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IAPSM's TEXTBOOK OF COMPREHENSIVE RESEARCH METHODOLOGY

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1 Title and Abstract for a Research Paper

Deepthi R, Suhitha R Das, Nirmala CJ

"A good title is the title of successful research. The most abstract statements or propositions in science are to be regarded as bundles of hypothetical maxims packed into a portable shape and size."

—William Kingdon Clifford

INTRODUCTION

Need of the Title and Abstract

Title and abstract are the "first line" and "face" of the paper that are read, when a reader goes through a journal article. The primary objective of a title is to engage the reader while simultaneously highlighting the central research inquiry; consequently, it is typically composed only after the entire manuscript is complete. Very few readers will read the full paper and most readers read only the title and the abstract of a research paper. This section aids editors in screening the manuscript for review, allows reviewers to form a preliminary assessment, and encourages readers to engage with the full text—a crucial function given that these are often the only openly accessible parts of the paper. Keywords in the title and abstract are the ones searched widely by readers to retrieve a particular paper during a search. Title and abstract should be captivating and informative and will introduce the subject to the reader in a clear and concise manner.

THE TITLE

Types of Title

Descriptive, declarative, or interrogative titles are the types of titles. They can also be classified as nominal, compound, or full-sentence titles.

- *Descriptive or neutral title*: This title incorporates essential research components like subjects, design, interventions, controls, and outcomes without pre-emptively disclosing the results or conclusions. By remaining descriptive rather than declarative, it encourages impartial evaluation by the reader. Consequently, such titles are often preferred as they tend to enhance the article's visibility and discoverability.
  - For example: Effects of intermittent fasting on HbA1c of diabetics.
- *Declarative title*: Incorporating the principal finding directly into the title is generally discouraged. This practice risks diminishing reader engagement and predisposing the audience to cognitive bias before the evidence is reviewed.
  - For example: Intermittent fasting among diabetics reduced HbA1c levels.

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- *Interrogative title*: This title states a query or the research question in the title. This may sensationalize the topic leading to more downloads. Such titles may be distracting to the reader; hence, they are best avoided for a research.
  - For example: Can intermittent fasting reduce HbA1c levels among diabetics?

Based on Sentence Construct

- *Nominal titles*: Titles may just capture only the main theme of the study.
  - For example: Prevalence of hearing impairment among elderly.
- *Compound titles*: Subtitles detailing context, design, geography, and significance are frequently incorporated to supply supplementary information.
  - For example: Prevalence of hearing impairment among elderly of Bangalore—A cross sectional study.
- *Full-sentence titles*: They indicate an added degree of certainty of the results and are longer.
  - For example: Increased prevalence of hearing impairment among elderly of rural Bangalore—A cross sectional study.

The appropriateness of these constructs varies relative to the nature of the manuscript, its core findings, and the discretion of the researcher.

Components of a Good Title

A good title should have the following six key components: Setting, Population, Intervention, Condition, Endpoint, and Design ("SPICED").

1. *Setting*: The research setting refers to the specific physical or social context in which a study is conducted. This environment may be community, home, school, laboratory, or hospital-based. Within a clinical context, the setting can be further stratified into specific departments, such as outpatient clinics, inpatient wards, or emergency units. Likewise, it could be a rural or urban setting. If results are not generalizable to other settings, or if the setting reflects the magnitude of the research, it is important to mention setting in the title.
2. *Population*: The target population constitutes the core of the research and must be explicitly defined, including specific demographic parameters such as age and sex where relevant.
3. *Intervention*: A key element of any clinical trial is intervention.
4. *Condition*: Clinical condition of the subjects is referred to as condition.
5. *Endpoint*: Unless we wish to use a declarative title, the outcome is sparingly used in the title. The change or type of change the condition undergoes after being subjected to intervention is referred to as the endpoint.
6. *Design*: Often *placed* after a colon or hyphen, the study design serves to *complete* the title.

Do's and Don'ts in Title Writing

- A good title should avoid technical language, be easily searchable, be substantiated by data, and spark curiosity among readers.
- Although witty or amusing titles possess aesthetic appeal, they may impede comprehension for the time-constrained reader and diminish the professional impact of the study, leading to lower citation metrics. Conversely, titles that are excessively concise often exclude the critical keywords required for effective indexing and retrieval.
- An excessively long or complicated title may put off the readers. Titles should be of optimal length to long to not too short.
- Jargons and nonstandard abbreviations should be avoided.

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Table 1: Some titles from IJCM publications and remark/comment on their appropriateness.

Title	Comment/remark on the contents of the title
Challenges in detection of adolescent anemia: validation of point-of-care device (Mission® plus) for hemoglobin measurement among tribal residential school children of selected districts of Odisha, India	Long title (28 words) capturing the main theme; site of study is mentioned
Cost-effectiveness of universal repeat human immunodeficiency virus screening in pregnancy: A cross-sectional study from Western India	Optimum number of words capturing the main theme; site, type of study is mentioned, no abbreviation used
To study the awareness about universal health precautions among nursing professionals in a medical college hospital of India	The words "to study" can be deleted; site of study can be mentioned
Accountability in healthcare in India	Very short title; may miss out on the essential keywords required for indexing
Maternal health status in tribal India: A 5-year intervention program and its outcome	Site and type of study not mentioned
Journey to death: Are health systems failing mothers?	Whimsical title, declarative title, reader may be biased while studying
Devadasi and their intimate partners: Dynamics of relationship	Short title, jargons used, maybe missed when searching for keywords, type of study and site not mentioned

Consider your audience before finalizing the title. Discussing the title with the colleague is a worthwhile option.

Table 1 provides the checklist for drafting a good title for a research paper and reviews and comments on a few titles of IJCM.

Drafting a Suitable Title

Title is generally written after the main body of the text and the abstract are drafted. A stepwise process can be followed to draft an appropriate title. The paper should be described by the author in about three sentences ensuring that these sentences contain important scientific words/keywords that describe the main contents and subject of the paper. Subsequently, authors are advised to amalgamate these drafts into a unified sentence, refining the syntax to achieve maximum precision within a 10–15-word limit.

Furthermore, publications frequently mandate a "short title" for page headers. This abbreviated version, typically restricted to 40–50 characters and permitting standard abbreviations, facilitates document navigation.

THE ABSTRACT

Importance of Abstract

The abstract serves as a comprehensive synopsis of the manuscript, mirroring the title's need for clarity and precision. It must be *autonomous*, *scholarly*, and *unbiased*, avoiding any misleading information. As the second most accessed section of the paper, it acts as a decisive preview; therefore, it is imperative that it accurately reflects the main text to effectively engage the reader.

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Reader engagement with the full manuscript is largely contingent upon the abstract's relevance and appeal. To maximize this engagement and ensure accurate representation, both the title and abstract must integrate key terminology derived from the main text.

Errors in grammar and typography do three things: (i) They *diminish* the perceived quality of the abstract, (ii) *signal* a lack of diligence on the part of the author, and (iii) *jeopardize* the chance of acceptance; therefore, they should be avoided at all costs.

Types of Abstracts

The abstracts can be structured or unstructured.

- *Structured abstracts* are mandated by the majority of peer-reviewed journals due to their superior ability to convey information efficiently. This format requires the segmentation of content into distinct subsections, typically comprising Context, Objectives, Design, Setting, Participants, Interventions, Main Outcome Measures, Results, and Conclusions. Structured abstracts are more elaborate, informative, easy to read, recall, and peerreview and hence are preferred; however, they consume more space and can have same limitations as an unstructured abstract.
- *Unstructured abstracts*, also known as nonstructured abstracts, are freeflowing and do not have predefined subheadings. They are commonly used for papers that usually do not describe original research. Though structured abstract is understood better, final format depends on the journal style.

The following elements need to be properly written under each subheading:

- *Introduction/Background and/or Objectives*: This subsection articulates the primary *rationale* for the study, typically limited to one or two concise sentences. It encompasses the central *hypothesis*, the *research question*, and the principal *objectives*.
- *Methods*: Typically the most substantial section, this subsection delineates the methodological framework. It encompasses critical details regarding the *study design* (setting, blinding, duration, follow-up), *population* (participants, sample size, sampling method), and *execution* (interventions, instruments), concluding with the *analytical strategy* (outcome measures and assessment methods).
- *Results/Observations/Findings*: This subheading delineates the study's findings. Often the most challenging section to synthesize due to its density, it must explicitly report the participant count and the outcomes of primary and secondary analyses. It is imperative to include concrete quantitative data, such as measures of central tendency (mean, median), dispersion (standard deviation), and statistical significance (p-values, 95% confidence intervals, effect sizes, odds ratios, etc.).
- *Conclusions*: This section articulates the study's conclusion—the answer to the "so what?" question—by synthesizing the research hypothesis with the obtained results. It is imperative to interpret findings conservatively to avoid overgeneralization while also delineating the broader implications of the work.

Drafting a Suitable Abstract

Strict adherence to the target journal's "Instructions to Authors"—specifically regarding format, typography, and word limits—is imperative. As most journals stipulate a maximum of 200–300 words, authors must exercise brevity. To ensure *congruence* with the full manuscript, it is recommended to draft the abstract as the final step; this facilitates logical alignment between the title, the introduction, and the summary. Furthermore, authors should verify the permitted subheadings, utilize concise phrasing rather than lengthy sentences, and consistently employ the active voice **Box 1**.

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Box 1: Checklist/useful tips for formulating a good abstract for a research paper.

- *Language and syntax*: Employ simple language and prioritize concise phrases over complex sentence structures to maximize economy
- *Structure and cohesion*: Ensure the content is informative and cohesive, strictly adhering to the specific subheadings mandated by the target journal (noting that structured abstracts are generally preferred over unstructured formats)
- *Autonomy*: The abstract must function as an autonomous, self-contained entity that is fully comprehensible without reference to the full text
- *Tone and ethics*: Maintain a writing style that is concise, engaging, and precise while ensuring the presentation of findings remains unbiased, honest, and balanced
- *Accuracy and consistency*: Ensure the abstract is neither misleading nor misrepresentative; it must maintain strict fidelity to the main text, particularly following any manuscript revisions
- *Information density*: Optimize the full word capacity permitted by the journal to ensure that the maximum number of substantive scientific facts are represented
- *Core focus*: The study's central thesis or "key message" must be displayed prominently
- *Compliance*: Adhere rigorously to the specific style guidelines and word count limits prescribed by the target journal
- *Style mechanics*: Prioritize the active voice and refrain from utilizing nonstandard abbreviations
- *Indexing*: Immediately following the abstract, authors must list appropriate *keywords* to facilitate effective indexing and search retrieval

Subsequently, authors must meticulously edit the abstract, eliminating redundant verbiage to strictly adhere to the permitted word count. Crucially, this reduction must occur *without compromising* the paper's key message, focus, or novelty. The study's rationale and the evidentiary basis for its conclusions must remain transparent, ensuring full consistency with the main manuscript throughout the revision process.

Nonstandard abbreviations should be avoided and do not cite references, tables, or figures in the abstract. It is always helpful in getting an opinion of a colleague on the content of the abstract. Suitable "Keywords" preferably chosen from the Medical Subject Headings (MeSH) list of the US National Library of Medicine (https://meshb.nlm.nih.gov/search) should be written as they are used for indexing purposes. These keywords need to be different/variant of the words from those in the main title as the title words are automatically used for indexing. Some formats like ICMJE (International Committee of Medical Journal Editors; http://www.icmje.org/) recommend publishing the clinical trial registration number at the end of the abstract.

RELEVANCE OF TITLE AND ABSTRACT DURING PUBLICATIONS

- The "title" and the "abstract" need to be drafted accurately, carefully, and meticulously since they are "initial impressions" of a research article. One should adhere to the instructions by the "target journal" regarding the style and number of words permitted for the title and the abstract.
- It is advisable for inexperienced authors to systematically review the titles and abstracts of leading journals. This practice facilitates familiarization with established stylistic conventions and provides insight into the specific aims and scope of the target publication.
- The abstract must maintain strict consistency with the manuscript, ensuring that the study's central thesis is displayed prominently. Furthermore, the strategic incorporation of *keywords* within both the title and the abstract is essential to facilitate effective indexing

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and retrieval via scientific databases. These specific terms should be formally enumerated immediately following the abstract.

- Strict adherence to the target journal's guidelines regarding style and word limits is mandatory for both the title and the abstract. Furthermore, the construction of compelling titles and meticulously structured abstracts serves to *expedite the editorial review process* and significantly *enhance readership metrics*.
- A well-structured title and abstract improve visibility, discoverability, and citation of research. High-impact journals require adherence to reporting guidelines like ICMJE, CONSORT, PRISMA, and STROBE for clarity and transparency. Following these enhances scientific credibility and increases chances of publication success.

KEY POINTS

- Title and abstract are the "first line" and "face" of the paper that is read.
- Title and abstract should be captivating and informative and will introduce the subject to the reader in a clear and concise manner.
- Three types of titles are descriptive, declarative, or interrogative. These can be further classified into nominal, compound or full sentence.
- A good title should have the following six key components, i.e., Setting, Population, Intervention, Condition, Endpoint, and Design ("SPICED").
- The abstract is a summary or synopsis of the full research paper.
- Two types of abstracts are structured and unstructured.
- A checklist is of immense importance while constructing a title and an abstract.

BIBLIOGRAPHY

1. Andrade C. How to write a good abstract for a scientific paper or conference presentation. Indian J Psychiatry. 2011;53:172-5.
2. Bavdekar SB. Formulating the right title for a research article. J Assoc Physicians India. 2016;64:536.
3. Cals JWL, Kotz D. Effective writing and publishing scientific papers, part II: Title and abstract. J Clin Epidemiol. 2013;66:585.
4. Dewan P, Gupta P. Writing the title, abstract and introduction: Looks matter! Indian Pediatr. 2016;53: 23541.
5. Gupta P. Framing a suitable title. In: Gupta P, Singh N (Eds). How to Write the Thesis and Thesis Protocol. A Primer for Medical, Dental and Nursing Courses. First, 1st edition. New Delhi: Jaypee Brothers Medical Publishers; 2014. pp. 45-9.
6. Hartley J. Current findings from research on structured abstracts: An update. J Med Lib Assoc. 2014;102:146-8.
7. Jamali HR, Nikzad M. Article title type and its relation with the number of downloads and citations. Scientometrics. 2011;88:653-61.
8. Papanas N, Georgiadis GS, Maltezos E, Lazarides MK. Writing a research abstract: Eloquence in miniature. Int Angiol. 2012;31:297-302.
9. Tullu MS, Karande S. Writing a model research paper: A roadmap. J Postgrad Med. 2017;63:1436.

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IAPSM'S TEXTBOOK OF COMPREHENSIVE RESEARCH METHODOLOGY

In the ever-expanding universe of research—where the rigorous demands of scientific inquiry intersect with the complex and evolving nature of health challenges—*IAPSM's Textbook of Comprehensive Research Methodology* continues to serve as a vital guide. More than a compilation of research methods, this textbook represents a structured journey for learners at every stage, from beginners taking their first steps in research to experienced scholars seeking deeper methodological insight.

At the core of this book lies the recognition that sound research is fundamental to shaping, strengthening, and sustaining health policies at local, national, and global levels. The text explores diverse research methodologies that inform evidence-based decision-making and effective public health action, thereby providing a strong intellectual foundation for those committed to advancing population health.

The second edition builds upon the foundational principles presented in the earlier version while incorporating updated perspectives, expanded methodological discussions, and emerging areas of relevance. Beginning with the essential concepts that underpin scientific inquiry, the book progresses through the statistical rigor of quantitative approaches, the depth and contextual richness of qualitative research, and specialized domains such as economic evaluation, operational research, and systematic reviews. These additions reflect the dynamic nature of contemporary health research and the growing need for multidisciplinary competence.

A defining strength of this textbook is its balanced and inclusive treatment of varied research methodologies. Rather than privileging one approach over another, it emphasizes the complementary value of each, enabling readers to select and apply methods appropriate to their research questions and real-world contexts. This comprehensive orientation ensures meaningful engagement for students, educators, practitioners, and policymakers alike.

Ultimately, the second edition of *IAPSM's Textbook of Comprehensive Research Methodology* aspires to remain more than a reference volume—it seeks to be a mentor, guide, and enduring companion in the pursuit of scientific understanding and public health advancement. By illuminating the pathways of rigorous inquiry and thoughtful application, the book continues to support all who strive to unravel the complexities of health and society through the transformative power of research.

Shelving Recommendation
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