



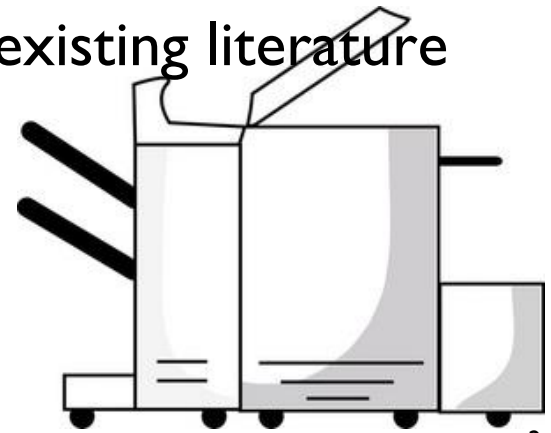
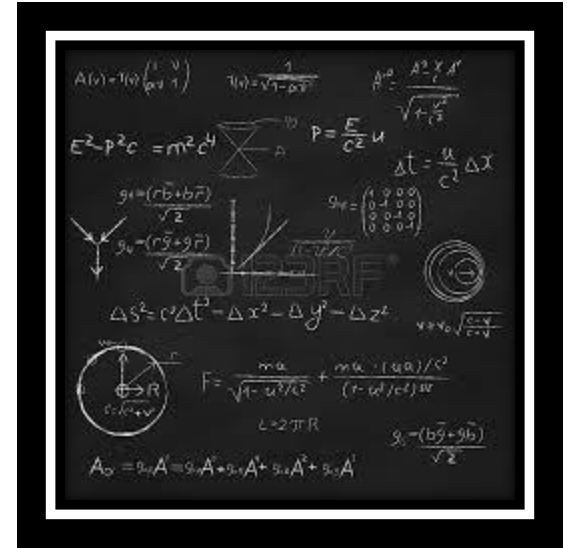
Writing Research Papers

Nihar Jangle (Micro Insurance Academy, New Delhi, India)
at the **2nd Workshop on Crop Insurance**, Institute of Actuaries of India
Mumbai, 19 September 2014

What is a Research Paper?

- A research paper can be on, e.g.:
 - New theory or new methodology
 - Analysis of a specific topic

- To be considered:
 - Factual, objective survey of all relevant existing literature
 - Cite don't plagiarise
 - Work on something that interests you!



- Make an outline
 - Topic?
 - Why is it significant?
 - What could be the research questions?
 - What background material is relevant?
- What similar work has been done?



- Initially, draft the research questions before you start your analysis
- When you have data, you can judge which questions you can answer
 - Remember, a convincing negative answer is an answer as well
- You may (or may not) wish to rephrase the original question to fit the actual data



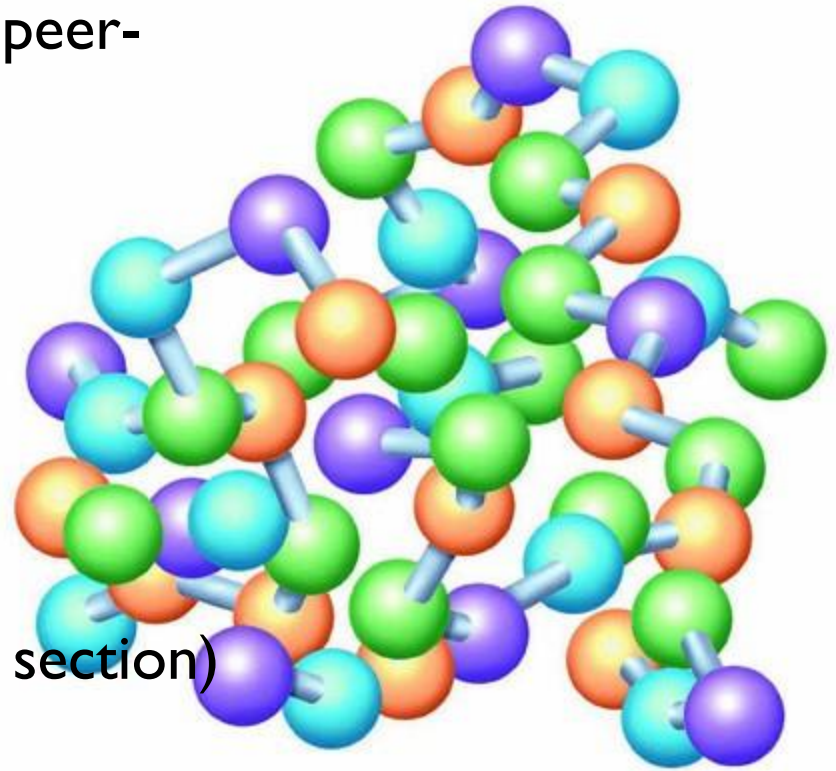
When finishing to read your research question, the reader of your introduction should think:

- “How pertinent, why has nobody else thought of this before?”



Structure of research paper, e.g. for peer-reviewed journal:

- Abstract
- Introduction
- Methods (incl. materials and data)
- Findings (or Results)
- Discussion
- Conclusion (not always a separate section)
- Acknowledgements (optional)
- References
- Annexes (optional)



Where to start with the writing?

- How to proceed without getting lost in the maze?
- DO NOT start in the beginning... start with the “Findings” section
 - or “Methods” section, if it is more a methodological paper



Methods should give details about:

- Material (e.g. questionnaires) and data used (e.g. what yield data)
- Methodologies used (e.g. sampling, statistical methods used for evaluation, field research)



- Findings section typically main section of the paper (usually also in terms of relative size)
- Include only your own findings

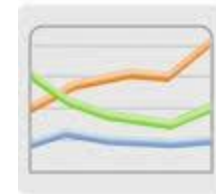
Structure of Findings section

- Objectively present your key results
- No interpretation
- In orderly and logical sequence
- Use past tense



Structure of Findings section (continued)

- What items do you wish to include?
- What is the best way of presenting the items?
 - Text paragraph
 - Figure
 - Diagram
 - Table
- Decide on the order of presenting your data items
- State main insights explicitly and coherently





- Interpret your results based on what was already known about the subject of investigation
 - Compare your findings to similar studies with a similar research focus
 - Including previous studies you may have done
- Focus on relationship between findings section and research question(s) / objective of paper (as described in introduction section)
 - Interpreting your findings, can your results provide answers to the research questions?
- What is the new understanding of the issues studied?
- Do not introduce new results
- State reservations



- **I** Intro:
 - Background: What we already know about the subject? Briefly description of problem
- **N-T** Need-to-Know: What is NEW in this paper (added value)
- **R** Range: Clearly stated research question, hypothesis, thesis statement
- **O** Objective: What the paper seeks to achieve?
- The introduction is a motivator designed to draw your reader into your topic. Consider several techniques for a “grabber”:
 - An unusual fact; an interesting quote; an historic event; a provocative question; an anecdote, illustration, example
 - A common interest, relationship, belief, opinion

Introduction Section: Chekhov's Rule of Thumb

- **If a gun is hanging on the wall in the first scene of a play, it must be used before the end of the play.**
- List the items that need to be included in the intro (Chekhov's rule)
- Decide on the order by which you lead your reader to the research question before you write the narrative



Anton Pavlovich Chekhov
29 Jan 1860 – 15 July 1904
Russian physician,
dramaturge and author

- Conclusions should
 - Restate the thesis
 - Sum up the evidence that justifies your claims of the added value / new insights / findings
 - Conclude with policy implications of these findings
- Conclusions should not repeat the intro or the discussion
- Conclusions should be no longer than 1 page
- Clear and to the point



- Complete but concise description of your work to entice potential readers into obtaining a copy of the full paper.
- “Sell” your work.
- An abstract word limit of 150 to 200 words is common.
- An abstract should also have 4-5 key words.

What is Referencing?

- Important part of academic writing
- A way of referring to work of others to provide evidence and support for your own work
- Done to avoid plagiarism
- A reference list refers to all the books, articles and websites referred to in the paper.

Reference style

- Often pre-defined by journals
 - Otherwise use for example Harvard referencing style
- Different software available (BibTeX from LaTeX, EndNote, Zotero for MS Word)

- **Proof reading, proof reading ...**
- Smooth transition between paragraphs
- Examine layout, content, and grammar of your paper
- Layout / presentation: margins, spacing, indentation, correct citation, references, page numbers etc.
- Tables and Figures: Should be labeled accordingly and properly numbered and captioned

