A 10 Days Workshop: How to Write and Submit a Research Article

Lecture 1

Prerequisite Concepts for Writing A Research Article

Trainers

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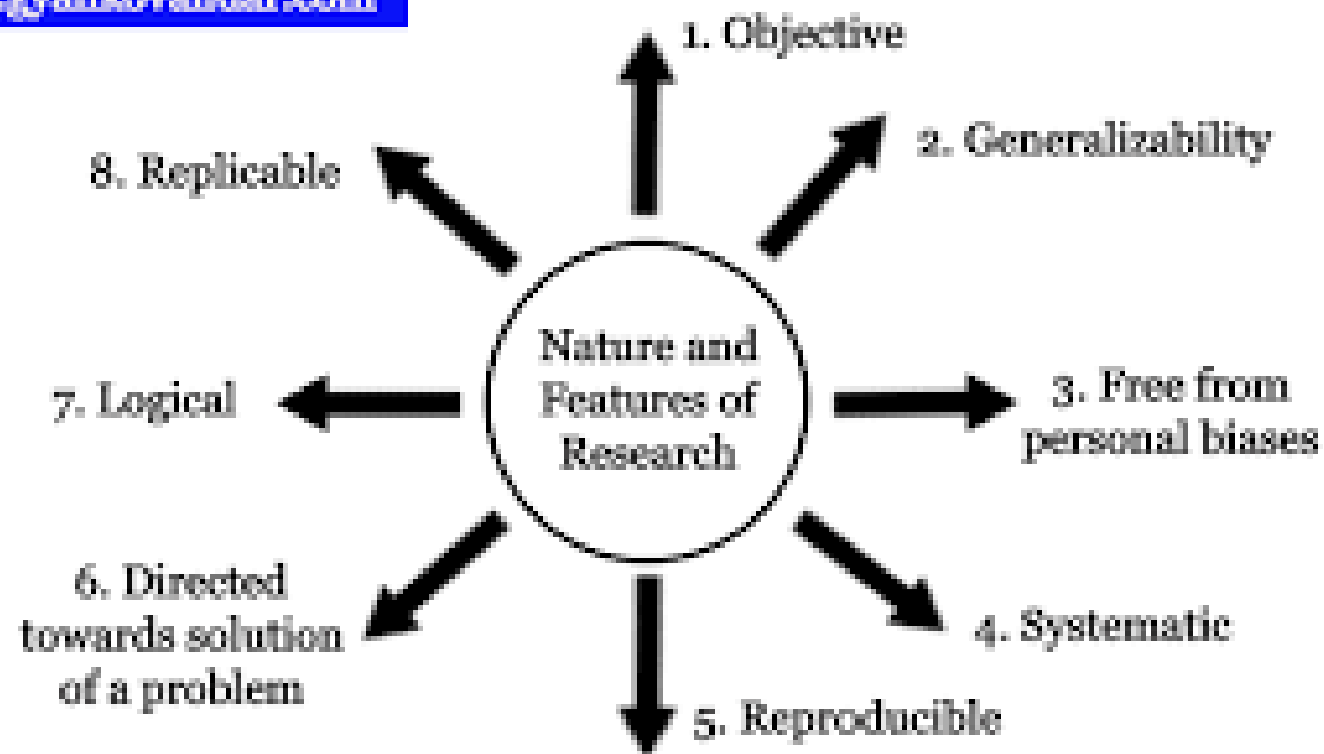Collaborating Member: Barcelona Supercompting Centre

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Prerequisite Concepts for Writing A Research Article

❑ Importance of Research

❑ Research Types

❑ Cycle of Publication

❑ How To Select Relevant Publishing Platform?

❑ Ethics of Publication

❑ Publication Ethics Checklist

❑ What Impact Factor is Good Enough?

Importance of Research

❑ Advancement in Understanding

❑ Understanding of Best Available Solutions

❑ Innovation and Discoveries

❑ Quality Improvement

❑ Analytical Mind Set and Skill Set Development

❑ Technology/Knowledge Transfer to Relevant Industry/Field

❑ Global Collaboration

❑ Continuous Improvement in a Concept

1. Objective

2. Generalizability

8. Replicable

Nature and Features of Research

3. Free from personal biases

7. Logical

4. Systematic

6. Directed towards solution of a problem

5. Reproducible

Research Types

Types of Research Methodology

Quantitative Research

Qualitative Research

Descriptive Research

Analytical Research

Applied Research

Types of Research Methodology

Fundamental Research

Exploratory Research

Conclusive Research

Surveys

Case Studies

Cycle of Publication

Journal Selection → Manuscript Preparation → Manuscript Submission → Peer-review & Revision → Acceptance → Copy editing English editing → Proofreading → Publishing

Rejection

How To Select Relevant Publishing Platform?

- Scope of The Publishing Platform

❏ Existing Publications

- Look for the Credentials of the Publisher

❏ Website Quality

❏ Tools and Services Offered

- Scalability of the Publisher

❏ No. of Publications

❏ Forums, Tutorials, Supporting Plate Forms

- Budget Considerations

- Terms and Polices of the Publisher

- Iterate the Platform

Ethics of Publication

❑Truthfulness

❑Transparency of Authorship and Contributions

❑Conflict of Interest

❑Institutional Review Boards (IRBs) /Ethics Committees Approval

❑Reproducibility

❑ Encouragement to Open Access

Publication Ethics Checklist

- ❑ Approval and Consent
- ❑ Data Accuracy
- ❑ Falsification
- ❑ Fabrication
- ❑ Plagiarism
- ❑ Self-Plagiarism
- ❑ Submission Fraud
- ❑ Ethics of Authorship
- ❑ Conflict of Interest

What Impact Factor is Good Enough?

- The impact factor (IF) is **a measure of the frequency with which the average article in a journal has been cited in a particular year**.

Field of Research	Good Enough Impact Factor Range
Biomedical Sciences	3 - 10
Chemistry	2 - 8
Physics	2 - 6
Engineering	1 - 5
Computer Science	1 - 5
Social Sciences	1 - 5
Humanities	0.5 - 3