The ideea woman

Author: Conf. Dr. Cosmina-Ioana Bondor

Lecture 2 – Vancouver style for reference, Formulating the hyphotesis

A **ALWAYS**

S **SEEK**

K **KNOWLEDGE**

Objective

- the student will know
- to cite a reference in Vancouver style
  - original articles
  - books
  - online resources
- which journal to choose (based on journal impact factor)
- which author is trustable (based on Hirsch index)

Vancouver style for references

described here:

- https://www.nlm.nih.gov/bsd/uniform_requirements.html

Citing articles

Author names (period at the end)

- Author name followed by up to 2 initials
- All authors' names separated by a comma and a space.
- 1 to 6 authors:
  - list all authors
- more than 6 authors:
  - list the first 6 authors, then add "et al“

Title:capitalized (followed by period)

Citing articles

Journal title

abbreviated- (correct abbreviations: PubMed Journals Database)

Publication date

After the date, put a semicolon;

Abbreviate months to the first 3 letters (without a period).

Indicate the volume number (without a space)

followed by the issue number in parentheses.

Abbreviate page numbers where possible,

for example: 173-9 instead of 173-179.

Citing articles

- Shaki D, Hodik G, Elamour S, Nassar R, Kristal E, Leibovitz R, et al. Urinary tract infections in children. Eur J Clin Microbiol. 2020 May;39(5):955-963.

Citing articles

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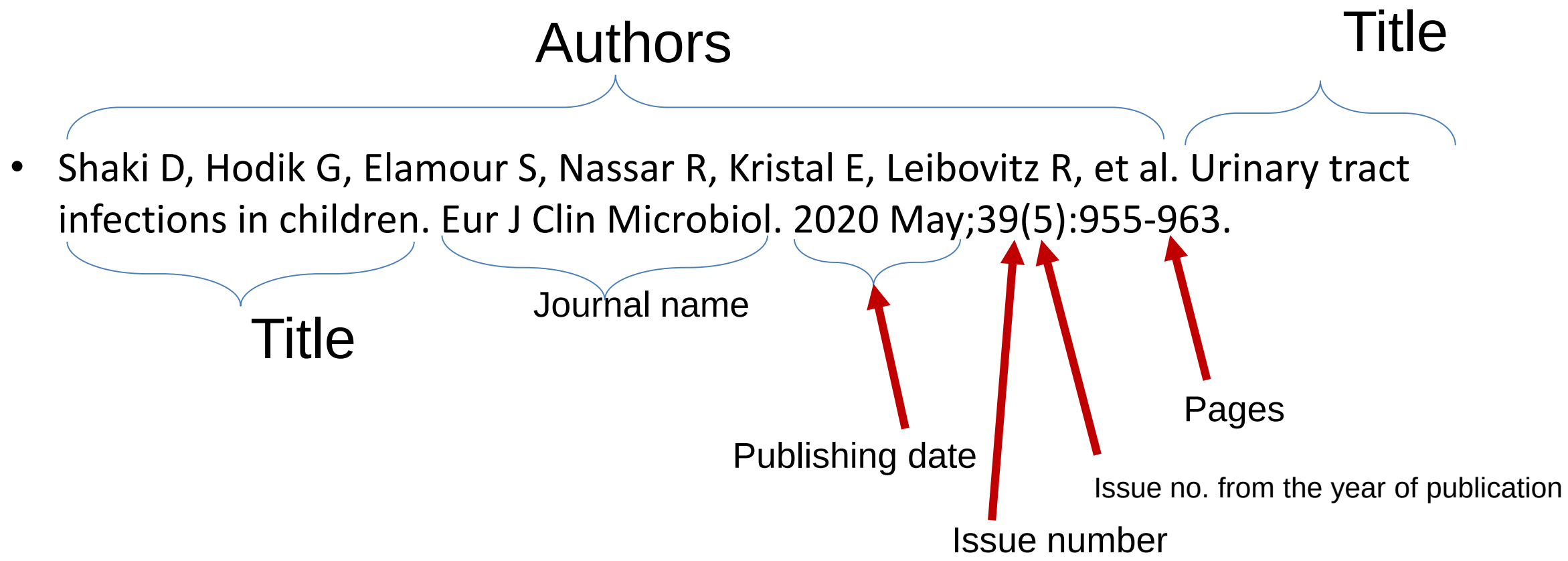
Citing articles



Citing articles

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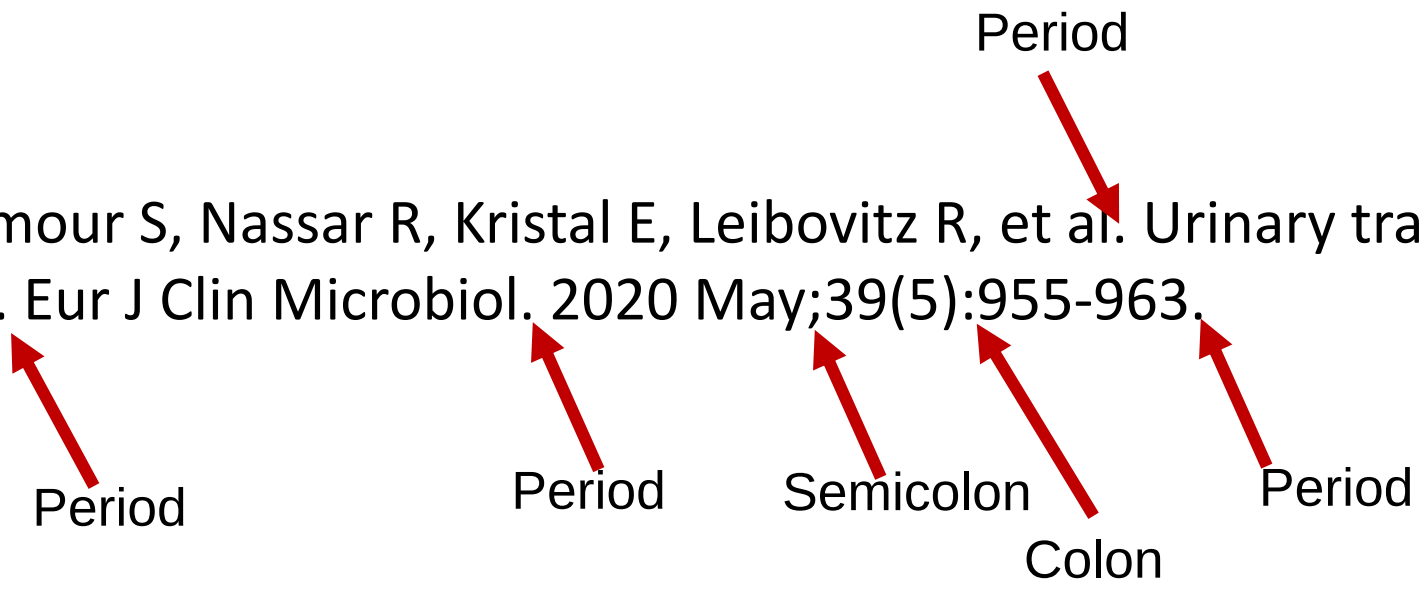

Citing articles

Initial name

Initial name

with colab =
et al >6 authors

Surname Surname

- Shaki D, Hodik G, Elamour S, Nassar R, Kristal E, Leibovitz R, et al. Urinary tract infections in children. Eur J Clin Microbiol. 2020 May;39(5):955-963.

Comma between
the authors

Citing articles

Two initials

- Hamilton JL, Evans SG, Bakshi M. Management of Fever in Infants and Young Children. Am Fam Physician. 2020 Jun 15;101(12):721-729.

Date is optional

Abbreviate months to the first 3 letters

Citing online articles

- The word [Internet] in square brackets
  - inserted after the abbreviated title of the journal.
- The date cited [in square brackets]
  - included after the publication date.
- The URL (web address)
  - included at the end of the reference.
- optional: Include the DOI (digital object identifier) at the end of the reference, after the URL.

Citing online articles

Xie X, Liu Y, Liu J, Zhang X, Zou J, Fontes-Garfias CR, et al. Neutralization of SARS-CoV-2 spike 69/70 deletion, E484K, and N501Y variants by BNT162b2 vaccine-elicited sera. bioRxiv [Internet]. 2021 Jan 27 [cited 2021 Feb 9];2021.01.27.427998. Available from: https://pubmed.ncbi.nlm.nih.gov/33532771/

Citing online articles

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Citing online articles

[Internet]

Xie X, Liu Y, Liu J, Zhang X, Zou J, Fontes-Garfias CR, et al. Neutralization of SARS-CoV-2 spike 69/70 deletion, E484K, and N501Y variants by BNT162b2 vaccine-elicited sera. bioRxiv [Internet]. 2021 Jan 27 [cited 2021 Feb 9];2021.01.27.427998. Available from: https://pubmed.ncbi.nlm.nih.gov/33532771/

[data when access]

Address URL

Citing books

- Authors' names (period at the end)
  - Author's name followed by up to 2 initials
  - All authors' names separated by a comma and a space.
  - 1 to 6 authors:
    - list all authors
  - more than 6 authors:
    - list the first 6 authors, then add "et al“
- Title:capitalized (followed by period)
- Series number (if it's a book series)

Citing books

Edition (if not the first) (period)

Place of publication (if there are several places, only the first will be mentioned) (colon)

Publisher (semicolon)

Year of publication (period)

Available from: URL;

Access date [Date].

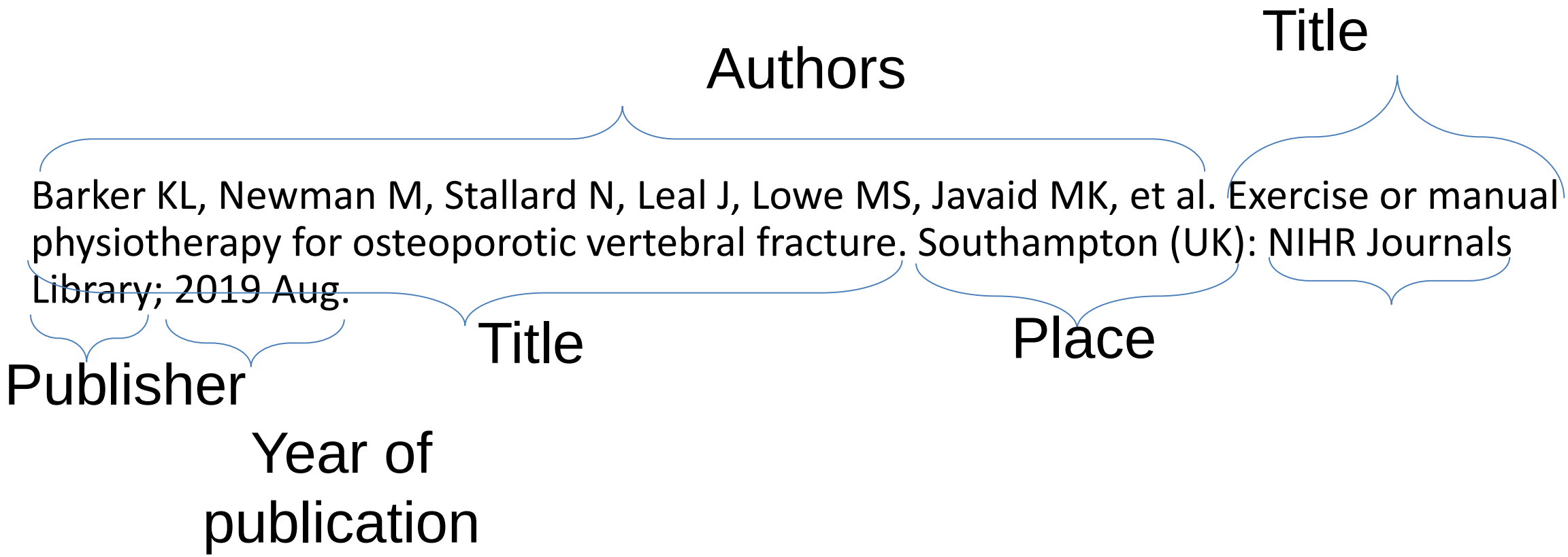
Citing books

Barker KL, Newman M, Stallard N, Leal J, Lowe MS, Javaid MK, et al. Exercise or manual physiotherapy for osteoporotic vertebral fracture. Southampton (UK): NIHR Journals Library; 2019 Aug.

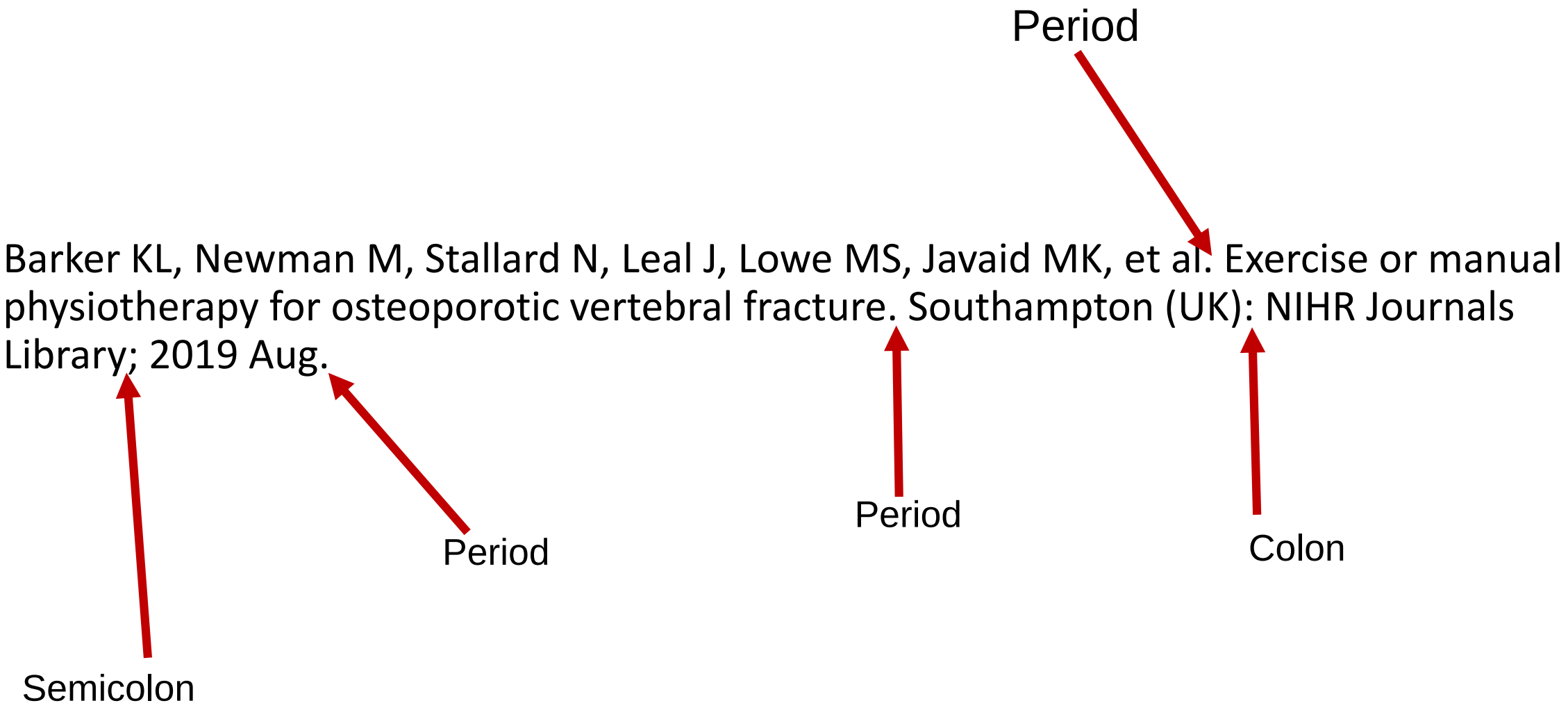
Citing books

Barker KL, Newman M, Stallard N, Leal J, Lowe MS, Javaid MK, et al. Exercise or manual physiotherapy for osteoporotic vertebral fracture. Southampton (UK): NIHR Journals Library; 2019 Aug.

Citing books



Citing books



Citing books

3rd. edition

- Ken D, Yin GW, LaFontaine N. Palliative Medicine. 3rd ed. Oxford: Oxford University Press; 2004.

Journal impact factor

- measure the importance of a journal
  - by calculating the number of times selected articles are cited within the last few years
- The higher the impact factor, the more highly ranked the journal.
- It is one tool you can use to compare journals in a subject category.
- The most known classification: SCIE
  - ISI Web Of Knowledge. The Web of Science - 8,500 prestigious, high impact research journals

Example

Journal information

AMERICAN JOURNAL OF ORTHODONTICS AND DENTOFACIAL ORTHOPEDICS

Publisher name: MOSBY-ELSEVIER

Journal Impact Factor ™

2.7	3.2
2023	Five Year

JCR Category	Category Rank	Category Quartile
DENTISTRY, ORAL SURGERY & MEDICINE *in SCIE edition*	35/158	Q1

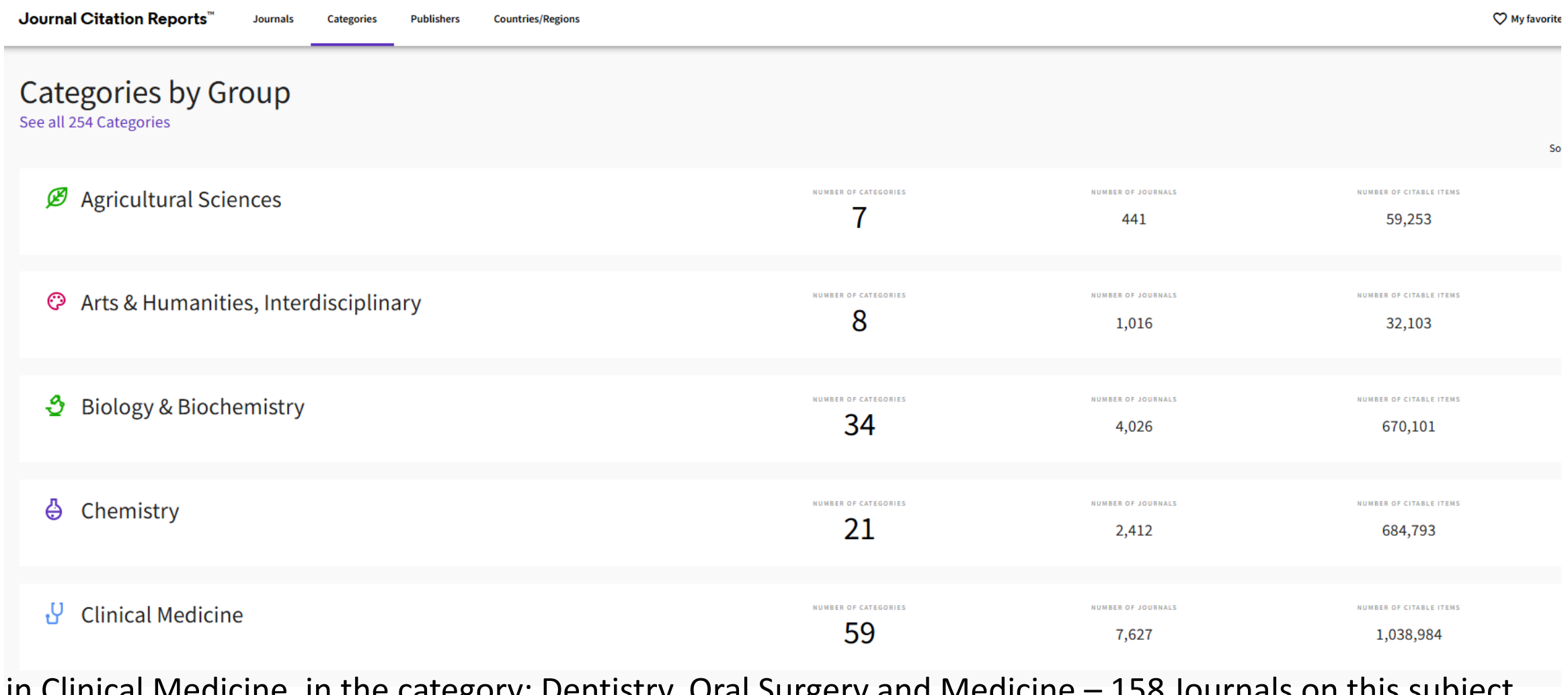
Source: Journal Citation Reports 2023. Learn more

Category

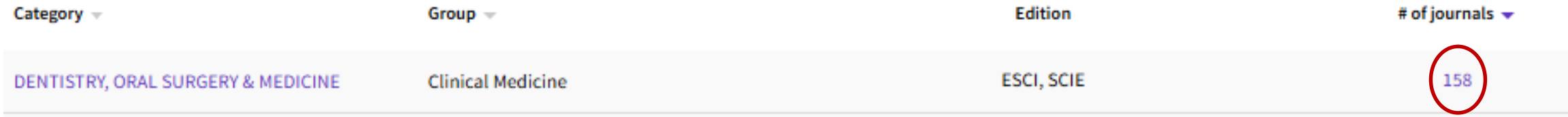
- 2023 Impact factor =2.7
- No. 35 in rank from 158 indexed Journals in this category: Dentistry, oral surgery And Medicine
- Q1 – First quartile
  - 158 jurnals/4=39.5
  - No.35 is in the first 39.5 journals=Q1

Quartile of a Journal - based on citations

- 158 journals in the category
- 158/4=39.5 → 39 journals in each quartile
  - Quartile 1 – the most cited journals in the field - 40 journals
  - Quartile 2 – the second most cited journals in the field - 39 journals
  - Quartile 3 – the third most cited journals in the field - 40 journals
  - Quartile 4 – the least cited journals in the field - 39 journals – last category



in Clinical Medicine, in the category: Dentistry, Oral Surgery and Medicine – 158 Journals on this subject

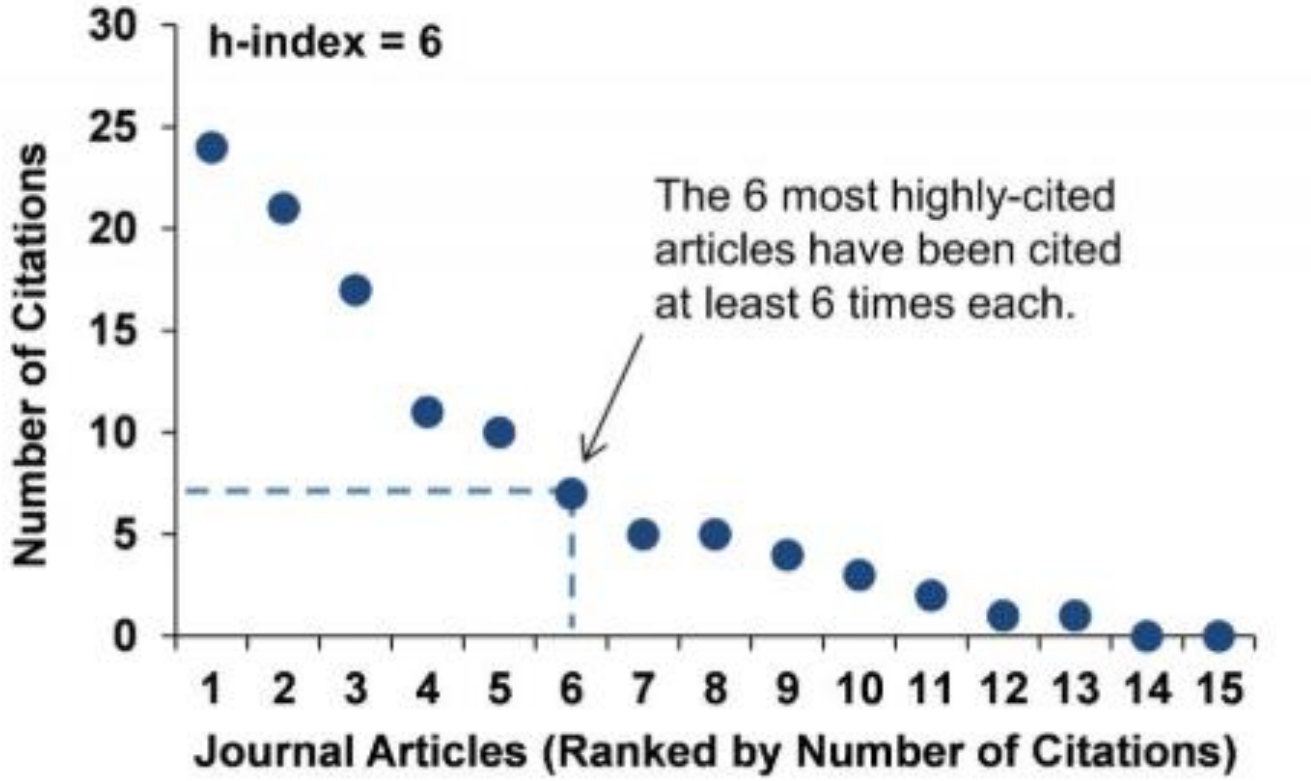


First 13 Journals in Dentistry

Journal name	ISSN	eISSN	Category	Edition	Total Citations	2023 JIF	JIF Quartile
PERIODONTOLOGY 2000	0906-6713	1600-0757	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	9,590	17.5	Q1
International Journal of Oral Science	1674-2818	2049-3169	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	3,639	10.8	Q1
JOURNAL OF CLINICAL PERIODONTOLOGY	0303-6979	1600-051X	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	21,117	5.8	Q1
JOURNAL OF DENTAL RESEARCH	0022-0345	1544-0591	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	24,426	5.7	Q1
Japanese Dental Science Review	1882-7616	2213-6851	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	1,192	5.7	Q1
INTERNATIONAL ENDODONTIC JOURNAL	0143-2885	1365-2591	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	11,468	5.4	Q1
JOURNAL OF DENTISTRY	0300-5712	1879-176X	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	14,129	4.8	Q1
CLINICAL ORAL IMPLANTS RESEARCH	0905-7161	1600-0501	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	15,754	4.8	Q1
DENTAL MATERIALS	0109-5641	1879-0097	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	17,995	4.6	Q1
JOURNAL OF PROSTHETIC DENTISTRY	0022-3913	1097-6841	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	19,174	4.3	Q1
JOURNAL OF PERIODONTOLOGY	0022-3492	1943-3670	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	18,340	4.2	Q1
Journal of Evidence-Based Dental Practice	1532-3382	1532-3390	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	1,365	4.1	Q1
ORAL ONCOLOGY	1368-8375	1879-0593	DENTISTRY, ORAL SURGERY & MEDICINE	SCIE	13,306	4.0	Q1

Hirsch index of an author

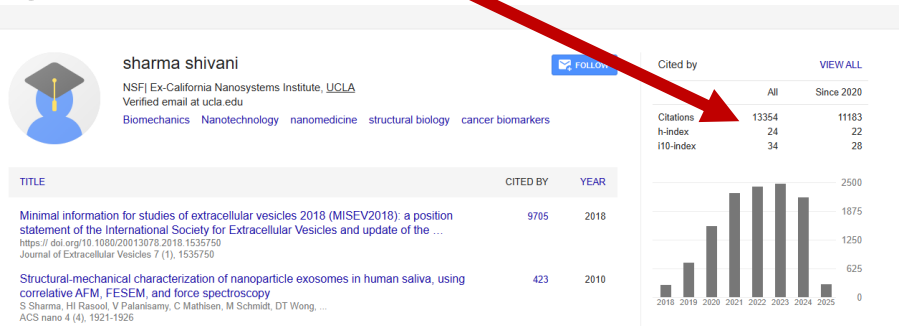
- author-level metric
  - measures
    - the productivity
    - citation impact

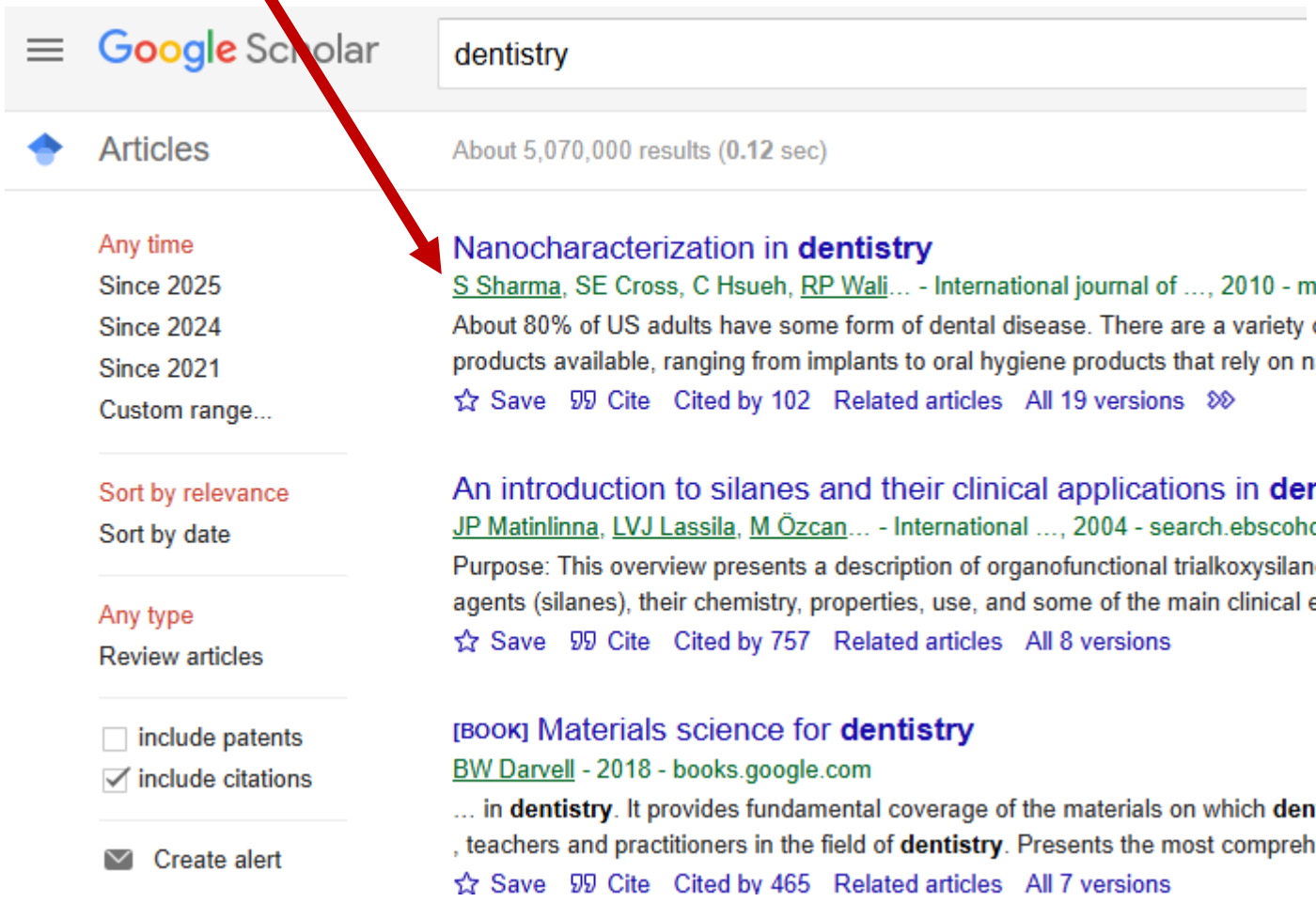


Author profile

Hirsch – index=24

Google Scholar



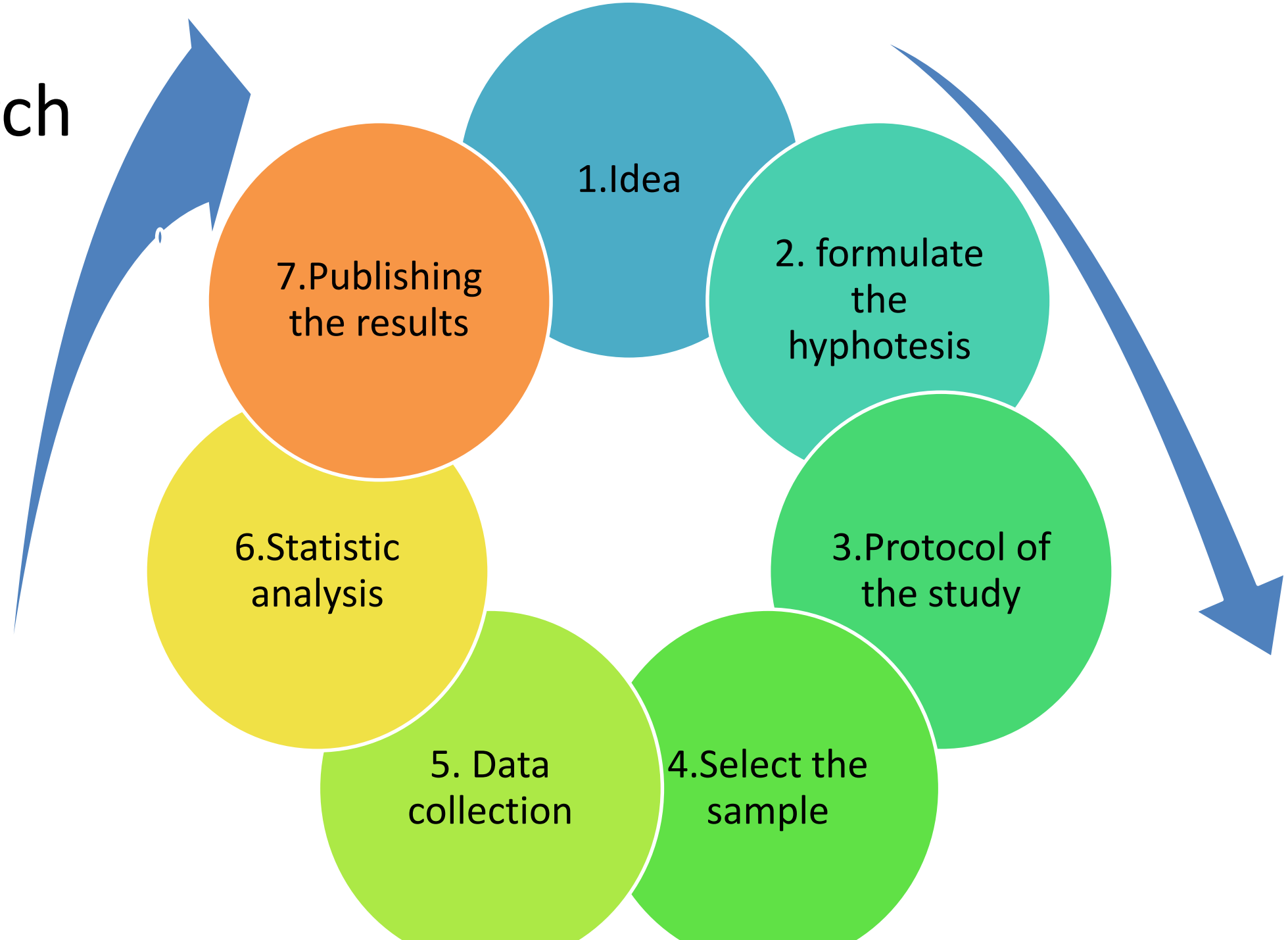


Idea

Objective

- From idea to study
  - Study hypothesis
  - Population, sample
  - Study protocol

Research


1.Idea
2. formulate the hyphotesis
3.Protocol of the study
4.Select the sample
5. Data collection
6.Statistic analysis
7.Publishing the results

How we get the idea? When?

- When we walk…

When?

- when we read…

When?

- when we sleep…

How?

- we observed

How?

- or From others…

How we get the idea?

- There are no recipe…

But once we have the idea…

Formulate the hyphotesis

Research method: scientific

- research hypothesis/study question

  = what **we want to prove**

  Formulating the hypothesis so that

  it can be tested

Bibliographic study

- maybe it's not a **new** idea
- maybe it's a **very studied** idea
- maybe there are controversies....?
- how to do the study to answer the asked question?

!!!we need to inform ourselves

- **Bibliographic** documentation
  - justify the pertinence of the research

Formulating a testable question

- From idea to hyphothesis

From idea to hyphotesis

- Dividing the research question into testable units

Example

Creative idea - Pessimistic thinking leads to depression (Seligman ME. Optimism is learned. New York: A.A.Knopf, 1990)

- Example of testable units:
  - What is pessimistic thinking? a diagnosis of pessimistic thinking

Creating a questionnaire to establish the type of thinking: pessimistic/optimistic

  - Are there degrees of pessimism?

Creating a questionnaire to establish the degree of pessimism

  - Is there an association between depression and pessimistic thinking?

- **case-control study**: Do depressed people think pessimistically to a greater extent than people without depression?
- **cohort study**: People who have pessimistic thinking will become depressed to a greater extent than those who do not have pessimistic thinking
- **experimental study**: If we "cure" pessimistic thinking, then people will no longer be depressed?

Different hyphotesis depending on:

- If the idea is not new, than find
  - a new population (persons)
  - a new place
  - a new time

Population

Ex. Who gets/doesn't get the disease?

- Criteria:
  - **Age** – children, young people, adults or the elderly
  - **Sex** – women or men
  - **Race** – white, black, etc.
  - **Genetic predisposition**
  - **Risk behavior:** smokers, sedentary, alcoholics
  - **Education level**
  - **Profession**

Place

Where does/doesn't the disease occur?

- Criteria:
  - Climate
  - Altitude
  - Population density
  - Housing type
  - Pollution Level
  - Economic Development
  - Nutritional Habits
  - Level of Medical Services

Time

When does/doesn't the disease appear?

- Criteria:
- Morning/Noon/Evening/Night?
- Winter/Spring/...
- It’s repetitive
- Time since an event
- Evolution is in stages/time

Formulation of the hypothesis

- H0: null hypothesis
- Ha: alternative hypothesis – usually this is the hypothesis of the study

Hypotesis (Finer)

It must be as **simple** as possible

novel

relevant

irrelevance - see IgNobel Prize

ethics

fesible (to be achievable)

Relevance? Ig Nobel Prize

IgNobel Prize – Study That Makes You Laugh, Due to Its Lack of Relevance

- Pavlo Blavatskyy: The obesity of politicians in a country can be a good indicator of the corruption of that country. "Obesity of Politicians and Corruption in Post-Soviet Countries," Pavlo Blavatskyy, Economic of Transition and Institutional Change, vol. 29, no. 2, 2021, pp. 343-356.
- Ethan Beseris: Beards are an adaptation of men to punches in the face. "Impact Protection Potential of Mammalian Hair: Testing the Pugilism Hypothesis for the Evolution of Human Facial Hair," Ethan A. Beseris, Steven E. Naleway, David R. Carrier, Integrative Organismal Biology, vol. 2, no. 1, 2020, obaa005.
- Silvano Gallus: Pizza is a protective factor in disease and death, but only if it is made and consumed in Italy. "Does Pizza Protect Against Cancer?", Silvano Gallus, Cristina Bosetti, Eva Negri, Renato Talamini, Maurizio Montella, Ettore Conti, Silvia Franceschi, and Carlo La Vecchia, International Journal of Cancer, vol. 107, no. 2, November 1, 2003, pp. 283-284.

Feasibility? Some hypotheses cannot be proven

Examples:

- If we dream of dogs we will have an ilness
- Friday the 13th brings bad luck
- Etc.
- Feasible = can be achieved

Thank you!