

why Journal club?

By:

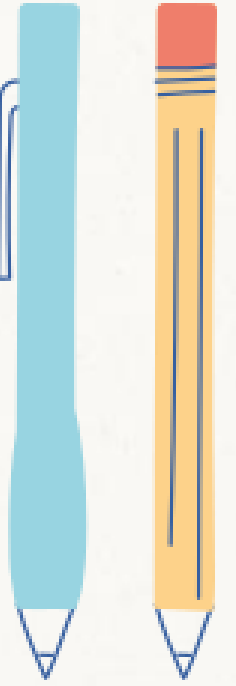
Forugh Aleebrahim

Msc of Epidemiology

Faculty Member, Torbat-e Jam School of Medical Sciences



Table of content



01 Journal club and history

04 Step of preparation

02 Importance and Aim of Journal club

05 Principle of critical appraisal

03 Prerequisites of Journal club

06 Additional notes on online Journal club

Journal Club and History



- ❑ A journal club refers to a structured group meeting in which members gather to review, evaluate, and discuss scientific research papers.
- ❑ Historical records suggest that Sir William Osler founded the first formal healthcare-related journal club at McGill University in 1875, aiming to promote critical thinking and improve clinicians' engagement with emerging medical literature.



Importance and Aims of Journal Club

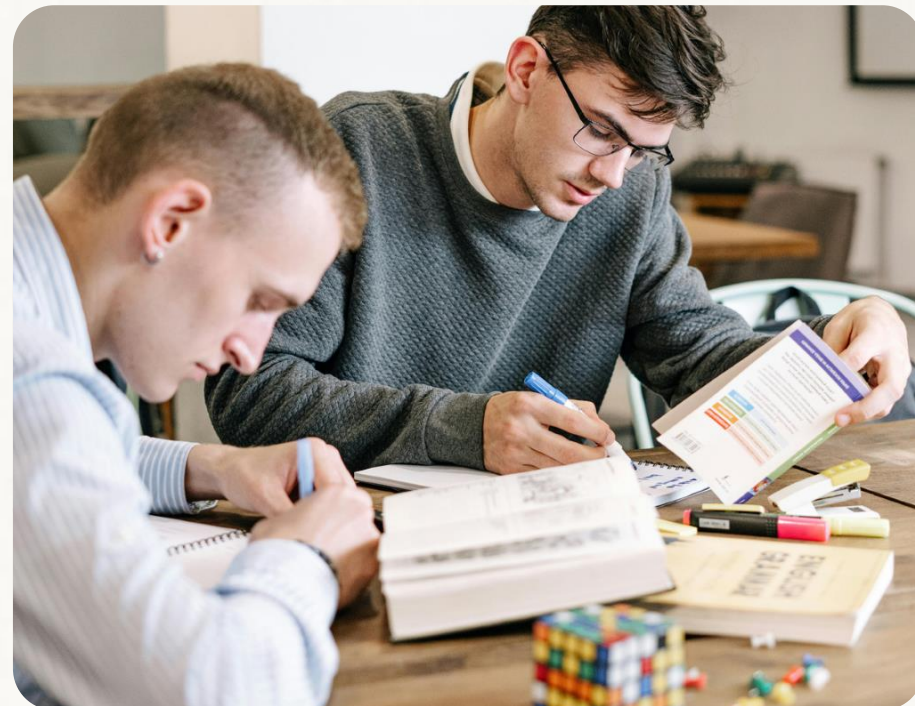


- ✓ To stay up-to-date with the latest scientific evidence and emerging research.
- ✓ To develop strong critical appraisal skills for evaluating research quality.
- ✓ To gain transferable professional skills, including effective presentation, analytical thinking, and structured discussion or debate.
- ✓ To assess whether current clinical or professional practices should be modified based on the best available evidence.





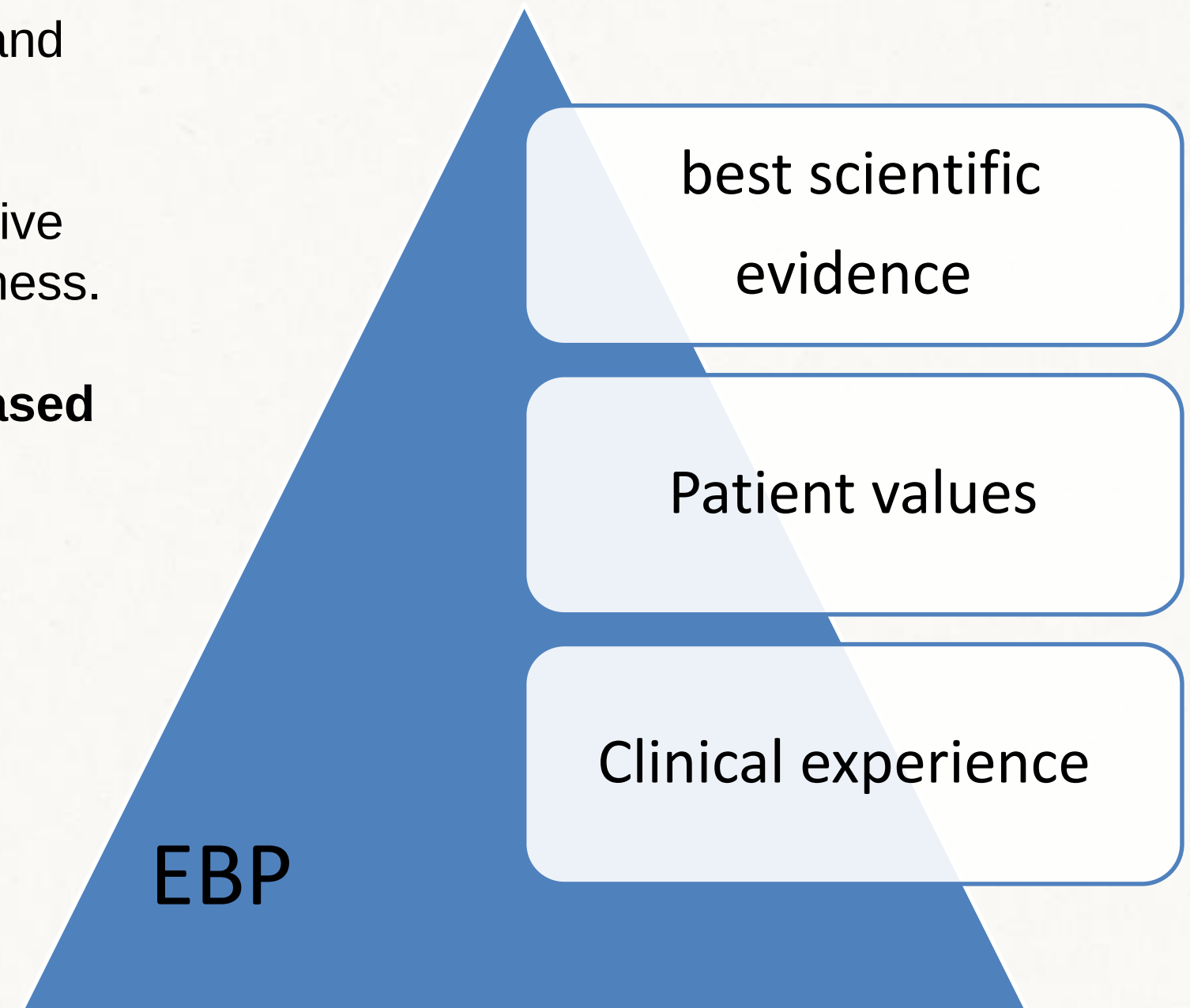
Key Requirements for Establishing an Effective Journal Club



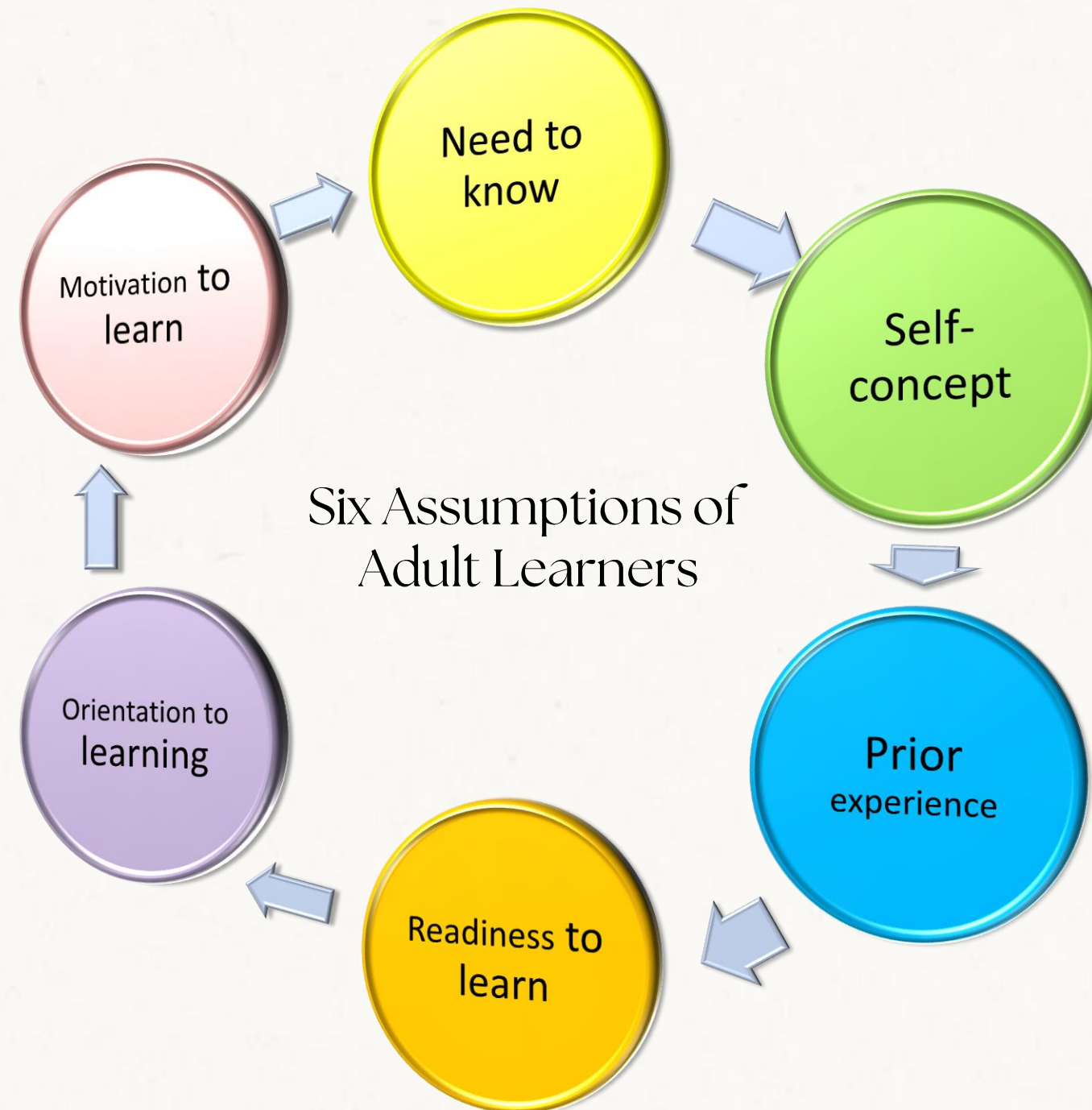
- Determining who is responsible for selecting the topic or research article.
- Establishing clear criteria for choosing high-quality and relevant material.
- Ensuring that all participants have timely and equal access to the selected article.
- Defining the structure of the session and identifying the discussion facilitator.
- Allocating sufficient preparation time for participants to critically review the paper.
- Setting a consistent schedule to maintain continuity and engagement.

Advanced Prerequisites for an Effective Journal Club

- ❑ Incorporating multidisciplinary participation to enrich discussions and broaden perspectives.
- ❑ Designing structured online feedback tools, including both qualitative (written) and quantitative evaluations, to assess session effectiveness.
- ❑ Developing a solid understanding of the principles of **evidence-based practice** and their application in decision-making.
- ❑ Applying **andragogical (adult learning) principles** to enhance engagement, relevance, and learning outcomes for participants.



Prerequisites of a Journal Club

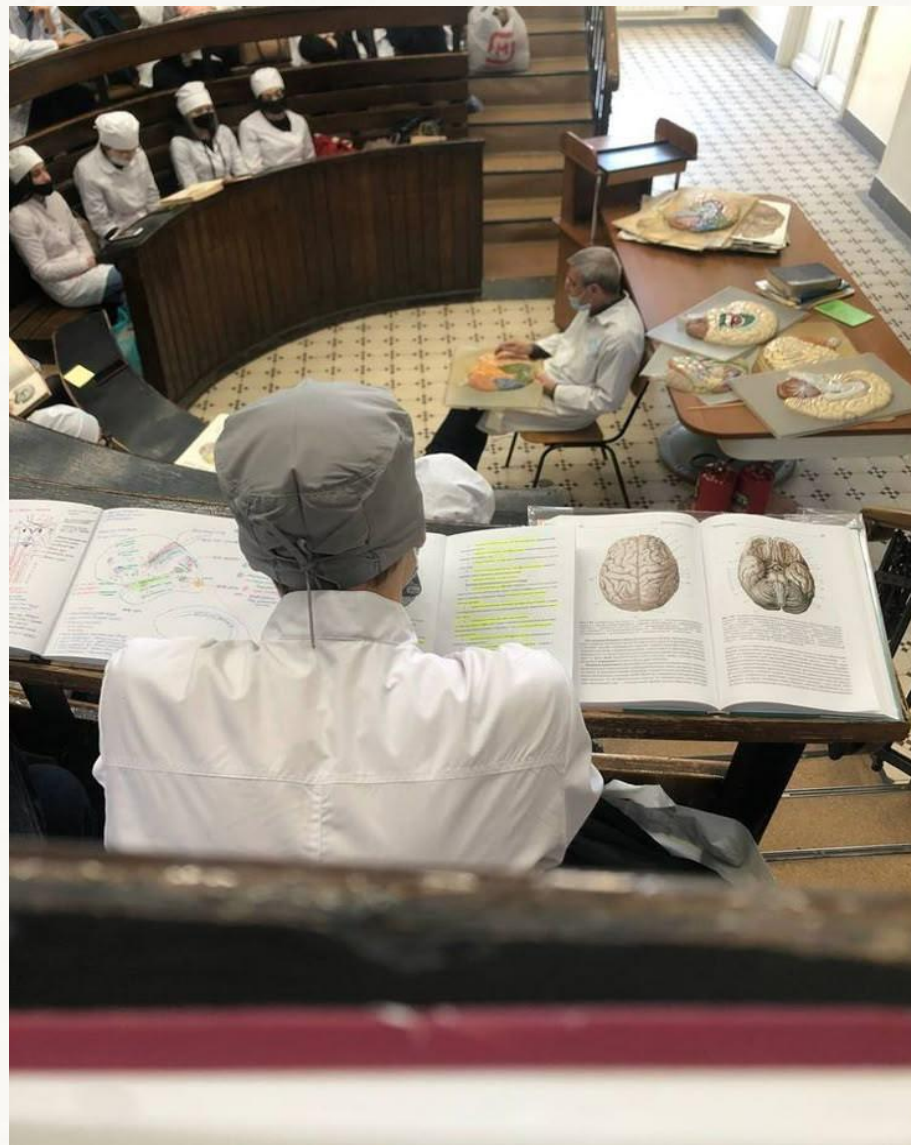


- 1) **Identify a knowledge gap and formulate a clear clinical or research question**, often using frameworks such as **PICO**.
- 2) **Perform a systematic literature search** to locate relevant and high-quality research articles.
- 3) **Select an appropriate article and critically appraise its methodology and findings**, using tools such as **CASP**.
- 4) **Share the selected article with participants in advance** so they have sufficient time to read and prepare.
- 5) **Present and discuss the article during the journal club session**, highlighting key findings, strengths, limitations, and implications for practice.

Steps of Preparation



Principles of Critical Appraisal



1. Study Objective

When evaluating a research paper, begin by clarifying the study's purpose. Key guiding questions include:

- ☐ **Why** was the study conducted? What gap or problem prompted it?
- ☐ **What clinical or research question** did the authors aim to explore?
- ☐ **Did the study successfully address its intended question**, based on the evidence and analysis presented?

Principles of Critical Appraisal

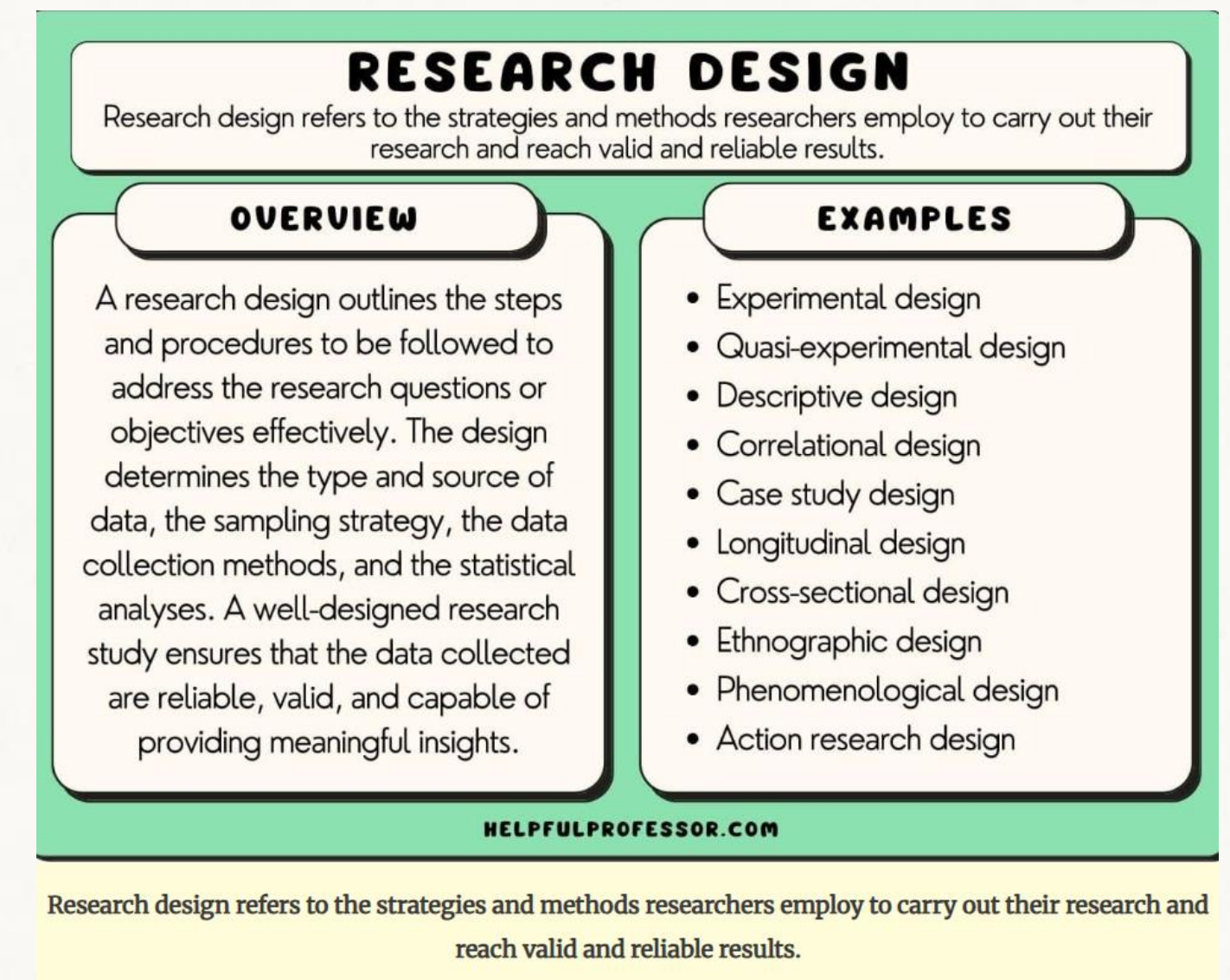
2. Study Design

Understanding the study design is a foundational step in critical appraisal because it determines the study's methodology, strengths, limitations, and the level of evidence it can provide.

A key question to begin with is:

What type of study was conducted?

Accurately identifying the design—whether experimental, observational, qualitative, quantitative, or a secondary study such as a systematic review or meta-analysis—helps assess the study's validity, the appropriateness of its methods, and how confidently its findings can be applied to practice.



Principles of Critical Appraisal

3. Study Characteristics

A critical step in appraising any research paper is to clearly identify and assess the key characteristics of the study, such as its population, intervention, comparison, and outcomes. Consider the following guiding questions:

Population: What type of participants were included in the study, and how were they recruited or selected?

Intervention: What specific intervention, treatment, or exposure is being evaluated?

Comparison: What is the study's control or comparison — another intervention, no treatment, or a placebo?

Outcomes: What primary and secondary outcomes were measured, and are these outcomes **objective** (e.g., measurable results) or **subjective** (e.g., patient-reported outcomes)?



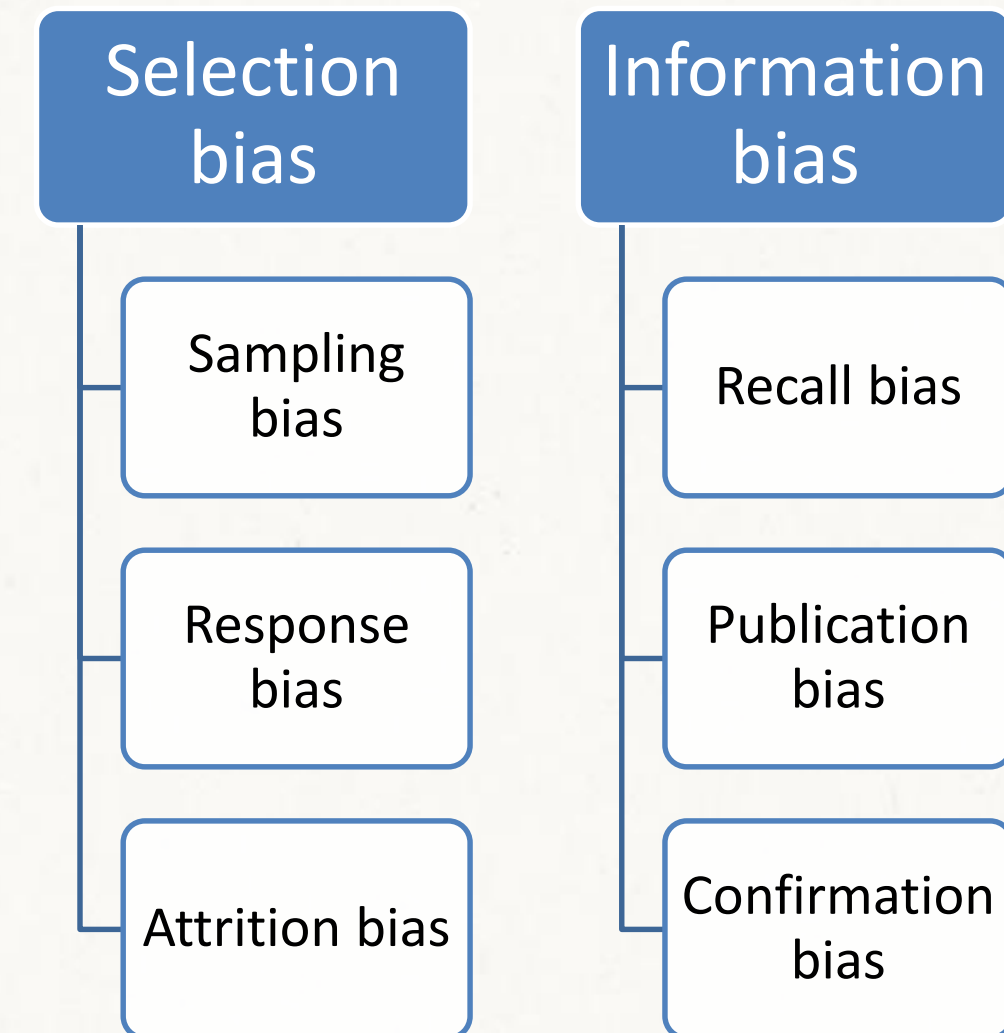
Principles of Critical Appraisal



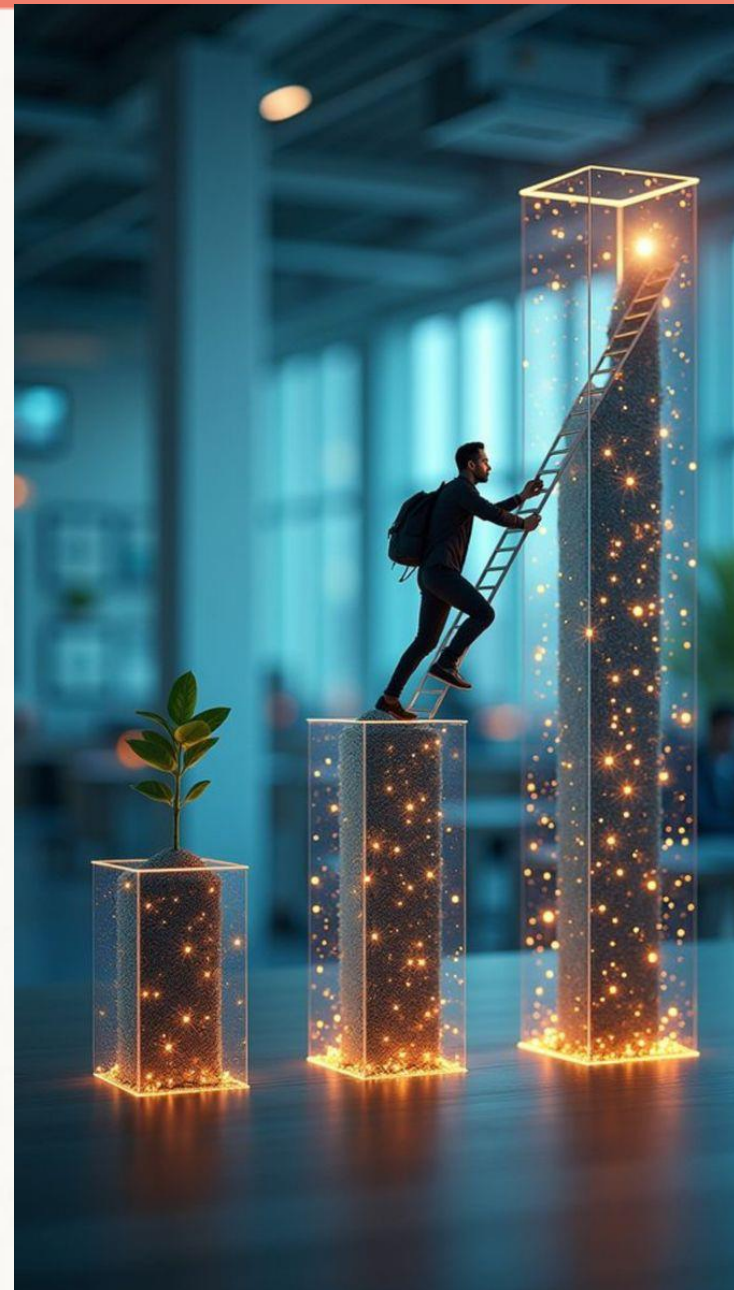
4. Assessing the Risk of Bias

Evaluating the potential for bias is essential for determining the credibility and validity of a research study. Bias can systematically distort results and reduce the reliability of the conclusions. When appraising a paper, consider the following:

Identify all possible sources of bias that may have influenced the study's design, data collection, analysis, or interpretation.



Principles of Critical Appraisal



5. Validity of the Results

After assessing the study design and potential sources of bias, it is essential to determine whether the study's results are valid and trustworthy. This can be guided by the following questions:

- ☐ **Do the results adequately answer the original research or clinical question?**
- ☐ **Are the outcome measures appropriate, relevant, and clearly defined?**
- ☐ **To what extent could bias have influenced the results, and how might this affect the study's conclusions?**

Evaluating result validity helps determine whether the findings can be confidently interpreted and used to inform practice or further research.

Principles of Critical Appraisal

6. Interpreting the Results



Key questions to address:

- a. Are the outcome measures used relevant and comprehensive?
- b. What is the size of the effect? (Clinical significance)
- c. What is the precision of the effect? (Statistical significance)



Principles of Critical Appraisal



7. Drawing Conclusions and Assessing Applicability

The final stage of critical appraisal involves interpreting how the study's findings apply to real-world settings and clinical practice. Key guiding questions include:

Will these results improve patient care or influence clinical decision-making?

Consider whether the study outcomes are practically useful and could enhance diagnosis, treatment, or patient management.

Are the findings generalizable and relevant to my own clinical or professional context?

Evaluate whether the study population, setting, and interventions are comparable to those in your area of practice.

In summary, determine how confidently the study's evidence can be translated into practice and what implications it may have for future research or guidelines.



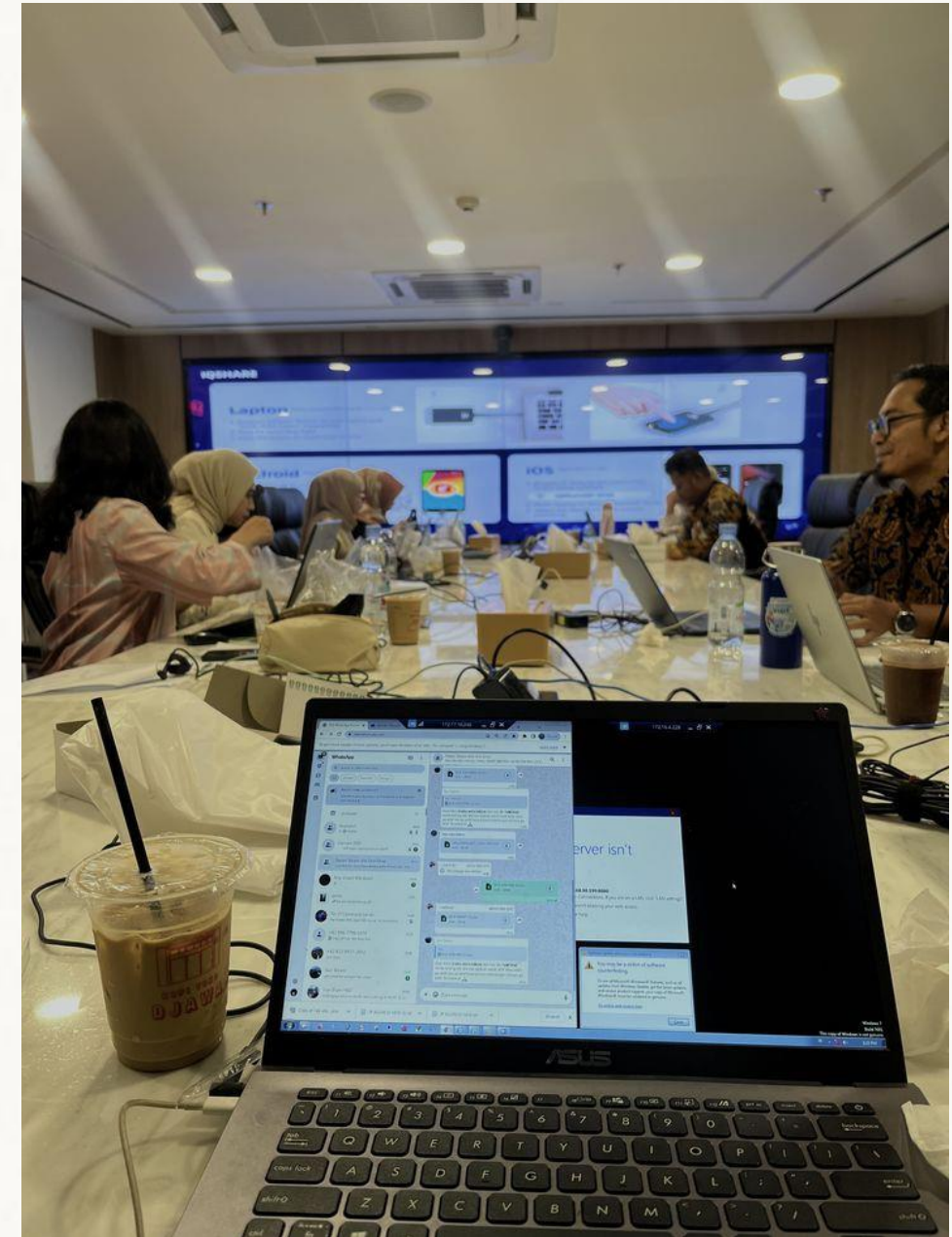
Additional Notes on Online Journal Clubs



- ☐ Explain videoconferencing etiquette at beginning of each session.
- ☐ If recording the session, specify when the recording will start and finish.
- ☐ Make time after the recording has finished for informal or social discussion.
- ☐ Use an online survey platform for feedback.
- ☐ Be prepared to change the format in response to feedback from attendees and facilitators.



Additional Notes on Online Journal Clubs



- Appoint both a chairperson and a facilitator so that technical responsibilities don't fall on one individual.
- Schedule sessions at times when participants have reliable access to a computer or device.
- Promote the journal club—such as through social media—to increase visibility and attendance.
- Choose a user-friendly videoconferencing platform to ensure smooth participation.





References

1. Esmail D, Shelton C. Establishing and sustaining an effective journal club. BJA Educ. 2022 Feb;22(2):40–8. doi: 10.1016/j.bjae.2021.10.001. Epub 2021 Dec 12. PMID: 35012375; PMCID: PMC8749795.
2. Journal Clubs: NHS Knowledge and Library Services. [Internet]. Available from: <https://library.hee.nhs.uk/knowledge-services/journal-clubs> (Accessed 7 June 2022)
3. How to set up an online journal club. BGS [Internet]. Available from: <https://www.bgs.org.uk/wp-content/uploads/2020/07/LIAISE-Guide-Setting-up-an-online-Journal-Club.pdf>
4. Evidence-Based Fitness Library Journal Clubs for Nurses: Home [Internet]. [LifeApps.com](https://lifeapps.com); 2013 [cited 2021 06 13]. Available from: <https://lifeapps.io/journal-clubs/journal-clubs-for-nurses/>
5. Journal Club: A Step Towards Evidence Based Practice [Internet]. [ResearchGate.net](https://www.researchgate.net/publication/271486977_Journal_Club_A_Step_towards_Evidence_based_Practi). [cited 2015 Oct 03]. Available from: https://www.researchgate.net/publication/271486977_Journal_Club_A_Step_towards_Evidence_based_Practi

Let's join us



+9152523224



www.reallygreatsite.com



forugha07@gmail.com



12 Mirghavam ST, Torbat-jum City, faculty of
medical scienc