McMaster University

Family Medicine

David Braley Primary Care Research Collaborative

The Art of Manuscript Writing

[Watch a recording of the session here]

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June 22nd, 2021

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Agenda

- Starting from a Blank Page
- Journal Selection
- Section by Section
- Editing, Phrasing, and Style
- Other Resources

Learning Objectives

- In this session, participants will learn:
  - The basics of getting started on a new manuscript
  - How to select the appropriate journal for your manuscript
  - How to structure and write sections such as the Background and Discussion

Starting from a Blank Page

Headings & Sub-Headings

- Most common headings & subheadings:
  - **Background/Introduction**
  - **Methods** (Design, Setting, Participants, Intervention, Data Collection, Data Analysis, Ethics)
  - **Results/Findings** (Participants, sub-headings for your results)
  - **Discussion** (Limitations, Implications for Future Research)
  - **Conclusion(s)**

- How to figure it out? Think design, methods, journal

The Length Question

- Journal dependent!
- But if you're just working on drafting first, some general standards I follow:
  - Intro: ~1.5 pages double spaced
  - Discussion: ~2 pages double spaced
  - Word count (not including references, tables): ~3500
- If you know your journal:
  - You can try breaking down other similar articles (e.g., look at length, and proportion section by section)

Journal Selection:
Planning Where to Submit

Journal Fit: Start with the Journal

- Make a list of journals and check them all out ***use your own references as a good starting point*
- Read the author guidelines – will it (or can it) fit for length, design, topics?
- Check out the About section for further fit info
  - Some may have published commentary about what they are seeking
- Look at other articles the journal has published
  - E.g., Clinical vs. community-based, "big" summaries like SRs vs projects, RCTs vs pilots, qualitative vs quantitative, negative results vs only positive

Journal Selection & Paper Planning with Teams

- Key authors (e.g., PI, first author, key implementer) should definitely give opinions on journal selection
- Give other authors the opportunity to weigh in
- Things that teams may particularly care about:
  - Fit, as described
  - Impact factor
  - Cost of submission
  - Open-access
- Start early and be transparent – a Publication Plan is ideal

Section by Section

Writing the Background & Doing a Lit Review

- Think: problem, gap, hook; end with your objective
- How much is enough literature?
  - It doesn't need to be Systematic Review level for every paper
  - A snapshot of what exists – focus on areas you'll be fleshing out
  - Give *enough* of a picture to identify the gap your research fills (**hint:** directly referencing the gap makes it clear to readers)
- Citing papers? Don't cite from others' referenced Background sections, find the original source
- Consider which lit fits Background vs Discussion

Writing a Discussion

- The basic steps:
  - Go through results and see what stands out – “good” or “bad”
  - Make educated assumptions about what might have happened to lead to those results
  - Compare your results to the existing literature
- Include limitations even if it’s not a distinct subheading requested – consider also strengths and implications for future research

Putting Things in the Right Places

- Keep your outcomes and/or data collection methods in the ***same order*** at every mention
  - Keep an eye out in Data Collection, Data Analysis, Results
- Don't repeat the same info in the Methods, even if it fits in multiple sub-sections (pick one)
- Results vs Discussion?
  - Watch for inclusion of anything verging on assumptions or interpretation being included in Results… except for some qual
- Doubting what to include? Use a checklist (See EQUATOR Network)

Special Notes for Qualitative Results

- Your transcription might not actually be “verbatim”
  - If it isn’t, you can delete filler words (e.g., “like”, “just”, “you know”
    - depends on participant age & cultural groups)
  - If it is, use more ellipses…
- Use actual terms from the quotes in your text if possible – otherwise meaning can get muddled

Tables & Figures

- Use them strategically
- Should be able to stand alone – use the ‘Note’ to make sure they do
- Should not be redundant to the text

Editing, Phrasing, & Style

Different Styles of English

- We've got folks from all over – so pick only one & stick to it!
- Quick and dirty guide:
  - **US** = no U's, Z's over S's, -ER over –RE, no added E's, ends at M *(Color, randomization, theater, aging, program)*
  - **UK** = added U's, S's over Z's, -RE over –ER, added E's, add -ME *(Colour, randomisation, theatre, ageing, programme)*
  - **Canada** = added U's, Z's over S's, -RE over –ER, no added E's, ends at M *(Colour, randomization, theatre, aging, program)*
- But of course, there are exceptions to every rule

Adding Clarity & Accuracy When Editing

- Short forms aren't always clear – if you have space, spell out those acronyms & initialisms
- Make sure the story of your abstract matches the story of your paper
- E.g. = *an* example of, i.e. = *the only* examples of
- Read your paper specifically for language use that isn't sensitive to those outside dominant culture or language that is 'out of date'
  - Even if an article you're referencing uses it, you do not have to

Make the Paper a Good Read

- Academic papers don't have to be boring and dry
  - Make them as readable as you can from top to bottom (working with what you have in subject matter)

- Academic papers don't have to be pretentious
  - If a smaller word does the job as well or better than a big word, use it (e.g., use vs utilize)
  - It's better to be clear than to sound smart
  - Even experts prefer plain language [1]

1. https://www.nngroup.com/articles/plain-language-experts/

Other Resources

Sample Papers

- **A clean quantitative program evaluation** → Agarwal, G., Angeles, R., Pirrie, M., Marzanek, F., McLeod, B., Parascandalo, J., et al. (2016). Effectiveness of a community paramedic-led health assessment and education initiative in a seniors' residence building: the Community Health Assessment Program through Emergency Medical Services (CHAP-EMS). *BMC Emergency Medicine, 17*. https://bmcemergmed.biomedcentral.com/articles/10.1186/s12873-017-0119-4
- **A thick qualitative evaluation** → Gaber, J., Oliver, D., Valaitis, R., Cleghorn, L., Lamarche, L., Avilla, E., et al. (2020). Experiences of integrating community volunteers as extensions of the primary care team to help support older adults at home: a qualitative study. *BMC Fam Pract, 21*, 92. https://bmcfampract.biomedcentral.com/articles/10.1186/s12875-020-01165-2

Other Resources – Internal to DFM/McMaster

- DFM Guidelines for Authorship, based on ICMJE guidelines: *dfmresearch:\Research Projects\Clinic Research Coordinator\Faculty Resources*
- May 2018 RKSB on ClinicalTrials.gov and Checklists, in: *dfmresearch\Training and Resources\Knowledge and Skills Builder Sessions\Research Methods and Design*
- HSL's Getting Started with Literature Searching: *https://hslmcmaster.libguides.com/literature_searching*

Other Resources - External

- Web of Science Journal Search & Manuscript Matcher: https://mjl.clarivate.com/home
- UBC Science Writing Resource: https://wiki.ubc.ca/images/c/cc/Science_Writing_Resource.pdf
- Tips for Writing an Abstract: https://www.stfm.org/media/1711/tipstoimproveabstract.pdf
- The EQUATOR Network (checklists and more): https://www.equator-network.org/
- Academic Writing, from OWL Purdue Online: https://owl.purdue.edu/owl/general_writing/academic_writing/index.html
- ICMJE Recommendations for Scholarly Work: http://www.icmje.org/recommendations/

Wrapping Up

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Any Questions?

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