

BENGKEL PENULISAN JURNAL BERIMPAK TINGGI **(Workshop on Research Manuscripts for** **Impact Factor Journal)**

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Research Manuscript - Introduction

“There is no way to get experience except through experience.”

Publication & Peer Review

What to publish?

abstract vs. full report

Choosing your forum

Which type of journal is best for you?

What audience are you targeting?

Research the journal

Publication guidelines

Article style

Research Manuscript - Introduction



*"The more you do, the more you fail.
The more you fail, the more you learn.
The more you learn, the better you
get."*

Research Manuscript - Introduction

Publication in Science – Global View

- Approximately 40,000 journals published regularly
- 20,000 of them are ISI or Scopus indexed
- Total number of papers published annually exceeds 2.5 million
- Google Scholar has almost taken over the world bibliometry.

Over 75% are never cited by any one

Research Manuscript - Introduction

Publication in Science – Global View

- Articles published (1665-2014)= 59 million
- Free and paid abstracts available Scopus, ISI Web of Knowledge (WoK), PubMed Central, and Google Scholar
- PubMed Central holds over 2.5 million articles, has a collection of over 21 million citations
- SciVerse Scopus holds over 47 million records, it includes 21,000 peer-reviewed journals (including 1,850 open access journals), 700 trade publications, and 450 book series.

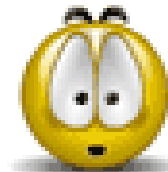
Research Manuscript - Introduction

Publication vs. Researcher

1. I love to do research



2. I have no choice



3. I hate to do research



Research Manuscript - Introduction

Publication

- How information is communicated among scholars and to potential users
- Research is not complete until it is published
- Provides accountability, which is the basis of trust
- From one author to many...

Research Manuscript - Introduction

Publication - Deciding Whether (or When) to Publish

Some factors to consider: quality of the work, extent of the work, interest to others

Suggestions:

- Seek guidance in this regard from others in your field who are more experienced in publishing journal articles – **Supervisor/Mentor.**
- Present your work **orally first**. Doing so can help in deciding whether the work is publishable and in shaping the paper.

Select the best journal for submission

- Look at **your references** – these will help you narrow your choices.
- **Review** recent publications in **each candidate journal**. Find out the hot topics, the accepted types of articles, etc.
- Ask yourself the following questions:
 - Is the journal **peer-reviewed**?
 - Who is this journal's **audience**?
 - What is the **average time to print**?
 - What is the journal's **Impact Factor**?
- Decide on **one** journal. DO NOT submit to multiple journals.

Select the best journal for submission

Identifying a Target Journal

- Decide early (before drafting the paper). Do not write the paper and then look for a journal. (Why?)
- Look for journals that have published work similar to yours.
- **Consider journals that have published work you cite.**

Research Manuscript - Introduction

What constitutes good journal?

Impact factor

- average number of times published papers are cited up to two years after publication.

Citation Index

- average number of times published papers are cited up to two years after publication.

Research Manuscript - Introduction

Impact factor

A measure of the frequency with which the "average article" in a journal has been cited in a **particular year or period**. The annual JCR impact factor is a **ratio between citations and recent citable** items published. Thus, the impact factor of a journal is calculated by **dividing the number of current year citations to the source items published in that journal during the previous two years**.

$$\text{Impact Factor} = \frac{\text{no. of citations}}{\text{total no. articles}}$$

calculated over the last 2 years

Research Manuscript - Introduction

Impact factor

- Calculation for journal impact factor.
 - A= total cites in 2014
 - B= 2014 cites to articles published in 2012-13 (subset of A)
 - C= number of articles published in 2012-13
 - $D = B/C = 2014 \text{ impact factor}$

The impact factor eliminates some of the **bias of such counts which favor large journals over small ones**, or **frequently issued journals over less frequently issued ones**, and of **older journals over newer ones**.

Research Manuscript - Introduction

2014 Impact Factors are available at various sites;
newer impact factors are copyright-protected

- Drawbacks of impact factors:
 - Review articles are cited more than original research
 - Number of citations does not measure quality, just exposure
 - The nature of results in different research areas yield different amounts of publications at different paces. Generally, medical journals have higher impact factors than mathematical journals.

Research Manuscript - Introduction

| Rank | Abbreviated Journal Title | IF (2012) |
|------|-----------------------------|-----------|
| 1 | ANNU REV IMMUNOL | 52.431 |
| 2 | CA-CANCER J CLIN | 44.515 |
| 4 | NAT REV CANCER | 36.557 |
| 5 | PHYSIOL REV | 33.918 |
| 6 | <u>NAT REV MOL CELL BIO</u> | 33.170 |
| 7 | REV MOD PHYS | 32.771 |
| 9 | <u>NATURE</u> | 32.182 |
| 10 | <u>SCIENCE</u> | 31.853 |
| 13 | <u>CELL</u> | 28.389 |
| 14 | <u>NAT IMMUNOL</u> | 27.586 |
| 15 | JAMA-J AM MED ASSOC | 24.831 |

Select the best journal for submission

Some Factors to Consider

- **Audience** – Researchers, Educators
- **Prestige** – Relevant in the field
- **Access** – Open Access
- **Impact** – Journal value
- **Publication time**
- **Quality of reproduction**
- **Likelihood of acceptance**

Building the Writing Habit

- The same time.
- The same place.
- Carry a notebook
- Get rid of **rid of** negative thoughts.
- Sit alone in silence.
- Ideas, not grammar, for the first draft. Rewrite.

Key to Writing Skills

- The path to writing well is to read excellent writers and write.....and write...and write.
- “Free write” your thoughts. Don’t worry about structure initially.
- Use the **best paper in your field** as a template and try to convert your free write-up into a format.
- Keep writing concise, dynamic and simple in construction.
- Convey enthusiasm in your writing so it attract the audience.

Research Manuscript - Introduction

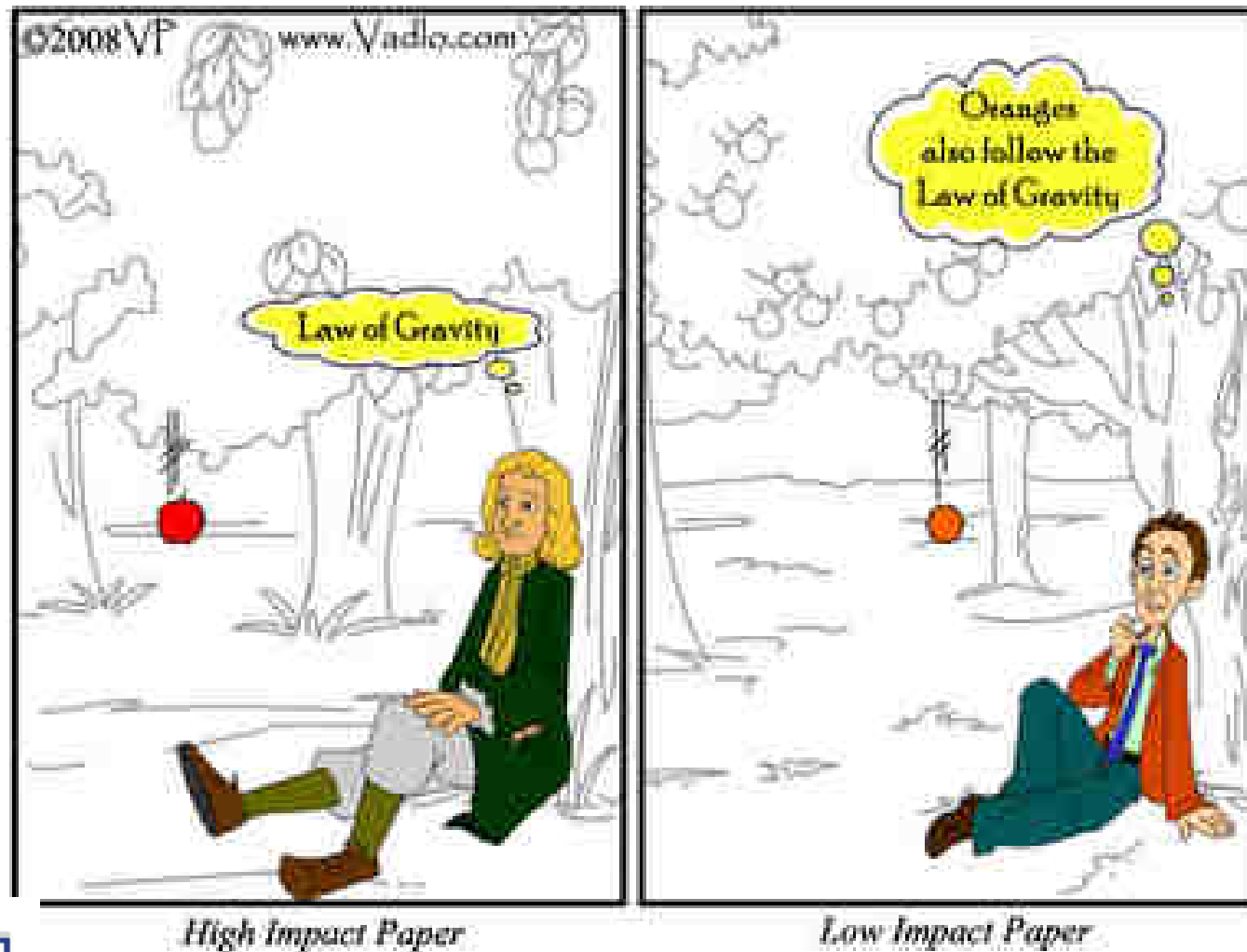
What makes a good research paper?

- **Good writing**
- **Publication in good journals**

Great science when written poorly can be a good paper or alternatively, average science when written well can be a good paper.

On the other hand, great science when written well can be an excellent paper and average science when written poorly can be the readily reiected paper.

Publishing in High Impact Journals-It's the idea which matters



Research Manuscript - Introduction

Excuses for not publishing.

- Fear of judgement / rejection.
- “I can’t write.”
- “I don’t know where to start.”
- Need for perfection.
- “I don’t have enough time.”
- Lack of Confidence
- Fear of public scrutiny
- Unsure whether have the skill



Caution – work has a ‘use by’ date.

Research Manuscript - Introduction

“The Seven Deadly Sins”

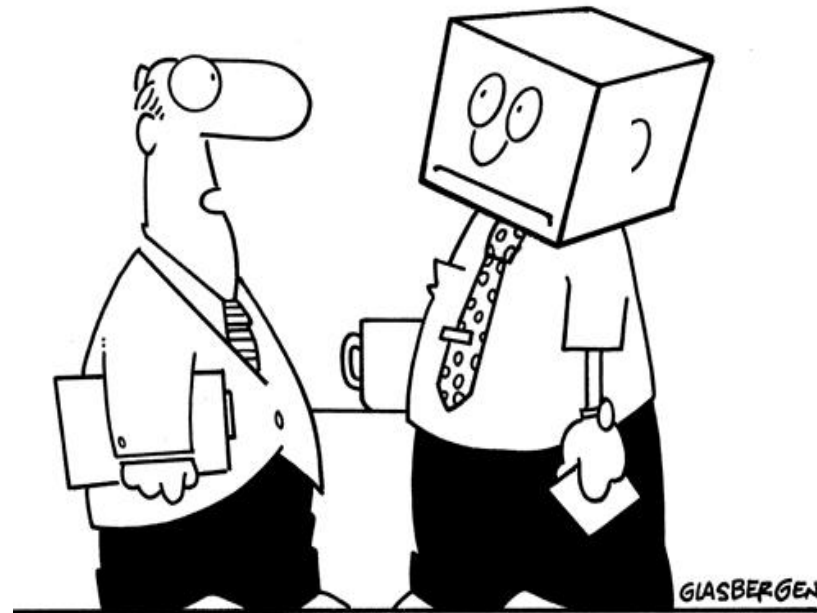
1. Data manipulation, falsification
2. Duplicate manuscripts
3. Redundant publication
4. Plagiarism
5. Author conflicts of interest
6. Animal use concerns
7. Humans use concerns



Research Manuscript - Introduction

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- Creativity
- Open mind
- Curiosity
- Patience
- Persistence
- Positive Attitude
- Discipline and focus



"Thinking outside of the box is difficult for some people. Keep trying."

Research Manuscript - Introduction

What constitutes good Research?

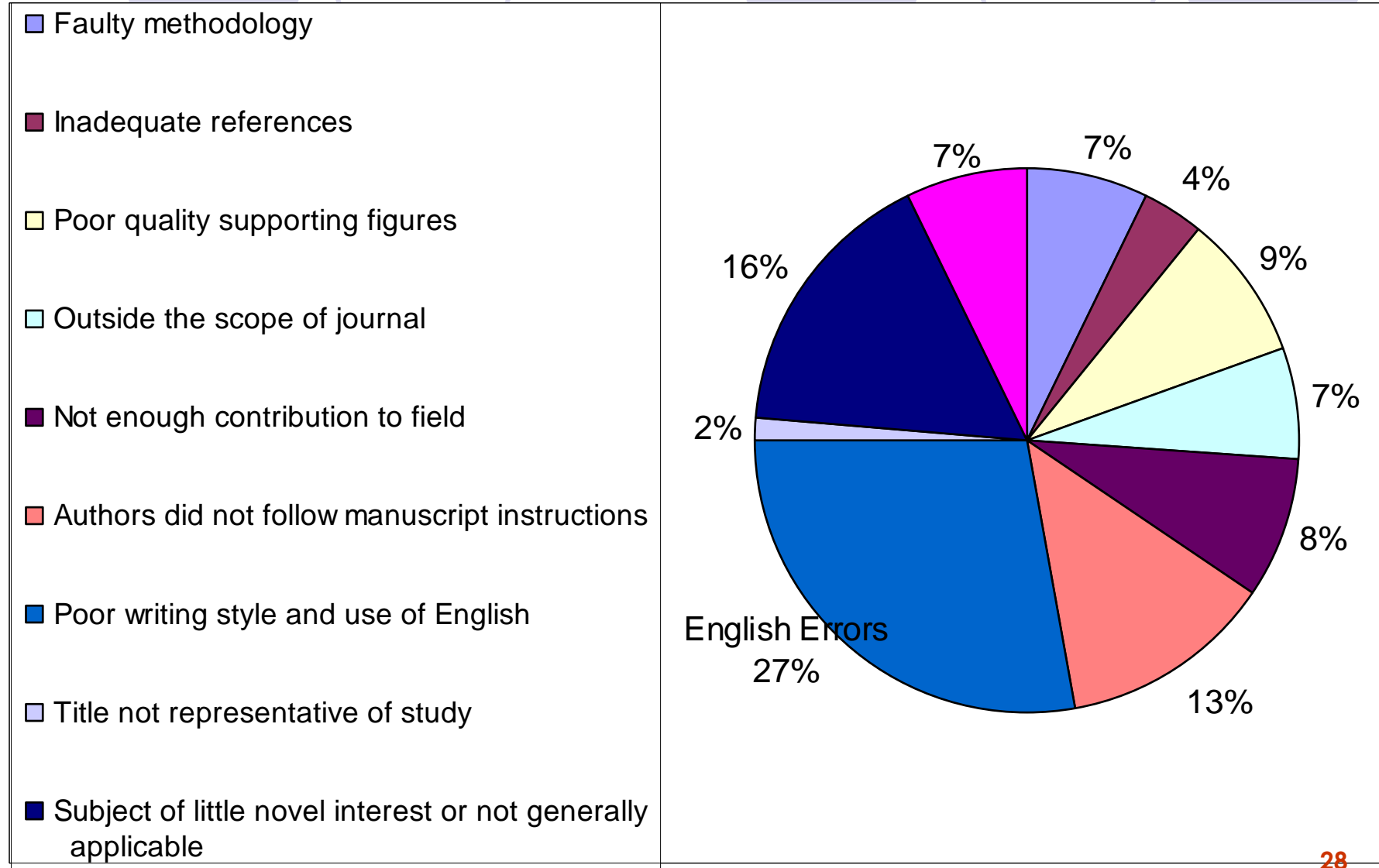
- Novel – new and not resembling something formerly known or used (can be novel but not important)
- Mechanistic – testing a hypothesis - determining the fundamental processes involved in or responsible for an action, reaction, or other natural phenomenon
- Descriptive – describes how are things are but does not test how things work – hypotheses are not tested.

Research Manuscript

Reasons of Rejection

- **So what factor”** - fails to communicate a sense of purpose and how it extends the boundaries of knowledge
- Material is inappropriate for the journal
- Work is fundamentally flawed
- Work is unintelligible

Reasons for major revision or rejection of journal papers

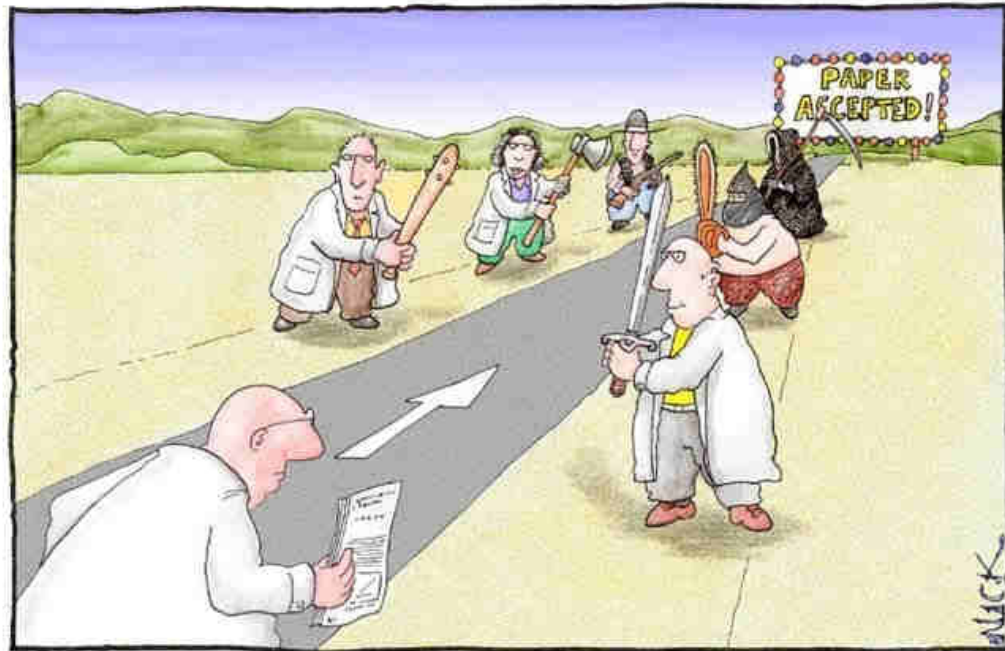


Manuscript - Get rejected

- **When rejected, try again**
- Even Nobel Laureates get rejection letters.
- You may need to play “ping pong” with the paper. Submit the paper to another journal within one month.
- You do not have to revise a paper every time it is rejected. But if a paper is rejected 4 times, there is a serious flaw in the paper. Find and fix the problem.
- Why? **The same referee might get it again.**

What is Peer Review Process?

- Exciting the reviewer's mind is far more important than exciting the reader's mind.
- It is likely that no one will ever read your paper more thoroughly than the reviewer.
- Suggest referees that appreciate your work (political)



Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'

www.weirdscience.ca

Research Manuscript

A scientific paper tells a story!!

- We need a problem or something to catch the reader's attention
- We need a plot / results
- We need resolution of the problem at the end of the story.

Research Manuscript

Attributes of the best papers

- **Resolve a controversy**
- **Separate Results and Discussion sections**
- **Discussion with sub-headings as questions**
- **Introduction builds to central questions**
- **All roads lead to central question**
- **Hypotheses / research questions crystal clear and results flow from these questions**

Research Manuscript Structure

A bit on Writing Style – Language

- There are generally no hard and fast rules about which tense to use when

but

- the following guidelines will help you decide what tense to use when.

Depends on the audience

More Lively Writing (usually preferred)

First Person, Active Voice, Past/Present Tense

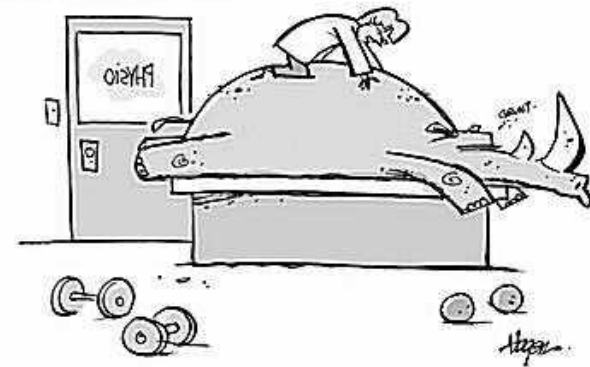
More Formal Writing

Third Person, Passive Voice, Past/Present Tense

Never use slang

Tense about tenses?

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YOU'RE VERY TENSE TODAY.

Search ID: rhan569

Research Manuscript Structure

A bit on Writing Style - Language

- Write in the **active tense** instead of passive tense:
“We collected samples of blah...” instead of
“Samples of blah were collected...”
- Avoid all jargon if at all possible. Never assume the reader knows any jargon.
- Write in simple sentences
- **Subject and verb up-front** in all sentences
- You can use personal pronouns: “We sampled...”

Scientific Language - Tenses

- Present tense for known facts and hypotheses:

“The average life of a honey bee is 6 weeks”

Use to discuss/describe

- a **fact** or situation that is **always true** or continues to be true, e.g. *genetic information **is encoded** in the sequence of nucleotides on DNA.*
- An aspect of your thesis, **a table or a figure** etc, e.g. *Figure 6 **shows** the distribution of the disease among older women.*
- the **implications** of your or others' work, e.g. *These results **suggest** that nutritional supplements **contribute** to substantial weight gain.*

Scientific Language - Tenses

- Past tense for experiments you have conducted:
“All the honey bees were maintained in an environment with a consistent temperature of 23 degrees centigrade...”
- Past tense when you describe the results of an experiment:
“The average life span of bees in our contained environment was 8 weeks...”

Scientific Language - Tenses

Use Past tense when...

- reporting your **results**, e.g. *In the final experiment the response **was** unexpected.*
- describing something that is **no longer** considered **valid**, e.g. *Twentieth century demographers **believed** that the world's population would stabilize by 2020 but current research **shows** it will not do so until 2040.*

Use to emphasize the specificity of a study

Scientific Language - Tenses

Present perfect – common uses

Use to

- indicate that research in the area is still **continuing**, or has immediate relevance today, e.g. *Several researchers **have studied** the effect of binge drinking on the cognitive functioning of adolescents.*
- generalise about **past ongoing research**, e.g. *Software has been tested manually for most of the last four decades.*

Scientific Language - Tenses

Referring to the work of previous researchers – changing tenses

- Smith (2008) **reported** that adult respondents in his study **remembered** 30 percent more than children.
- Previous research **showed** that children **confuse** the source of their memories more often than adults (Lindsay et al 1991).
- The study was completed in the past but this finding was specific to that study.
- The research was conducted in the past but the finding is an accepted fact.

Scientific Language - Tenses

Use tenses to indicate more than chronology

Use the **past** tense

- to report others' research
- to indicate that research is of secondary importance to your current work.

● Use the **present perfect**

- to indicate that the research is of more direct and primary importance.

● Use the **present** tense

- to indicate your general position relative to reported research.

Scientific Language - Tenses

After reviewing the results of your previous research, and in light of the relevant information found within the context of the study, there is ample evidence that important, significant changes can be made to our operating procedures.

After editing

Earlier research results and the current study's findings suggest we can make significant changes to our operating procedures.

Adapted from <http://www.unl.edu/gradstudies/current/dev/newsletter/GradConnections-201104.pdf> p.8

Research – Role of Literature Review

- **Systematic Sources**

Research ideas from systematic sources are carefully organized and logically thought out

- **Past Research**

- **A careful survey of the research done in a specific area will highlight any knowledge gaps or unanswered questions in that area.**

- *A failure to replicate a previous finding raises additional questions that only continued research will be able to answer.*

Choosing the Research Topic - Sources

Systematic Sources - Reading the literature

Types of reference works:

1. **index** – indices or indexes: published quarterly, monthly, annually or bi-annually; presented according to the author's name & subject; providing the year, place or publication, name, where and how it can be obtained and the form in which it was published.
2. **Bibliographies:** list of related publications and other materials
3. **Collections of abstracts:** summaries of journal articles and other literature.

Choosing the Research Topic - Sources

Reading the literature

Types of reference works:

4. **Dictionaries:**
5. **Encyclopedia:** give introductory information about subjects.
6. **Yearbooks:** *present books about specific years in the past*
7. **Unpublished papers:** conference papers or manuscripts circulated among colleagues for discussion. *Up-to-date*

Choosing the Research Topic - Sources

Reading the literature

Types of reference works:

8. **Journals:** a collection of papers published regularly as *language, journal of linguistics, journal of pragmatics, applied linguistics*.
9. **Textbooks:** a good introductory survey, explain concepts more systematically than research papers do.
10. **Research monograph:** single author's theory or viewpoint about a topic.

Choosing the Research Topic - Sources

Reading the literature

Consists of

1. **Background Review** : Introduction and fundamental / theoretical information.
2. **Critical Review** : Finding and analyzing the problem statement, research question, expected results and pre conclusion.

Choosing the Research Topic - Focusing

Why examine past research?

- Learn what is already known
- Learn about various variables that have been evaluated
- Learn what theories have been proposed
- Discover a question you want to investigate
- Decide on replication, replication with extension, or original research

Choosing the Research Topic - Focusing

Developing a research question

- Survey the research literature
- Read the actual article, not just the abstract
- What do you really want to know?
- Is your interest relevant to the improvement of the quality of life for human beings? I.e. what are the implications of the research findings if the hypothesis is or is not confirmed?

The Role of Literature Review

- To demonstrate skills in literature searching
- To show command of the subject area and understanding of the problem
- To justify the research topic, design, and methodology

Purposes of Literature Review

- Distinguish what has been done from what needs to be done
- Discover important variables relevant to the topic
- Synthesize and gain a new perspective
- Identify relationships between ideas and practice
- Rationalize the significance of the problem
- Understand the structure of the subject
- Identify the main research methods and techniques used
- Place the research in a historical context and show familiarity with state-of-the-art developments

Questions to Ask During Literature Review

- What are the fundamental grounds for the discipline?
- What are the key theories, concepts and ideas?
- What are the main questions/problems addressed so far?
- What are the major issues and debates about the topic?
- What are the author(s)' standpoints?
- What are the origins and definitions of the topic?
- What are the key sources?
- How is the research conducted?
- How is the research knowledge structured/organized?
- How has the research contributed to the field?

A Good Literature Review Should Have a:

- explanation of the importance of the topic
- analytical synthesis
- covering all major known literature on the problem
- high level of conceptual links within and across theories
- summative and formative evaluation of previous work
- depth and breadth of discussion on related issues
- critical evaluation of the theories/models studied
- indication of the strengths/weaknesses of the method used
- clear and cohesive structure
- accurate citations and bibliography

From Literature Review to Research Imagination

The Research Imagination is to:

- have a broad view of a topic
- be open to ideas regardless of how/where they originated
- question and scrutinize ideas, methods and arguments regardless of who proposed them
- play with different ideas to see if links can be made
- follow ideas to see where they might lead

Why Cite?

- It allows readers to cross-reference your sources easily.
- It provides consistent format within a discipline.
- It gives you credibility as a writer.
- It protects you from plagiarism.

When to Cite?

- When **quoting** any words that are not your own
 - Quoting means repeating another source word for word, using quotation marks.
- When **summarizing** facts and ideas from a source
 - Summarizing means taking ideas from a large passage of another source and condensing them, using your own words.
- When **paraphrasing** a source
 - Paraphrasing means using the ideas from another source but changing the phrasing into your own words.

Examples of offensive citation:

- *"The deficiency of Smith's approach is..."*
- *"The problems with Smith ' s paper are..."*
- *“A serious weakness with Smith ' s argument, however, is that ”*
- *“The key problem with Smith ' s explanation is that ”*
- *“It seems that Smith ' s understanding of the X framework is questionable. ”*

A better citation would be:

- *“Smith’ s model was effective in X problem, however in Y...”*
- *“The X benefit of Smith’ s approach are not applicable to Y...”*

Common Citation / Reference Problems

- Not enough citations (they aren't just for the ends of paragraphs)
- Reference style not in the format of your style guide or model journal
- Citation style not in the format of your style guide or model journal (“and” or &; et al. or *et al.*)
- Lack of consistency in citation
- Order of citations w/in the same parentheses

Research Manuscript

Paper Structure and relative level of writing difficulty

- Title (difficult)
- Abstract (difficult)
- Introduction (Most difficult)
- Study Area or Background (easy)
- Methods (easy)
- Results (easy - just the facts)
- Discussion (Second-most difficult)
- Conclusions (easy)

Research Manuscript

Ethical Publishing

- Material must be obtained ethically and must be accurate
- Experiments or trials involving **human subjects or animals** must have been approved by the relevant research ethics committees
- Material should be unbiased, uncensored, complete, factual and verifiable
- Relevant funding and any conflict of interest must be disclosed

Research Manuscript

Ethical Publishing - Authorship

- Authorship requires a significant contribution to at least one aspect of the work (concept, data collection, data analysis, literature review, writing)

Ethical Publishing – Things unacceptable

- Duplication of **previously published material** (this includes web publication of previous print publication, Web and print publication covered by the same copyright is now frequent and is OK)
- Simultaneous submission to more than one journal
- Plagiarism

Resources / Bibliography

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Take Home Message

Sacrifice other interests

- Researchers gave up hobbies, games and time with friends to become high impact researchers. Most mentioned that they still had time for family, but less TV, computer games, and sports.
- When you play, play hard; when you work, work hard, don't play at all.

Theodore Roosevelt

Good Luck!
All the best!





T. Joseph Sahaya Anand

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Title 1–20

Cited by

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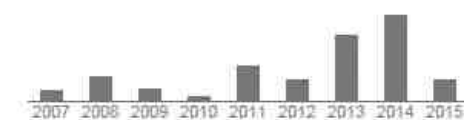
Google Scholar

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Citation indices

All Since 2010

| | | |
|-----------|-----|-----|
| Citations | 221 | 113 |
| h-index | 9 | 6 |
| i10-index | 9 | 2 |



Co-authors View all...

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Thanking you !

