required.

- Avoid speculations and over discussion.

- Avoid using words such as proves, confirmed, removed all doubts, etc. Remember science is dynamic and ever changing.

Discussion

- Hardest section to write, but it is also the most important.

- Use sections that concisely summarize the interpretation of the results.

- Answer the question posed in introduction

- Correlation of your finding with the existing knowledge

- Explain discrepancies between new results and previously reported results.

Discussion

- What is new without exaggerating.

- Conclusion/summary, perspectives, implications.

- Research limitations and need for future research.

- Theoretical implications and possible practical applications.

Conclusion

- Identify key findings and application

- Should NOT be a summary of the work done- abstract is doing fine with that.

- Consistent with result and introduction

- Easiest way is to use your research objective as the basis of the conclusion

Objective	Conclusion
The study will look at how alcohol (measured by Blood Alcohol Content) affect the mortality of RTI	The study found that patients who have alcohol BAC level above 5% were more likely to die from RTI than patients with lower alcohol BAC.

References

1 Cite current and key pertinent references

2 Reference citations must be accurate and complete

3 Read the references

4 Use correct style for journal

15 Use Reference managers…..If you are not doing this, you are wasting your time

Final Step is Revision and Proofreading

Revision and Proofreading

- What it involves:

    - Effectiveness of the study
    - Supporting information
    - Order and flow of the article
    - Must be leaving reader with a new question

Revision, Revision, Revision

After writing the first draft, at least a dozen revision are usually needed to improve to the text.

All authors must be involved in this process

All authors must read the first draft. Give them time line...

Proofreading

- Grammar and spelling errors
  - Consistent verb tense
  - Vocabulary
  - Tighten the sentences
  - spell-check
  - Punctuation
  - typos
- Technical terms
  - Scientific symbols
  - Reaction scheme
  - Chemical structures/names
  - references
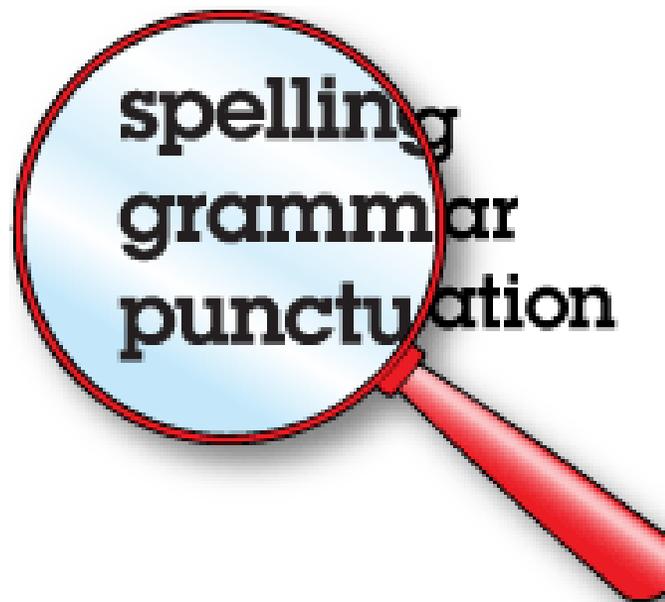
Some Jargons to avoid

Jargon	Preferred use
a considerable amount of	much
on account of	because
a number of	several
Referred to as	called
In a number of cases	some
Has the capacity to	can
It is clear that	clearly
It is apparent that	apparently
Employ	use
Fabricate	make

Day, RA. "How to write and publish a scientific paper," 5th edition, Oryx Press, 1998.

Right to Authorship

- According to the International Committee of Medical Journal Editors (ICMJE), all four of the following conditions must be met:

    i. Substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data

    ii. Drafting the article or revising it critically for important intellectual content

    iii. Final approval of the version to be published

    iv. Agreement to be accountable for all aspects of the work; ensure that questions related to the accuracy or integrity of any part of the work are investigated and resolved

All who are listed should be qualified and all who are qualified should be listed

Addendum
My research tools
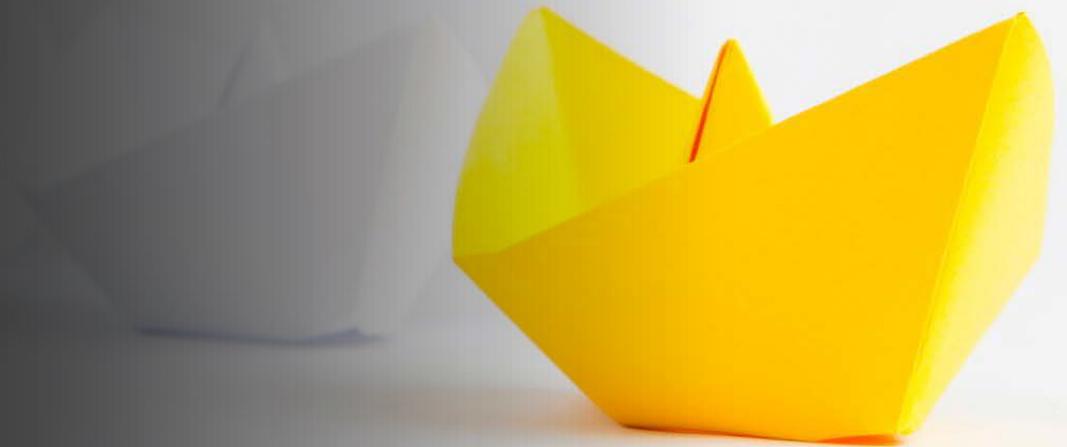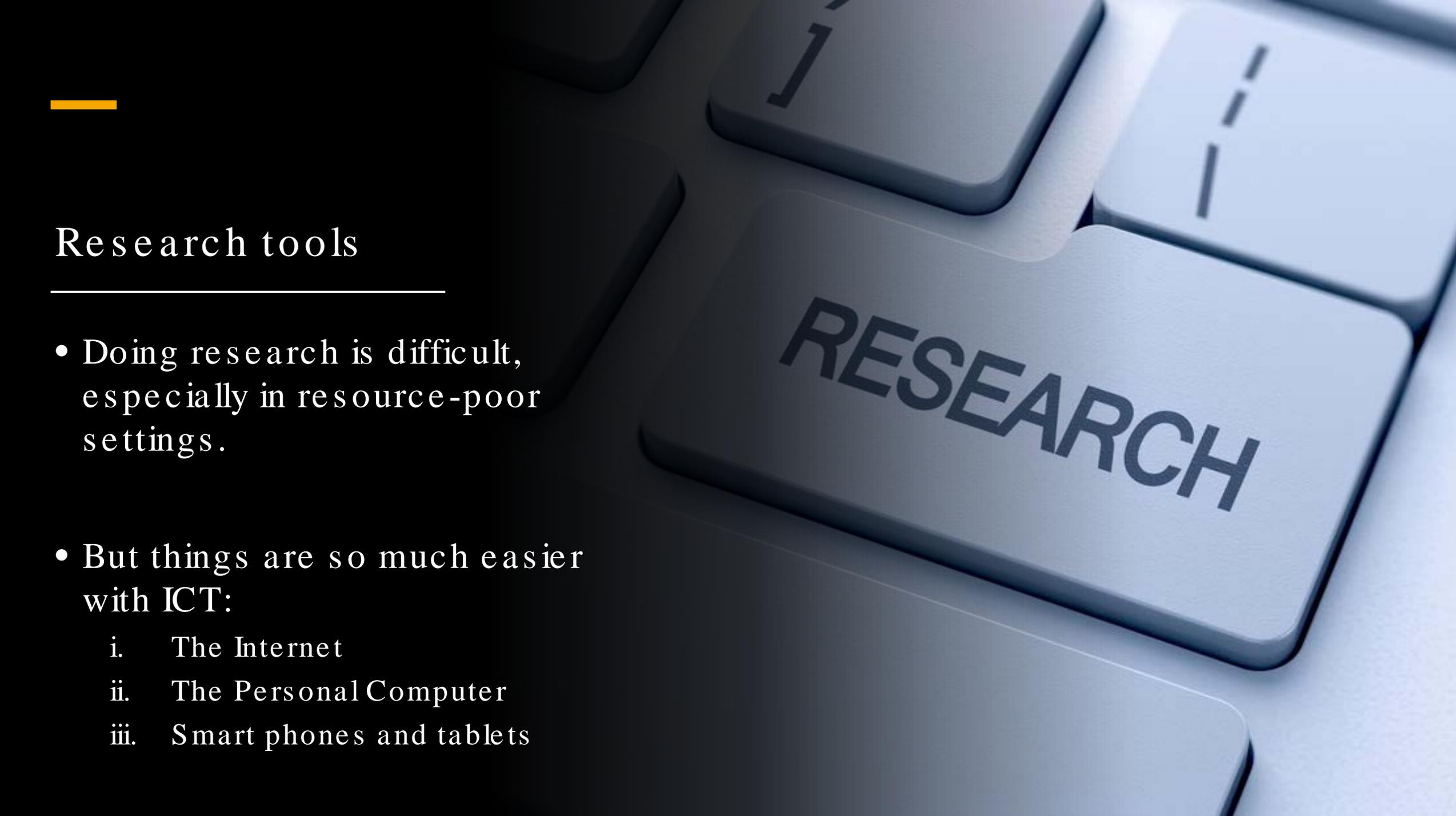
Research tools

- Doing research is difficult, especially in resource-poor settings.

- But things are so much easier with ICT:
    i.   The Internet
    ii.   The Personal Computer
    iii. Smart phones and tablets

Classes of research tools that are useful to me

i. Literature Search Tools

ii. Word Processors

iii. Grammar Checking Software

iv. Scientific writing software

v. Reference Managers

vi. Statistic Programs

vii. Archiving and Note Taking Software

viii. Never Lose Your Data Again (Cloud Storage and Local backups)

ix. Learning Epidemiology (and Statistics)

Tools for Literature Search

Vital for the initial three stages of research

The internet has replaced traditional libraries and encyclopedias as the primary source of information for most researchers

To be an effective researcher, then you must be skillful in searching the internet

Tools for Literature Search II

- Google Scholar

- HINARI

- PubMed

- African Journal Online (AJOL): You can get articles from journals based in Africa through this portal. Most of the articles can be downloaded free.

- General search Engines e.g. Google, Bing, Yahoo etc.

Word Processors

- Word processors are software that provides the user with tools needed to write and edit and format text and to send it to a printer.

- There are many of them.

- Examples include:
  - Microsoft Word, (the most popular of them all)
  - Open Office (which is a free alternative).
  - Cloud based alternatives such as Google Doc and Office 365 from Microsoft.

Grammar Checking Software

- Grammar checkers find grammatical errors in your writing
- They find errors such as punctuations, spelling and grammar
- Most word processors have basic grammar checkers
- However, there are more powerful alternatives that are both free and paid for

- Examples include:
- Grammarly
- ProWritingAid
- Hemingway
- Ginger
- WhiteSmoke
- And many more

https://becomeawritertoday.com/best-grammar-checker/

Scientific writing software

- Academic writing is different from other types of writing
- This style is mandatory for writing thesis, research proposals, and peer-reviewed articles.
- It can be difficult to master:
- These software help you to master the style of academic writing.
- Two common examples are
  - Academic Phrase Book (https://www.phrasebank.manchester.ac.uk/)
  - Ref and Write (https://www.ref-n-write.com/)

Academic Phrasebank

The Academic Phrasebank is a general resource for academic writers. It aims to provide the phraseological 'nuts and bolts' of academic writing organised according to the main sections of a research paper or dissertation. Other phrases are listed under the more general communicative functions of academic writing.

Academic Phrasebank: Example of Usage

Here is an example of common phrases that might guide you in writing the introduction:

General comments on the relevant literature

The literature on X has highlighted several ...

Much of the literature concerns X rather than Y.

Different theories exist in the literature regarding ...

More recent attention has focused on the provision of ...

There are relatively few historical studies in the area of ...

A great deal of previous research into X has focused on ...

A large and growing body of literature has investigated ...

Much of the literature since the mid-1990s emphasises the ...

Much of the current literature on X pays particular attention to ...

There is a large volume of published studies describing the role of ...

The existing literature on X is extensive and focuses particularly on ...

There is a relatively small body of literature that is concerned with ...

The generalisability of much published research on this issue is problematic.

A considerable amount of literature has been published on X. These studies ...

What we know about X is largely based upon empirical studies that investigate how ...

The academic literature on X has revealed the emergence of several contrasting themes.

Academic Phrasebank: Another Example of Usage

Let's say your study finding is unexpected: Here is an example of a pool of academic phrases from the phrasebank you can use.

Indicating an unexpected outcome

What is surprising is that ...

Surprisingly, X was found to ...

One unanticipated result was that ...

What is curious about this result is that ...

Surprisingly, no differences were found in ...

This finding was unexpected and suggests that ...

One unexpected finding was the extent to which ...

It is somewhat surprising that no X was noted in this condition ...

The weak association of X with Y is interesting, but not surprising.

One surprising variable that was found to be significantly associated with X was ...

These findings are somewhat surprising given the fact that other research shows ...

Contrary to expectations, this study did not find a significant difference between ...

However, the observed difference between X and Y in this study was not significant.

However, the ANOVA (one way) showed that these results were not statistically significant.

It was surprising that the X group scores did not differ significantly from those of the Y group.

Reference Managers

- Effective use of reference managers reduces one of the greatest chores in manuscript writing - formatting references. Examples include:

  1. EndNote is one of the oldest. EndNote also has a web-based version, which you can use for free if your institution is registered with HINARI.

  2. Zotero (http://www.zotero.org/) is a web-based alternative to EndNote.

  3. Mendeley is another web-based reference manager.

  4. lots more.

Statistic Software

- **SPSS**….Most commonly used statistic software in reported literature. Easy to use
- **EPIINFO**…Free, open source and GUI interphase
- **STATA**…Popular among statistician. GUI but programming language required. Steep learning curve.
- **R**…. Free, open source. Programming language required. Steep learning curve.
- **SAS**… Popular among statistician. Programming language required. Steep learning curve.
- **MedCalc**..Easy to use. Especially useful for ROC curve determination
- **NISS**….Useful for sample size determination
- **GRAPHPAD**…Has an easy to use tutorial section. Also has web-based components

…..and many, many, more

Archiving and Note Taking Software

- This group of programs allow you to capture anything you can think of from any program on your computer or smart devices.

- The captured materials can be formatted

- What makes these software so versatile is that you can attach almost any type of files such as PDF, Word documents, Excel spreadsheets to the notes you have captured.

- The attachments can be fully embedded in the program, or they can be linked to the program. Finally, the notes can be sorted into folders, then tagged, annotated, edited, given comments, searched and exported as part of a notebook. There are many of this programs on the internet, but I have only used three:

    i. Evernote (www.evernote.com) and
    ii. Microsoft OneNote.
    iii. Google Keep: On Android devices

How do I use these programs?

- When a new idea strikes me, instead of scribbling on paper, I open OneNote on my convertible Lenovo tablet. I already have a folder called "Studies". All I need to do to start scribbling away is to create a new Note in this folder. If I get any interesting titbits from my searches on the internet or my computer, I'll just capture them into the Note. If I like, I may even use it as my initial "Word Processor". But if you prefer to use your native Word Processor, you can still link the two programs together. For me, the programs act like a chest drawer where I can organize my research information, and never misplace them.

Never Lose Your Data Again

- Online data storage (also called cloud storage) are used primarily to backup selected files on your computer. While there are many examples, I have only used the following:

  - Dropbox (www.dropbox.com),

  - Microsoft OneDrive and

  - Google Drive

Learning Epidemiology (and Statistics)

- Studying Populations: This is a wonderful program for those intending to learn the basic principles of epidemiology without too much hassles. Here is the description from the program's website:

- Studying Populations is computer assisted learning package for epidemiological methods. It is suitable for anyone working in health sciences including medical students, Masters students, public health practitioners and clinicians. It covers many basic epidemiological concepts in a set of over 80 interactive exercises and simulations.

- Please find the links to download the program here: http://www.personal.dundee.ac.uk/~cdvflore/Welcome.htm or you may download it directly from here: http://www.personal.dundee.ac.uk/~cdvflore/SPv305Setup.exe. The supplementary files can be downloaded from here: http://www.personal.dundee.ac.uk/~cdvflore/SPv3ToolsSetup.exe.

- There is a review of the program in the International Journal of Epidemiology which can be downloaded from the journal website: http://ije.oxfordjournals.org/content/32/5/890.2.full

Useful websites

- www.oluwadiya.com: My website. The section on SPSS contains some useful links on SPSS. If you are keen on learning SPSS syntax, there are useful links on this site for you.

- http://www.graphpad.com/quickcalcs/contingency1.cfm: Online Statistics website.

- http://www.bettycjung.net/Statfxs.htm: This Betty C Jung's Statistical Procedure Site. It also contains link to other useful sites.

- http://www.whichtest.info/: This website is called Which Test. It is an online guide to selecting an appropriate statistical test. By following a series of instructions on the webpage, you can easily determine the appropriate statistics to use.

- https://www.statsoft.com/textbook/: This is the grand daddy of online statistic resource. This is the description from its website: The only Internet Resource about Statistics Recommended by Encyclopedia Britannica. StatSoft has freely provided the Electronic Statistics Textbook as a public service for more than 17 years now.

Useful websites

- http://www.spsstools.net/SampleSyntax.htm: If you want to learn SPSS syntax or you want access to syntax files that you can download and (freely) use, Raynald's SPSS Tools is for you. Syntax has a steep learning curve, but once you know how to use it, you can easily increase your productivity by a factor of ten! Furthermore some of SPSS's features are only available through syntax. Syntax is the real power house of SPSS.

- http://calcnet.mth.cmich.edu/org/spss/toc.htm : This site has some movies which can be downloaded. It is a great site for learning SPSS.

- http://www.ats.ucla.edu/stat/spss/ : Another great online learning resource for SPSS. Get your hands dirty on it!

- http://www.uccs.edu/~faculty/lbecker/SPSS/content.htm : A well organized site, designed to help you choose the right test for your data.

- http://www.epibiostat.ucsf.edu/biostat/sampsize.html?iframe=tr#ttest : This website contains a list of mostly free programs for sample size and power calculations.

- http://www.openepi.com : Online Sample Size calculator.

On my way out....

Random Advices
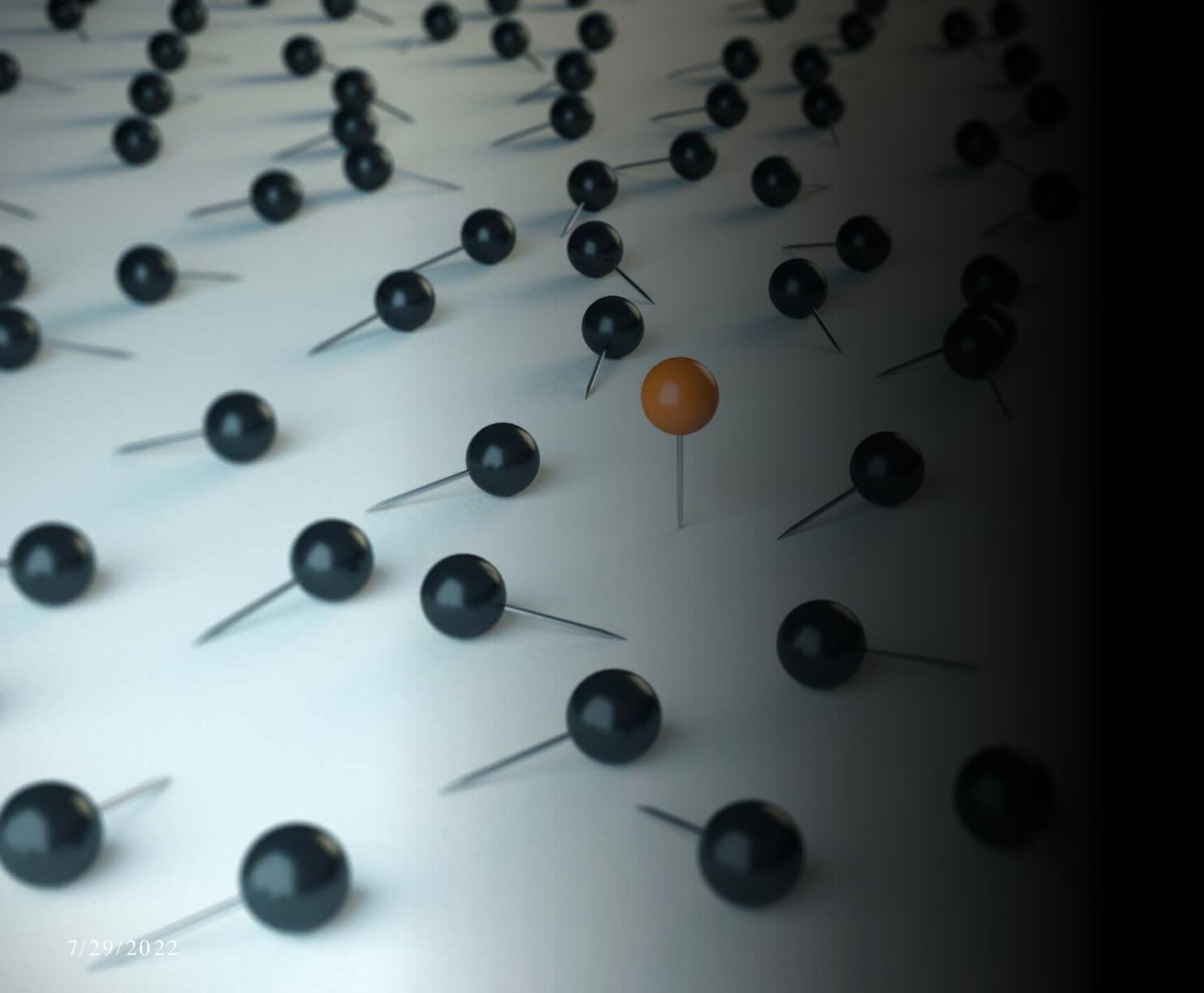
Divide and Conquer!!!!!!!

- Divide and work on.....

- If you get stuck on a particular section, just skip to a different section that is easiest to write.

- It means the easiest first and the most difficult latter.

Avoid Common errors

- Keep track of singular and plural forms
  - Remember data is the plural of datum!
  - Hence, "these data suggest..."

- Keep track of tense
  - Most experiments and procedures will be described in the past tense

More on tenses

A good way to separate what you have shown from what others have reported is to mix tenses in your writing

This is common in a discussion section

For example:

The protein <u>was</u> non-functional after modification of the terminal residue. This result <u>is</u> consistent with those from other groups (references) and <u>indicates</u>…

Writing the paper

Read the instructions to authors

What sections should the text be divided into?

Often:

Title

Abstract

Introduction

Methodology

Results

Discussion

References

Figure legends

Which do you write first?

This is what I do

- On a 1000 mile journey, the hardest thing is the first step.
  - Make the first step easy!

- The methodology is often easiest to write as is simply descriptive.
  - Order this in the same way as you will present your results

The next step

- I usually write the results text next
- This is also descriptive as you simply describe your data (figures and tables)
  - "These data show that something is higher/faster/larger than something else (p<0.001)".
- A common error is to add discussion and interpretation to this section
  - This leaves nothing for the discussion section!

Finally

- I usually then write the introduction
  - Details why you did you did the study (not what you found)
- Then the discussion interprets your results and places it into context with the literature.
  - End with a nice 'take home' message in the final paragraph

The Peer Review Process: You're O.Y.O.

To ask Questions, Please join the forum at www.oluwadiya.com