

Basics of peer review

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Purpose of Peer Review

- Improve what is published
- Help the editor decide what to do with the manuscript
- Help the author(s) improve the manuscript

Steps to MSSE review

- Manuscript submitted electronically
- Entered into Editorial Manager system
- Assigned to Associate Editor
 - Steve Messier, Danny Pincivero, Steve McCaw
 - Identify and distribute to reviewers
 - Synthesize reviews
 - Makes a decision
 - Accept/revise/reject

Accept/Revise/Reject

- Most authors will ultimately be unsatisfied
 - MSSE acceptance rate (Dr. Andrew Young):
 - Goal 29%
 - 2007: 39%
 - 2006: 31%
 - Why a goal for acceptance?
 - Time to publication
 - MSSE wants only the highest quality manuscripts

The Initial Contact

- **Receive email request from Associate Editor**
 - Includes the Abstract and Due Date
 - Respond ASAP (within 7 days)
 - *Editorial Manager* generated follow up
 - Factors affecting taking on the review
 - Don't bite off more than you can chew
 - Suggest someone else
 - Do you have the expertise?
 - Do have the time?
 - 2-4 hours for experienced
 - 8-12 hours for novice
 - Is there a conflict of interest?
 - Real or Perceived

Review Format

- Confidential comments to Editor
 - Suitability for publication
 - Worth allowing revisions?
 - Possible research misconduct / ethical issues
 - Is a commentary warranted?
- Comments to author
 - General
 - Paraphrase the purpose, methods, results, discussion
 - Specific comments (refer to page number and line number)
 - Major comments
 - Minor comments

Provide rigorous, detailed and constructive comments

- In my opinion, ...
- As shown by Smith et al (2004), ...
- Utilize 1st person
 - "I didn't understand...", "I'd like more explanation about...", "I couldn't follow..."
- Avoid 2nd person
 - "You should ...", "You need to ..."

Scientific Quality

- Research Question
- Methods
 - Subjects
 - Design
- Results
 - Tables/figures
- Discussion
- References
- Title/Abstract

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Strengths
&
Weaknesses

Research Question

- Clearly defined
- Original
 - Specify what it adds to existing knowledge
 - Specify what it replicates
- Leads to specific hypotheses
- Important?
 - Clinicians/clinicians? Researchers? Educators?
Policy makers? Patients? Athletes?

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S & W

- Defined populations
 - Inclusion/exclusion criteria
- Statistical Power
- Non-biased treatments (IVs)
- # trials
- Appropriate Detail
 - Instrumentation
 - Data Reduction
- Clear outcome measures (DVs)
- Statistical Analysis

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S & W

- Appropriate order of presentation
- Identify statistical significance
- Tables/figures match text?
 - No replication
- Anything missing?

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S & W

Five I's of a good discussion

- Integrate
- Interpret
- Implications
- Identify Limitations
- Ideas for future research

Casa, 2001

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S & W

- Thorough?
- Up to date?
- Original ideas duly noted?

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S & W

- Fit with the paper
- Adequate overview

General Points

- You provide advice
 - Associate Editor makes decision
- Be rigorous, courteous and constructive
 - May not be suitable for MSSE, but most get submitted elsewhere
- Mum's the word
- Do not use for revenge
- Declare competing interest
- Do not copy edit
 - No punctuation or spelling (except names)
 - Does it read well and make sense?
- Be timely

Final Points

- *Everyone* contributes to the review of a paper
 - Some flaws get through
 - Write a letter to the editor
 - Reference in your own work

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Acknowledgements

- All who have served as *MSSE* reviewer
- British Medical Journal
 - www.bmj.com/advice
- Casa, D. Five I's of a good discussion, *NATA News*, August, 2001, p 56.
- Writing across the curriculum, UW-Madison