

# Coalition for Open Access Publishing of Public Health in Africa (COPPHA) Peer Reviewing Course

## WEEK 3

### How to Conduct an Effective Peer Review: Key Steps and Best Practices

Modibo SANGARE, MD, PhD  
Associate Professor  
University of Science, Techniques  
and Technologies of Bamako  
(USTTB), Bamako, Mali

Izuchukwu A. Okafor, *CEART, PME, PhD*  
Senior Lecturer  
Nnamdi Azikiwe University, Nigeria  
Email: iza.okafor@unizik.edu.ng

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# COPPHA PEER REVIEW COURSE ZOOM SESSION

— WEEK 03 —

SESSION TOPIC

## HOW TO CONDUCT AN EFFECTIVE PEER REVIEW: KEY STEPS AND BEST PRACTICES

#COPPHApeerreview

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# OUTLINE

1. Why Peer Review
2. Key Considerations When Accepting a Peer Review Invitation
3. Quick and Simple Review Technique: SQ3R technique
4. Critical Elements to Review in a Manuscript
5. Structuring a Peer Review Report
6. Common Mistakes Reviewers and Journals Should Avoid

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# 1. Why Peer Review?

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# Why Peer Review 1/2

- **Ensures Scientific Rigor and Quality**
  - Sound methodology
  - Data analysis and interpretation
  - conclusions are well-supported by the evidence.
- **Promotes Objectivity and Unbiased Evaluation**
  - Neutral Assessment
  - Multiple Perspectives
- **Enhances Credibility and Trustworthiness**
  - Trust in Published Research
  - Academic Reputation

# Why Peer Review 2/2

- Improves Research Through Constructive Feedback
- Promotes Community Engagement and Professional Development
- Encourages Accountability
- Supports the Advancement of Knowledge
- Protects Against Fraud and Misconduct
  - Identifying Misconduct
  - Upholding Ethics



## 2. Key Considerations when Accepting a Peer Review Invitation

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# Key Considerations When Accepting a Peer Review Invitation 1/2

## ➤ Expertise

- Am I knowledgeable enough to make a positive contribution?

## ➤ Time

- Do I have the time for review?
- Can I work with their timeline?

## ➤ Journal's Modalities and Standards

- Open vs Blind
- Publishing the list of all reviewers
- Publishing review comments
- Incentive versus no incentive
- Familiarize yourself with the journal's expectations for peer review.
- Review the journal's peer review guidelines to understand the required depth and format of the feedback.

# Key Considerations When Accepting a Peer Review Invitation 2/2

- **Conflict of Interest/Bias**
  - Potential Conflicts: personal, financial, or professional relationships with the authors or the work being reviewed
  - Competing Research
- **Ethical Considerations**
  - Confidentiality
  - Objectivity and Fairness
- **Personal and Professional Development**
  - Learning Opportunity
  - Networking opportunity
- **Language Proficiency**
  - Are you proficient in the language the manuscript is written?
- **Workload Balance**
  - Avoid Overcommitting
  - Consider current Commitments

# Discussion: Personal Experiences

1. A journal as part of their review guideline requested that I suggest references from their journal that are related to the study being reviewed. It is part of what is being considered when assessing if a manuscript is within their scope
2. A journal suddenly asking me not to bother with the review just few days after I have accepted to review, because they have gotten the number of review feedback required.

**WHAT DO YOU THINK ABOUT THESE?**



# Discussion and Reflections

1. What other things do you consider when accepting a peer review invitation?
  1. Predatory vs Journal Ranking/Indexing?
  2. APC vs No APC
  3. Previous rejection experience with the journal
  4. Etc.

# 3. SQ3R Method of Reading

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# Quick and Simple Review Technique: SQ3R technique

- **SQ3R** is a reading strategy formed from its letters:
  - **S**urvey!
  - **Q**uestion!
  - **R**ead!
  - **R**ecite!
  - **R**evision!

Note: **SQW3R** when read and **write**.

Author: Francis Robinson in his 1941 book entitled, “Effective Study.”

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# Survey!

Before you read, Survey the article:

1. Read the title, look at the author list and read the abstract;
2. Understand the tables, figures, graphs without reading the text;
  - describe and interpret
3. Read the introductory and concluding paragraphs;
  - 1<sup>st</sup> paragraph (Introduction), last paragraph (Discussion) + conclusion
4. Read the first and last sentences of each remaining paragraphs;
5. Read underlined, bolded and italicized passages and sidenotes.

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# 4. Critical Elements to Review in a Manuscript

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# Critical Elements to Review in a Manuscript

- From the title to the last reference in the reference list
- Be familiar with manuscript writing:
  - Format and Content of each section
  - Standards of Reporting Findings based of the Study Type
  - Standard Methodological Approaches based of the Study Type
  - Study Designs
  - Data Analysis and Interpretation
- IMReD Structure
  - See the pdf Document « Critical Elements to Review a Manuscript



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# 5. Structuring a Peer Review

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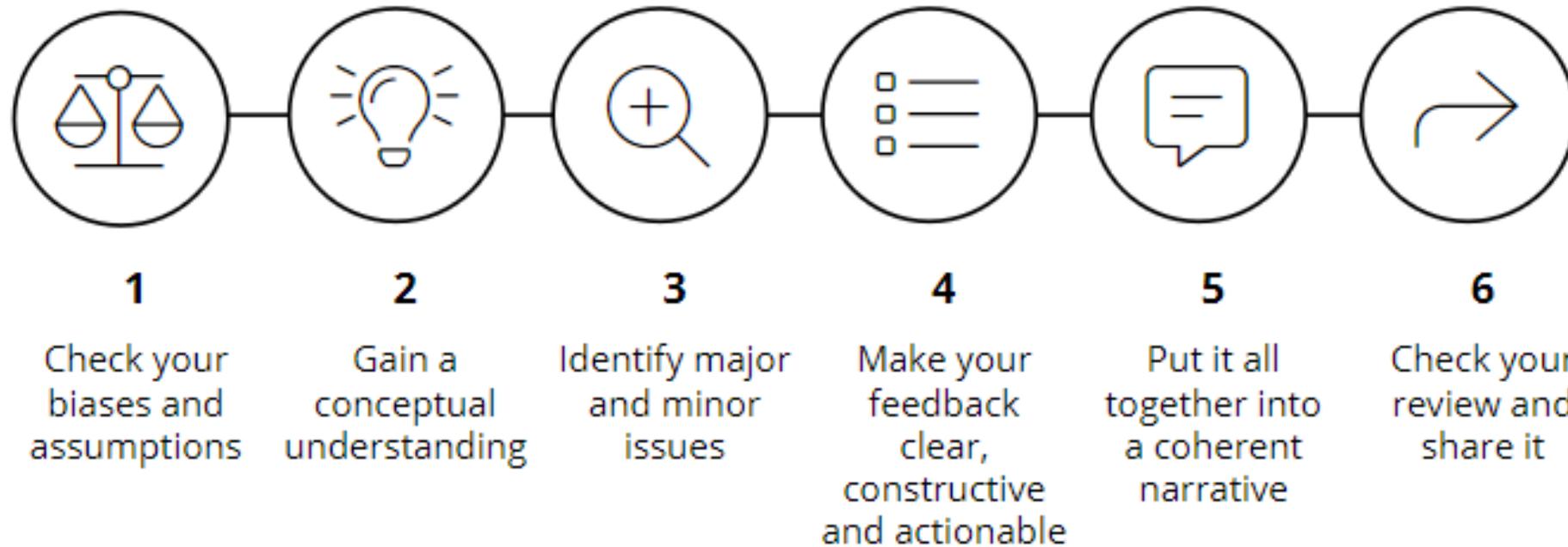


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# Structuring a Peer Review Report 1/4

Below is our attempt to break down the process of writing a review into **6 STEPS**:



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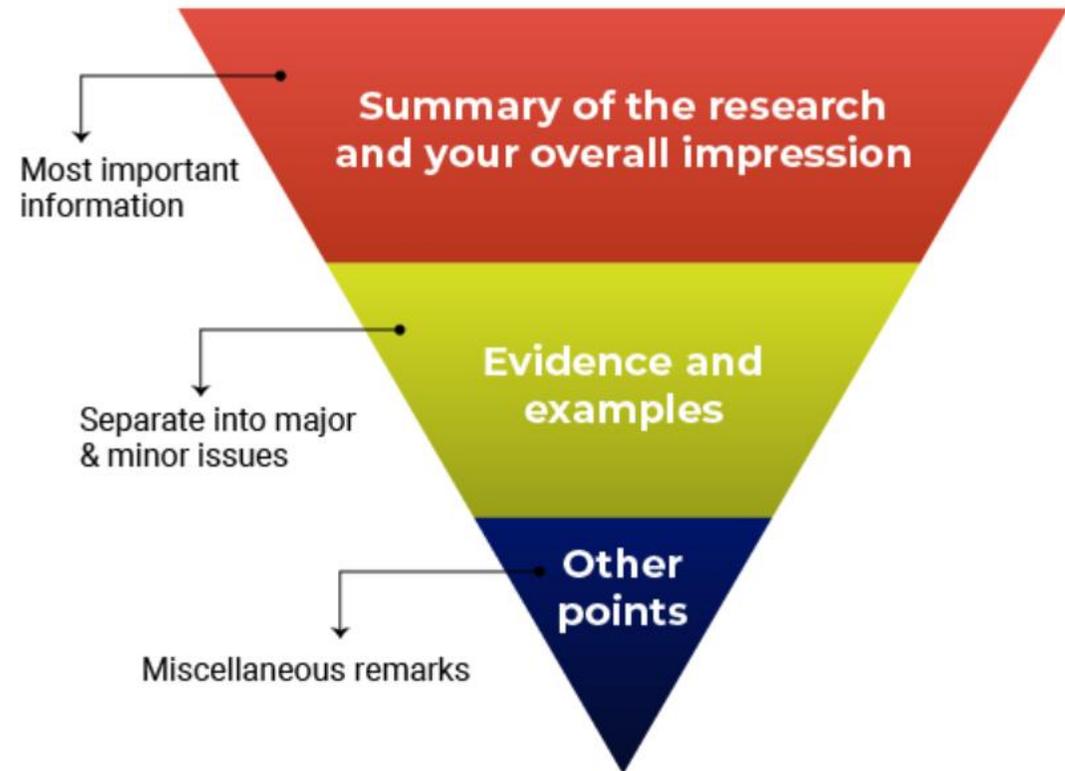


# Structuring a Peer Review Report 2/4

- Report must have a concise but informative **summary** of the findings,
  - highlighting what the study did well,
  - what can be improved, and
  - contextualizing the study within the state of the art in the field
    - (e.g., highlighting its novelty and impact on future research)
- Requested changes should be accompanied by **suggestions on improvements**, with justified
- Suggestions must be within the scope of the study
- The review does not contain any insult, direct critique, or questioning of the expertise of the author(s).

# Structuring a Peer Review Report – COPPHA Proforma 3/4

- Title
- Biases/conflict
- **Summary**
- Abstract
- Introduction
- Methods
- Result
- Discussion
- Conclusion
- Transparency/Reproducibility
- Language
- Other comments
- **Overall recommendation**



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# Structuring a Peer Review Report 4/4

- Respectful
- Constructive
- Honest
- Clear
- Humble
- Aware

# Discussion and Reflections 1/2

**What you think:** You don't completely understand the manuscript.

**What you could say:** "The authors should clarify the following sections to avoid confusion..."

**What you think:** The technical details don't make sense.

**What you could say:** "The technical details should be expanded and clarified to ensure that readers understand exactly what the researchers studied."

**What you think:** The writing is terrible.

**What you could say:** "The authors should revise the language to improve readability."

**What you think:** The authors have over-interpreted the findings.

**What you could say:** "The authors aim to demonstrate [XYZ], however, the data does not fully support this conclusion. Specifically..."



# Discussion and Reflections 2/2

## X Before

“It’s obvious that this type of experiment should have been included. I have no idea why the authors didn’t use it. This is a big mistake.”

## ✓ After

“The authors are off to a good start, however, this study requires additional experiments, particularly [type of experiment]. Alternatively, the authors should include more information that clarifies and justifies their choice of methods.”

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# 6. Common Mistakes Reviewers and Journals Should Avoid

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## Mistakes Dependent on the Reviewer 1/2

- **Bias:**
  - Personal and/or Confirmation Bias
- **Lack of Thoroughness:**
  - Superficial Review and Inadequate Evaluation of the Methodology
- **Focusing on Minor Issues:**
  - Nitpicking (a sentence should not start with a number unless spelt out, typos, spelling and grammatical errors) while ignoring Major Flaws
- **Insufficient Constructive Feedback:**

## Mistakes Dependent on the Reviewer 2/2

- **Not Understanding the Field or the Science all together:**
  - Lack of Subject Matter Expertise or Required Science Background
- **Failure to Respect Confidentiality:**
  - Discussing Manuscript Details or Suggesting Methods to Colleagues
- **Not Providing a Recommendation:**
  - No or Ambiguous Recommendations (Accepted with Minors or Major Changes, or Rejected)
  - Plagiat check

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# Mistakes Dependent on the Journal and/or the Reviewer

- **Inadequate Timeliness**
  - Delayed Reviews
- **Overlooking Ethical Considerations**
  - Ethics of Research
  - Conflict of Interest
- **Inconsistent Standards**
  - Variable Evaluation Criteria
  - No Evaluation Template



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# THANK YOU FOR LISTENING!

## *QUESTIONS?*

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## Join the COPPHA Community

**WhatsApp Group:** Stay connected for course updates and reminders.

**Support:** If you have any questions or seek collaborations, email us at [coppha@wacren.net](mailto:coppha@wacren.net).

*We're Here to Help: Our goal is to support you throughout your learning experience!*



## REFERENCES

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