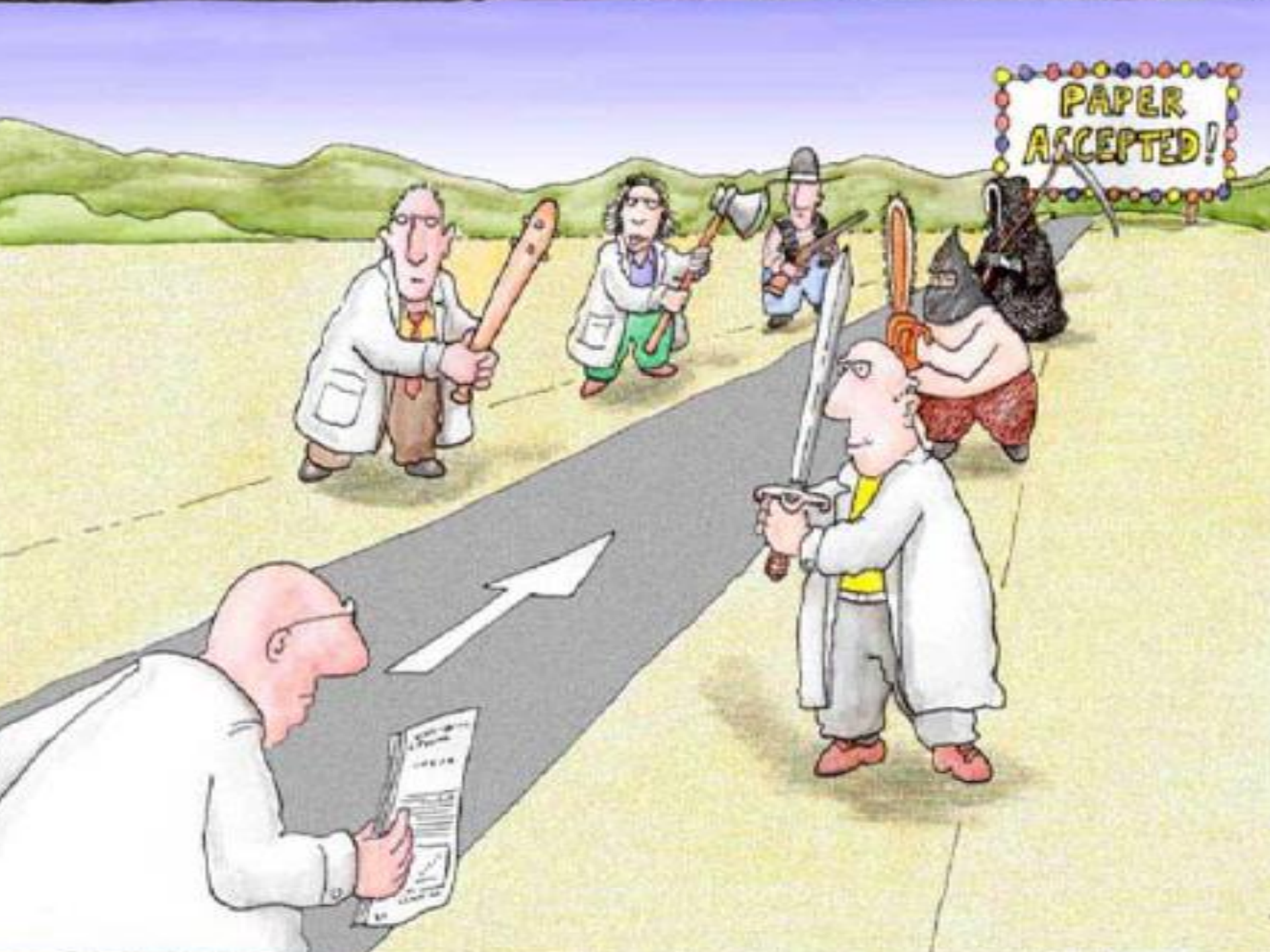


HOW TO REVIEW A RESEARCH PAPER



By

Abbas M. Abd



PAPER
ACCEPTED!



American Concrete Institute®
Advancing concrete knowledge

ASCE

American Society of Civil Engineers



ELSEVIER



Scopus®



Taylor & Francis
Taylor & Francis Group



Emerald
Research you can use



WILEY
Publishers Since 1807



Hindawi



Springer



Journal Citation Reports

The recognized authority for evaluating journals



THOMSON REUTERS



THOMSON
REUTERS



SCImago
Journal & Country
Rank

Citation Based Metrics

- Thomson Reuters → JCR/Web of Science
 - Journal Impact Factor (JIF)
 - Eigenfactor
- Elsevier → Scopus
 - SCImago Journal Rank Indicator (SJR)
 - Source Normalized Impact per Paper (SNIP)

ISI

The Institute for Scientific Information (ISI) was founded by Eugene Garfield in 1960. It was acquired by Thomson Scientific & Healthcare in 1992,^[*] and became known as Thomson ISI. It is a part of the Intellectual Property & Science business of Thomson Reuters.

- *:*"Thomson Corporation acquired ISI". Online. July 1992. Retrieved 2012-02-*



Intellectual Property & Science is now known as Clarivate Analytics

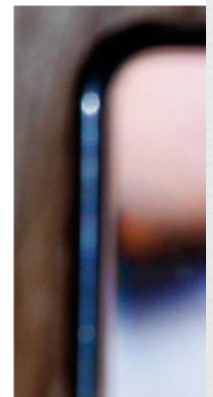
...and is no longer part of Thomson Reuters. You can still explore their products on this page.

[Learn more >](#)

Science Citation Index Expanded

Overcome information overload and focus on essential data from the world's leading journals

[Contact Sales >](#)



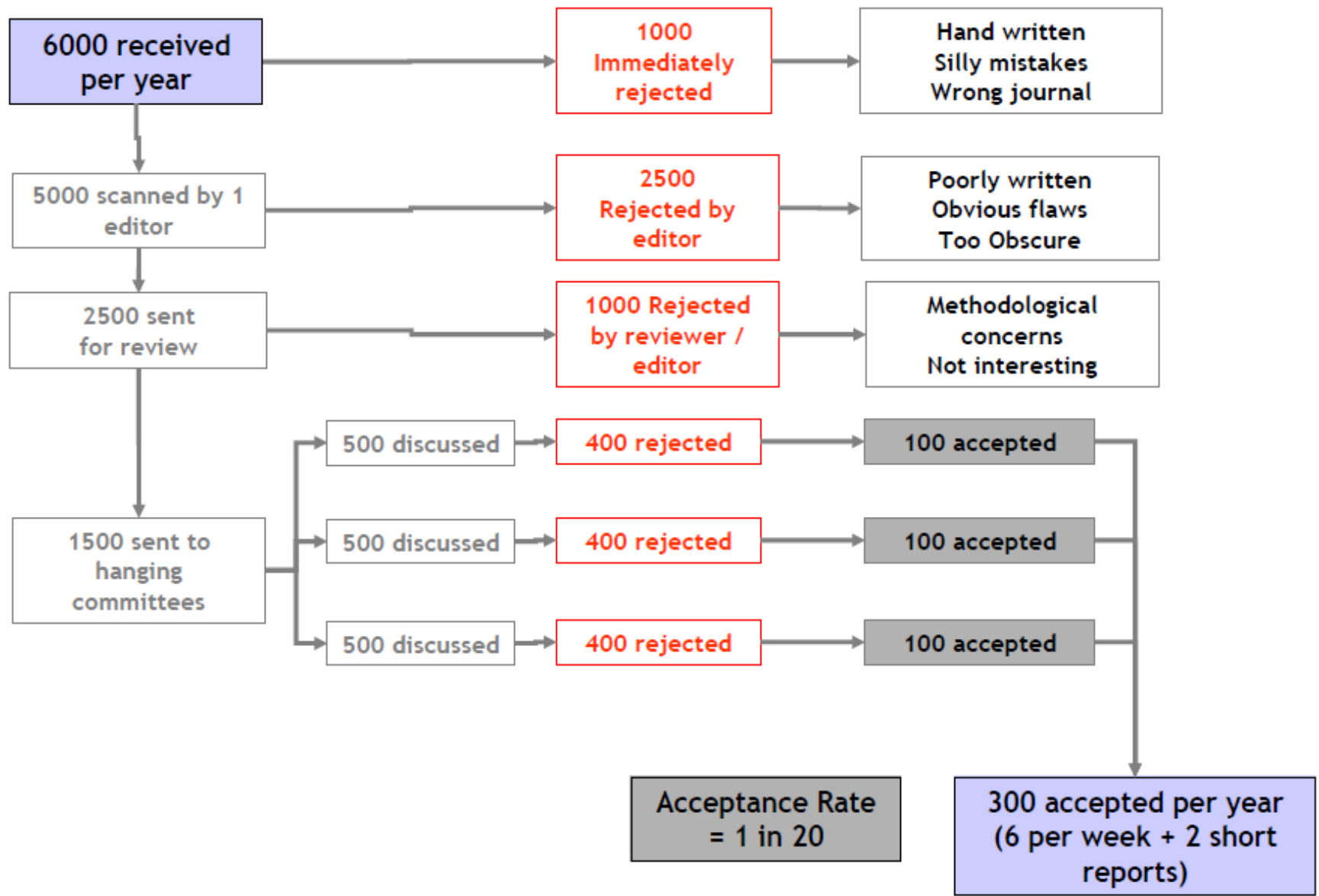
Thomson Reuters Closes Sale of Intellectual Property & Science Business for \$3.55 Billion

NEW YORK – Thomson Reuters (TSX/NYSE: TRI) today announced that it has closed the sale of its Intellectual Property & Science (IP&S) business to Onex Corporation and Baring Private Equity Asia for \$3.55 billion in cash. Thomson Reuters plans to use about \$1 billion of the net proceeds to buy back shares and the balance to pay down debt and reinvest in the business. Any share buybacks will be part of the company's previously announced \$1.5 billion share buyback program.

Following today's closing, Thomson Reuters is organized in three business units supported by a corporate center – Financial & Risk, Legal and Tax & Accounting. The company also operates Reuters, a leading provider of real-time, high impact, multimedia news and information services.

<http://thomsonreuters.com/en/press-releases/2016/october/thomson-reuters-closes-sale-of-intellectual-property-science-business.html>

BMJ Manuscript Processing



Outlines

Reviewing
by Author

Reviewing by
Publisher
(Editor + Reviewer)

Reviewing by Author

Writing a Literature Review

Guidelines to Writing a Literature Review

- Introduce the literature review by pointing out the major research topic that will be discussed
- Identify the broad problem area but don't be too global.
- Discuss the general importance of your topic for those in your field



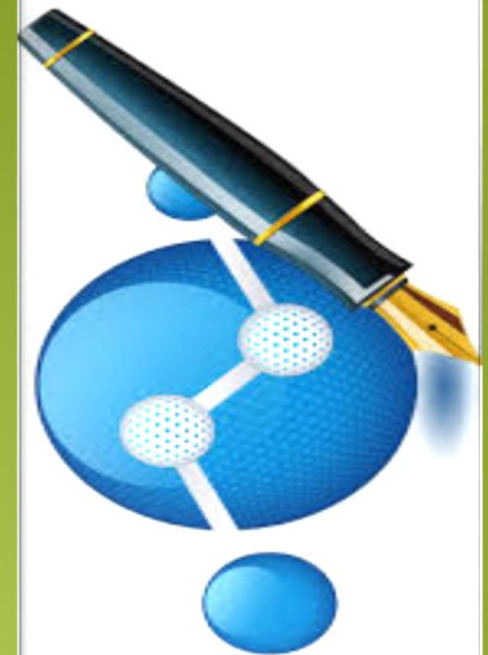
Guidelines to Writing a Literature Review

- Don't attempt to cover everything written on your topic
- You will need to pick out the research most relevant to the topic you are studying
- You will use the studies in your literature review as “evidence” that your research question is an important one



Guidelines to Writing a Literature Review

- It is important to cover research relevant to all the variables being studied.
- Research that explains the relationship between these variables is a top priority.
- You will need to plan how you will structure your literature review in term of timeline or variables based.



Organizing Your Literature Review

Topical Order—organize by main topics or issues; emphasize the relationship of the issues to the main “problem”

Chronological Order—organize the literature by the dates the research was published

Problem-Cause-Solution Order—Organize the review so that it moves from the problem to the solution

Organizing Your Literature Review

General-to-Specific Order—(Also called the funnel approach) Examine broad-based research first and then focus on specific studies that relate to the topic

Specific-to-General Order—Try to make discuss specific research studies so conclusions can be drawn

Literature Review (Argument)

After reviewing the literature, summarize what has been done, what has not been done, and what needs to be done



Remember you are arguing your point of why your study is important!



Then pose a formal research question or state a hypothesis—be sure this is clearly linked to your literature review

Literature Review (Citation)

All sources cited in the literature review should be listed in the references list.

To sum, a literature review should include **introduction**, **summary** and **critique** of journal articles, **justifications** for your research project and the hypothesis for your research project

Common Errors Made in Lit Reviews

Review isn't logically organized

Review isn't focused on most important facets of the study

Review doesn't relate literature to the study

Too few references or outdated references cited

Review isn't written in author's own words

Review reads like a series of disjointed summaries

Review doesn't argue a point

Recent references are omitted

Literature Review vs. Plagiarism

Plagiarism includes:-

Using another writer's words without proper citation

Using another writer's ideas without proper citation

Citing a source but reproducing the exact word without quotation marks

Borrowing the structure of another author's phrases/sentences without giving the source

Borrowing all or part of another researcher's paper

Using paper-writing service or having a friend write the paper

RULES OF THE THREE PARTIES

Editors

- Publication decision
- Fair play
- Confidentiality
- Disclosure and conflicts of interest

Reviewers

- Contribution to Editorial Decision
- Promptness
- Confidentiality
- Disclosure and conflicts of Interest

Authors

- Reporting standards
- Data Access and Retention
- Originality and Plagiarism
- Multiple, Redundant or Concurrent Publication
- Acknowledgement of Sources
- Authorship of the Paper

Outlines

Reviewing
by Author

Reviewing by
Publisher
(Editor + Reviewer)

Peer Review in Science

“Peer Review” of any type goes back to the 17th century and beyond;

The first recorded academic peer review process was at The Royal Society in 1665 by the founding editor of Philosophical Transactions of the Royal Society, Henry Oldenburg, soon followed by “Medical Essays and Observations” published by the Royal Society of Edinburgh in 1731.

Definitions

- Peer review (also known as refereeing) is the process of subjecting an author's scholarly work, research or ideas to the scrutiny of others who are experts in the same field.
- Peer review requires a willing and able community of experts who give impartial feedback, with no personal credit and no financial or other reward.
- A peer-reviewed journal is one that has submitted most of its published articles for review by experts who are not part of the editorial staff. The numbers and kinds of manuscripts sent for review, the number of reviewers, the reviewing procedures and the use made of the reviewers'

Types of Peer Review

1. Literature review
2. Journal articles
3. Conference proceedings
4. Book and chapters
5. Grant proposals
6. Teaching portfolios
7. Promotion decisions
8. Program accreditation

Blind vs. Open Peer Review

-
- In Blind Peer Review; submitted manuscripts are sent outside of the journal's publishing or sponsoring organization for review by external reviewers whose identifies are hidden .
 - In Open Peer Review; reviewers disclose their identity. Often authors are encouraged to suggest possible reviewers who are may or may not be impartial

Blind Peer Review

Single blind -- authors do not know the identity of the reviewers.

Double blind – both authors and reviewers do not know the identity of each other.

Rejecting without review: The Whys, the Hows

- “Owing to the very simple ratios of the number of submissions, the number of papers we can publish in any given (monthly) issue, and availability of reviewers, a large fraction of papers submitted to ACS Nano must be rejected without review. We receive far more submissions than we could ever publish, and thus it is a necessity”...

“Rejecting without review: The Whys, the Hows” , ACS Nano, 4 (9), 4963 – 4964 (2010)



American Chemical society

Reviewer comments

-
- Comments to editor
 - Comments to author
 - Reviewer recommendations and comments may not agree, may even be contradictory
 - Reviewers are consultants, not decision makers
 - Editors are decision makers, ask them if you have questions about reviewer comments, editorial decision, or the process

Functions/Responsibilities of Peer Review

-
- Filtering out incorrect, inadequate & fraudulent work
 - Improving the accuracy and clarity of work that warrants acceptance
 - Helping journals deal with high volumes
 - Helping journals deal with multiple publications
 - Ref. Alex J Mitchell, University of Leicester ajm80@le.ac.uk

These Are **NOT** Functions of Peer Review

- Deciding whether the paper should be accepted
This is the role of the editor
- Improving the spelling and grammar
This is the role of the copy-editor
- Improving on the study design
This is the role of the author
- Deciding upon the authors order
This is the role of the authors
- Disseminating the reviewed paper
This is not allowed unless the paper is officially in print

Questions before starting to Review

Expertise:

- Do I have expertise in the content or methods, or a valuable perspective on the issue?

Potential conflicts :

- Do I have conflicts of interest that preclude fair and balanced judgments?
- Do I stand to gain, either financially or personally, from reviewing this particular manuscript?
- Will I be able to hold the main information that I gain from reviewing this manuscript confidential until publication?

Ability to meet deadline:

- Do I have the time to devote to this review and complete it by the date the editors requested?

CHECKLIST FOR THE REVIEW

- ❖ The manuscript's importance, novelty and what it adds to existing knowledge.
- ❖ The validity of the research, pointing out major strengths and weaknesses of the methods.
- ❖ The clarity of presentation.
- ❖ Important missing and/or inaccurate information.
- ❖ The generalizability of findings.
- ❖ The interpretation of results and stated conclusions.
- ❖ Whether the authors noted and discussed important limitations.
- ❖ Cite specifics to support criticisms.
- ❖ Offer suggestions for improvement.
- ❖ Keep nitpicking (looking over tiny details) to a minimum.
- ❖ Is the review's tone balanced.

Tips-1 for Reviewers: General

- Be courteous and constructive.
- Your role is advising not deciding.
- Try to suggest improvement no matter what the outcome.
- Maintain confidentiality.
- Don't review work for those you know well.
- Complete reviews promptly, typically within 4 weeks
- Spend at least 1 hour on the review daily.
- Search for related (especially recent work).
- Write as you would like to be written to you.

Tips-2 for Reviewers - Key Questions

- Is the research question (hypothesis) Appropriate?
- Was the question answered?
- Were the methods appropriate?
- What must be improved?
- What could be improved?
- What were the strengths?
- Was all relevant literature considered?
- What will readers think
- Would I object if my review was published

Bias

Author-related

- Prestige (author/institution)
- Gender
- Where they live and work

Paper-related

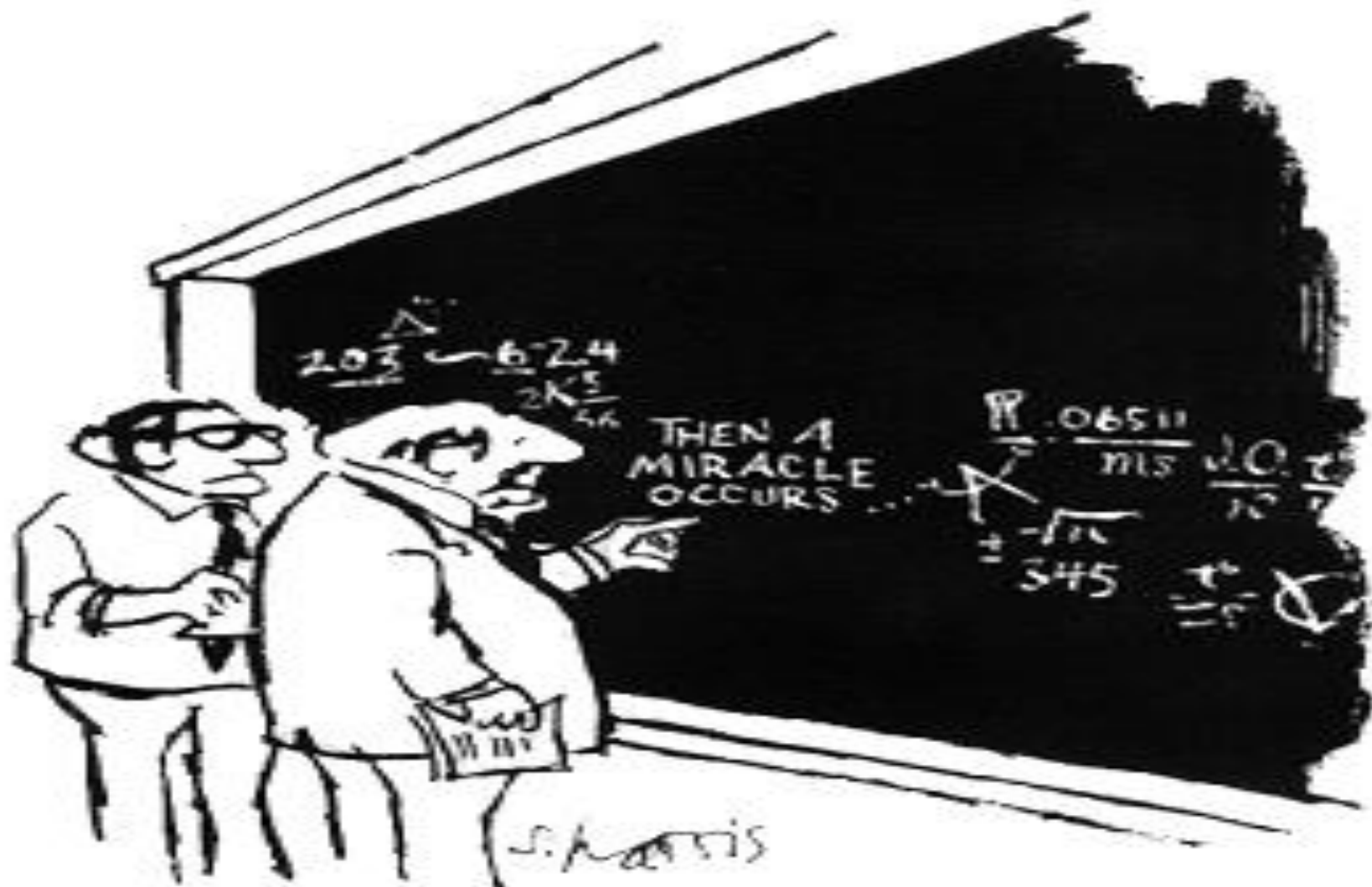
- Positive results
- English language

- *See Maddox J. Conflicts of interest declared [news]. Nature 1992; 360: 205;*
- *Locke S. Fraud in medicine [editorial]. Br Med J 1988; 296: 376-7.*

Problems: Plagiarism & Duplicates

- A poll of 3,247 scientists funded by the U.S. National Institutes of Health found 0.3% admitted faking data, 1.4% admitted plagiarism, and 4.7% admitted to auto-plagiarism (republishing from others).
- **Note: Reviewers generally lack access to full raw data!!**

Weiss, Rick. 2005. Many scientists admit to misconduct: Degrees of deception vary in poll. Washington Post. June 9, 2005. page A03.[1]



"I think you should be more explicit here in step two."

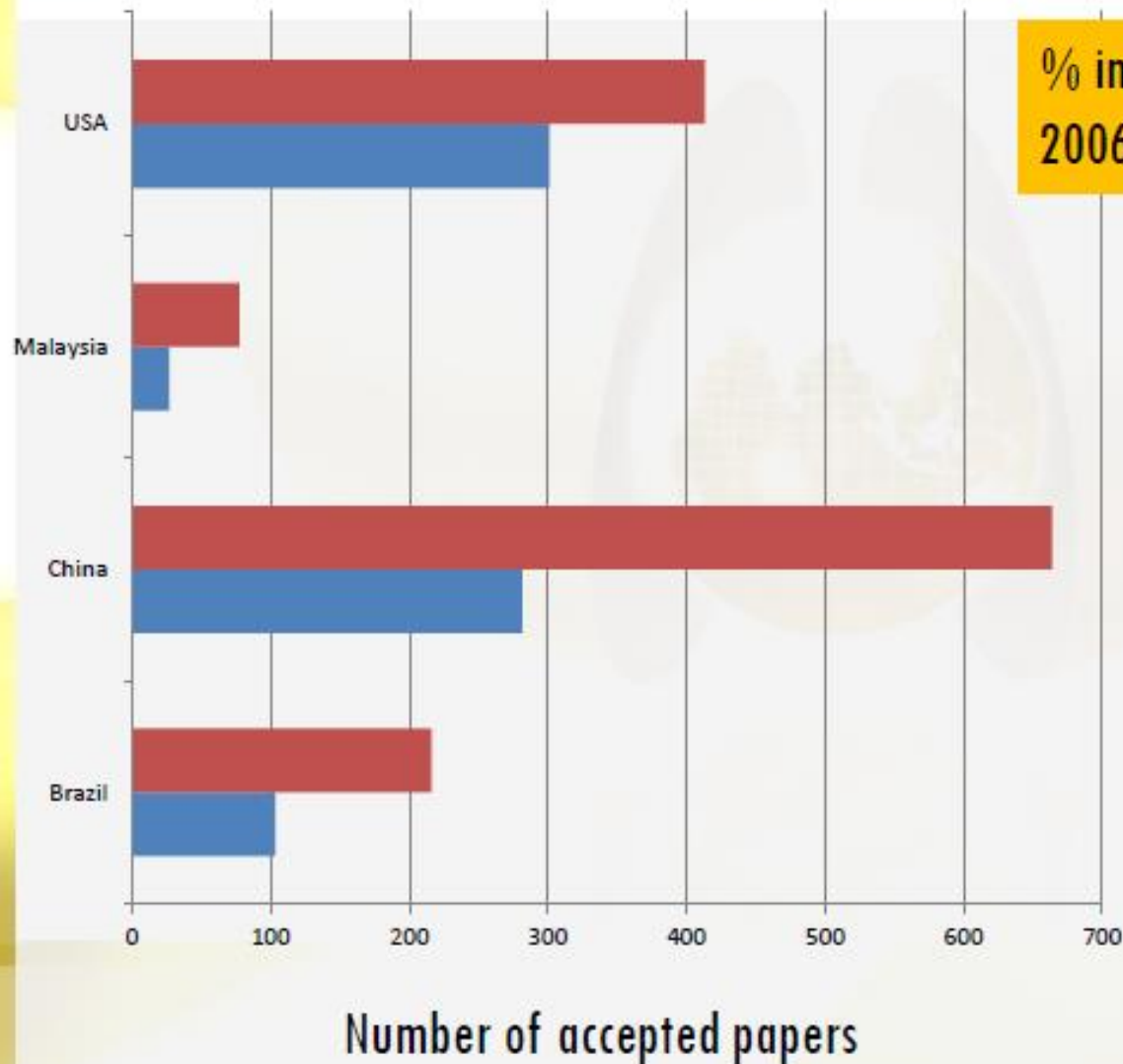
Final Advices

- Read the paper
- Try to think it is:
 - Has useful dimensions to look at
 - Novelty, Clarity, Importance, Timeliness..etc.
- Read the paper again.
- Wait a few days
- Read paper and write the review

Rules of the Game are Not Explicit

- **Peters and Ceci (1982)**
- Resubmitted 12 altered articles to psychology journals that had already published them but changed **title/ abstract/ introduction/ authors' name/ name of institution**
- • **3 articles recognised as resubmissions**
- • **One accepted**
- • **8 rejected on methodological grounds!**
- *Peters, D.C., & Ceci, S.J. (1982). Peer review practices of psychological journals: The fate of published articles, submitted again. The Behavioral and Brain Sciences, 5, 187-255.*

Perspective: Some statistics



% increase in accepted papers
2006-2010 for selected countries:

17 Elsevier Food
Science Journals

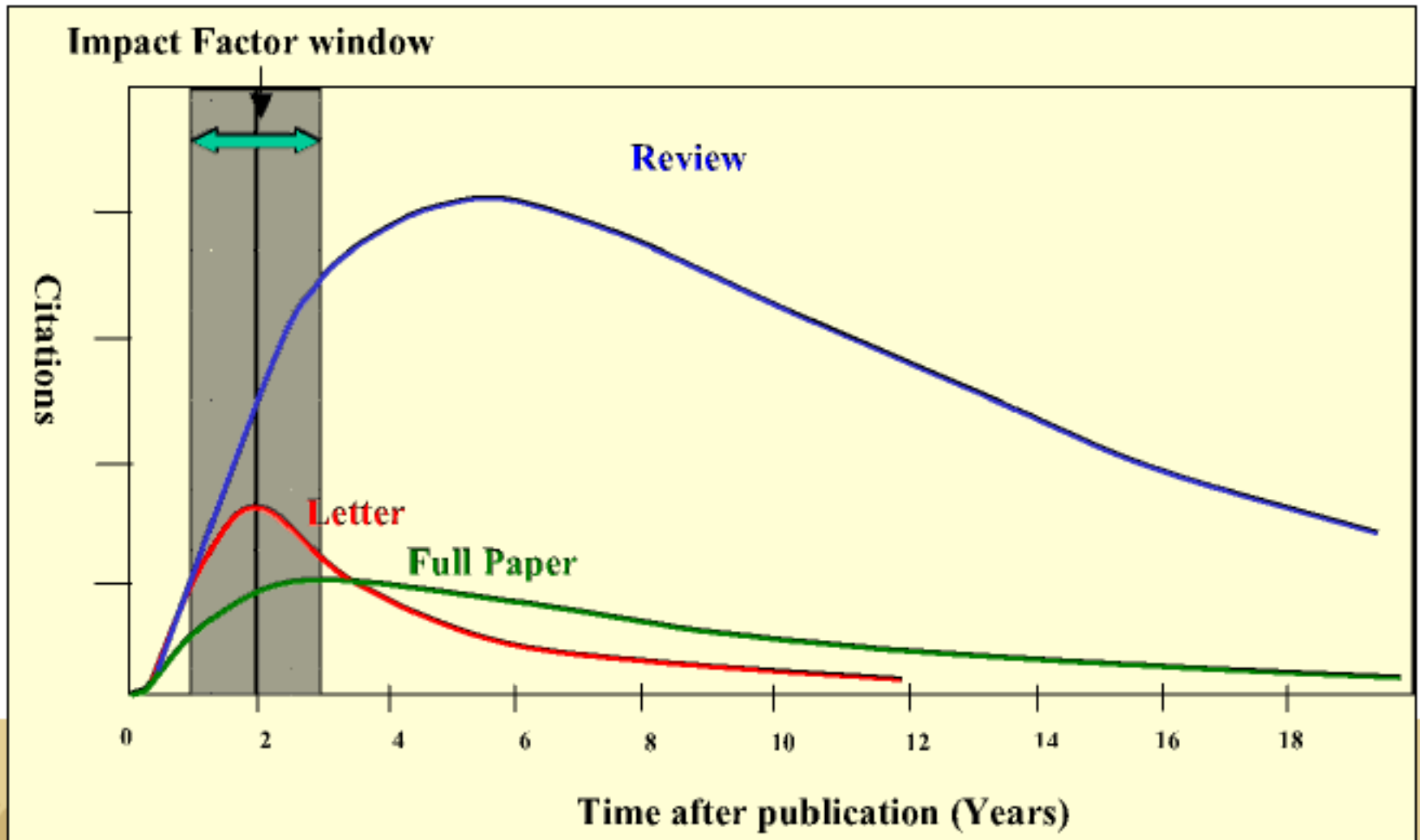
USA: 37%

Malaysia: 196%

China: 136%

Brazil: 109%

Impact Factors for different types of article



- Famous papers that were published and did NOT get peer reviewed:
-

- –**Watson & Crick's** 1951 paper on the structure of DNA in Nature (Patent win 121 M\$).
- –**Abdus Salam's** paper “Weak and electromagnetic interactions” (1968). Led to Nobel Prize

Famous papers that were published, passed peer review, later proved to be fraudulent:

- –**Jan Hendrik Schon** (Bell Labs) submitted and passed peer review 15 papers published in Science and Nature (1998-2001) found to be fraudulent.
- –**Igor and Grigori Bogdanov** 1999 & 2002 published papers in theoretical physics believed by many to be jargon-rich nonsense.

Famous papers that got rejected that later turned out to be seminal works:

- –**Krebs & Johnson's** 1937 paper on the role of citric acid on metabolism was rejected by Nature as being of “**insufficient importance**”, was eventually published in the Dutch journal Enzymologia. This discovery, now known as the Krebs Cycle, was recognized with a Nobel prize in 1953.
- –**Black & Scholes** 1973 paper on “the pricing of options and corporate liabilities”, **rejected many times**, was eventually published at the intercession of Merton Miller to get it accepted by the Journal of Political Economy. This work led to the Nobel Prize.

References

- Smith Peer review: a flawed process at the heart of science and journals. *JRSM* 2006;99:178-182.
- Linkov et al. Scientific Journals are 'faith based': is there science behind Peer review? *JRSM* 2006;99:596-598.
- Schroter et al. What errors do peer reviewers detect, and does training improve their ability to detect them? *JRSM* 2008;101:507-514.
- Rennie R. Editorial peer review: its development and rationale
- In Godlee F, Jefferson T, editors. Peer review in health sciences. Second edition. London: BMJ Books, 2003:1-13.
- Overbeke J, Wager E. The state of evidence: what we know and what we don't know about journal peer review In Godlee F, Jefferson T, editors. Peer review in health sciences. Second edition. London: BMJ Books, 2003:45-61.
- Fletcher RH, Fletcher SW. The effectiveness of editorial peer review In Godlee F, Jefferson T, editors. Peer review in health sciences. Second edition. London: BMJ Books, 2003:62-75.
- Martyn C. Peer review: some questions from Socrates In Godlee F, Jefferson T, editors. Peer review in health sciences. Second edition. London: BMJ Books, 2003:322-8.
- Smith R. The future of peer review In Godlee F, Jefferson T, editors. Peer review in health sciences. Second edition. London: BMJ Books, 2003:329-46.
- Champion, Michael A. 1993. Article review checklist: A criterion checklist for reviewing research article. *Personnel Psychology* 46 (3): 705-718.
- Feldman, D. C. 2003. Sense and Sensibility: Balancing the Interests of Authors, Reviewers, and Editors. *Journal of Management* 29(1): 1-4.
- Libby, R., R. Bloomfield, and M. Nelson. 2002. Experimental Research in Financial Accounting. *Accounting, Organizations, and Society* (27): 775-810.
- Omer, T. C., S. L. Porter, R. J. Yetman, A. M. Magro, L. F. Mills, R. C. Sansing, and B. C. Ayers. 2004. A Discussion with Reviewers: Insights from the Midyear ATA Meetings. *JATA* 26 (supplement): 135-141.
- Peecher, M. E. and I. Solomon. 2001. Theory and Experimentation in studies of audit judgments and decisions: Avoiding common research traps. *International Journal of Auditing* 5: 193-203.

**THAT'S
IT**

**THANK
YOU ALL**