

## Paper writing tips:

### Choosing a journal:

- Where are the journals you have been using been published
- Impact factor:
  - Reflects the yearly mean number of [citations](#) of articles published in the last two years
- Rank within discipline
  - <https://www.scimagojr.com/journalrank.php?category=2916>
- Research Excellence Framework (REF) – Start ranking 1-4. International journals for 4\*.
- Aims and Scope
  - <https://journals.sagepub.com/aims-scope/NAH>
  - <https://academic.oup.com/jn/pages/About>
- Submission guidelines:
  - Length limitations
  - Publications costs should be funded, the University will cover costs if a research council (e.g. ESRC) is acknowledged or recognised charity (check with your supervisor). The University may subscribe to certain publishers to get discounts, or co-authors may have discounts from peer-reviewing or guest editing
- Look at the journals most recent articles and do a key word search to see how your planned report fits in
- Timescale pressures – check journal submission – publication times
- Co-authors
- Have 1-3 journals in mind for plan A, B, C

### Plan content based on journal guidance

- Start a working document with all the criteria summarised.
- Overall article length
- Section length – e.g. only 1 page for the introduction. This requires extra planning for the key messages
- Number of figures and tables
  - If you can have 6, then plan what these will be ahead of running the analysis.
  - You can have a 'panel' of figures, but some journal will state that a 'panel' counts as 2 figures etc.
  - It may be possible to combine tables. Take a look at published work for inspiration.
  - Create the tables with headers before running the analysis - that will make you focus on getting the right information out.
  - You may be permitted to have supplementary material. This could be a way of including extra figures/tables that are interesting but not critical to the main message.

- Consider colour versus blank and white. Do the journal charge for colour? Would your colour scheme work on a greyscale? What about symbol instead of colours. If colour is the best way to present something, we can typically find funding. (colour blind friendly palettes).
- Number of references
- 'Highlights' section

## Abstract

- Leave until the end
- Sells the piece of work almost like a headline
- Policy relevance important as that is the bit policy makers often (only) read
- Typically follows the intro, methods, results and discussion (key findings) order

## Title

Again leave to the end (unless you come up with something whilst writing).

## Introduction

- Start broad and funnel down
- Pick out the key themes of your research
- I tend to try and structure my introduction roughly into these paragraphs (only a suggestion):
  1. What is the issue (e.g. obesity) – include stats. and implications (e.g. 1 in 4 UK adults are classified as obese, link to non-communicable disease etc).
  2. What is currently being done to tackle the issue – why has it not been fully addressed already? (e.g. gaps in the knowledge, literature gaps, evidence gaps, methodological limitations).
  3. What new can be done to address the issue?
  4. Aims of the paper – how you are going to address the issue you have identified. (Paper aims typically go in the last paragraph of the introduction section, often people will skim the introduction and skip straight to this paragraph when deciding to read the whole journal article).
- Think about any highly informative papers in the field and cite them in the introduction.
- Some journals want you to state an hypothesis in the introduction, so consider this

## Methods

- 'What you did'
- Structure chronologically
- State software used for analysis and where possible link to the code used (reproducibility is important but in some cases this will be limited by data sharing agreements)
- Look at the structure of other methods sections in your chosen journal
- If someone else has used the same method cite them (this can save you words)
- Typical structure for a data science paper:
  - Background of the data used

- Where is it from
- Who does it capture
- Why was it chosen
- Any timescales or spatial scales
- Any data cleaning or pre-processing
  - Doesn't need to be overly detailed
  - Justify decisions made
- State which summary statistics were calculated (set the scene with the data)
- Introduce method(s) of analysis and what outputs were generated

## Results

- State the final numbers used in the cleaned data
- Present summary statistics
- Present model/analytical outputs
- Lots of nice visualisations!
- In the text comment on what the results and visualisations show

## Discussion

- First paragraph should grab your attention- this is the headline of what we found
- Discuss why you found what you did, how does it compare to existing literature?
- Can you explain any surprising results
- Strengths of the study
- Limitations of the study
- Future research directions
- Policy relevance/Business relevance

## Conclusion

- Restate the main findings of the paper and why they are important.
- This is the take home message so make it strong

## Reference management software

- Endnote
- Mendeley
- BibTex

## Formatting your submission:

- Word vs. Latex:
  - Journals often provide templates
  - Overleaf
- Journal constraints:
  - Line spacing

- SI units
- Page numbering
- Figure formatting
- Can check these just before submission

#### Other things to think about:

- Upon submission you can often pick suggested reviewers (think about people who have taken an interest in your work whilst presenting or are known researchers in the field).
- Cover Letter
  - A strong cover letter can get an editors' attention. It would be worth providing some information about the IGD H&SD programme in this context and saying this paper is part of a wider programme
- Co-author order:
  - First author: Should be you if you did the main analysis
  - Second author: This matters more in geography/social science fields
  - Other authors: should have had a major contribution to the work e.g. supervision, analytical support, study design input.  
(<https://www.elsevier.com/authors/policies-and-guidelines/credit-author-statement>)
  - <http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>
  - Last author: typically the 'lab leader', this matters more in medical/public health fields,
  - Normally ok to reach a consensus, but worth being aware of.
  - Good practice to agree authorship order up front wherever possible, especially when working with other Universities. It is possible to have joint 1<sup>st</sup>/last author etc.
- Conflicts of interest and funding statements.
  - This will need some thought given we are working with industry

#### Ways to write

- Sometimes, the first author will complete a first draft before sharing for comments
- Sometimes it will be a team effort for writing, down to sharing out paragraphs of an introduction
- May need an online 'live version' of a document
- Consider 'group writing' sessions, where you set goals with your peers and write in bite size chunks, in person in the same room, or a virtual room
- Set deadlines for yourself for section writing and for the wider team