Writing a research proposal

An introduction for undergraduates
Outline of the session

This workshop will cover:

• What a research proposal is
• What it may include
• Questions you will need to consider
• Tips on writing an effective proposal

• This workshop is not subject specific and aims to give general guidelines only
What is a research proposal?

• “Research proposals are documents prepared for two primary purposes: to help researchers articulate their plans for research and to convince others (e.g., funders, colleagues, supervisors) that the plan for a research study is sound. In essence, then, the research proposal is a plan for intended research.” (Julien, 2008)
What? Why? How?

• In essence this is what you are looking at - an overall framework

• **What** are you trying to achieve?
• **Why** is it worth doing?
• **How** are you going to answer the research question? (Punch, 2016)
Proposal possible headings

• Abstract
• Title: research question
• Introduction: including aims & objectives and significance
• Literature Review
• Methods/Research Design
• Ethics
• Timeframe
• References
• Appendices
WHAT? Research question

• What are you trying to find out? What questions is this research trying to answer?

• Good practice in a research question: single focus; unambiguous; not too broad or too specific
Example question

• *(Why) do *(more) *(men) than *(women) *(play) *(computer games)*?
  • *Why* – so, objectives of research are to provide reasons
  • *More* – is a quantitative comparison part of research? Or assumption to be checked and confirmed?
  • *Men and women* – Who? Age? Class or ethnic group? Assumption that gender makes difference – how to confirm?
  • *Play* – how defined? How much?
  • *Computer games* – what kind? Individual vs team? Platform? Location?

(Green and Stoneman, 2016)
Tools to think of research questions

- Russian doll principle
  - Layers to a research question
  - Get to heart – sharper and more defined focus

- Goldilocks test
  - Is it too big?
  - Is it too small?
  - Is it too hot?
  - Need something ‘just right’

- (Clough and Nutbrown, 2012)
Activity

• Sample questions: consider strengths and weaknesses
1. What causes criminal behaviour?
2. Is there a relationship between violent video game use and aggression in children?
3. Is there a difference in attitudes towards work engagement between self-employed and employees?
4. Can caffeine increase anaerobic treadmill performances in a student population?
Activity: Your research question

• Based on that: what is yours?
• Question 1 of worksheet
WHY?

• Why is your research worth doing?
• Need to provide justification and your literature review can help with this.
• Possible justifications
  • Gap in the literature
  • Practice based research: developments in your industry-subject area-zeitgeist/change in policy/legislation
  • Own interest or linked to placement/work
  • Add to knowledge base
Activity

- Ig Nobel awards: what could the possible justification for this research be?
  - Itch relief by mirror scratching: a psychophysical study
    - Awarded for discovering that if you have an itch on the left side of your body, you can relieve it by looking into a mirror and scratching the right side of your body (and vice versa).
    - This one won the medicine prize in 2016
    - [http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0082756](http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0082756)
  - From junior to senior Pinocchio: a cross-sectional lifespan investigation of deception
    - Awarded for asking a thousand liars how often they lie, and for deciding whether to believe those answers.
    - This one won the psychology prize in 2016
Answers

• Ig Nobel awards: what could the possible justification for this research be?

• Itch relief by mirror scratching: a psychophysical study
  • “Mirror scratching” might provide an alternative treatment to reduce itch perception in focal skin diseases with persistent pruritus without causing additional harm to the affected skin and might therefore have significant clinical impact

From junior to senior Pinocchio: a cross-sectional lifespan investigation of deception

  • How does lying evolve over life? This was the primary question we aimed to address in the current study. Practitioners could gain from taking into account the age of suspects. Our findings suggest that whereas the lies of older suspects would be relatively easy to catch, young adults would be more successful in getting away with their lies.
Follow-up activity

• Why is your research worth doing? What is your justification for your proposal?
HOW?

• Need to choose your methodology and methods
  • Methodology – system of methods, theory behind methods
  • Methods – what you actually do eg interviews

• Think about possible methodologies
• Why might it be appropriate to use those?
• What fits in with your subject area?
• What is realistic for your situation?
• Make sure it all fits together
How? Decisions to make

- Type of research
  - Literature based and why? Or primary research and why?
- Philosophy or paradigm?
  - Positivism (scientific) vs interpretivism? Or not needed?
- Quantitative or qualitative approaches?
  - Or both? Or something else?
- Data collection
  - Experiments or questionnaires or interviews or something else?
- Data analysis
  - Statistical tests vs thematic?
- Ethical considerations
- Timescales and feasibility
  - Resources available, costs
- Sample
  - Access to participants/lab availability...
Ethics

• Ethical clearance and timescale
• Principles
  • Harm and risk
    • Including personal safety
  • Consent
  • Confidentiality
  • Regulated materials
  • Conflict of interests
Activity

• What is your proposed methodology and method?
  • Think about any ethical issues
Aims and objectives

• Your aim is your What (your question)

• Objectives are your How (the stages of your research)
Tips

• Choose an area that you’re interested in, so that you’ll want to use it for your final project
• Keep focused on your What, Why and How
• Be realistic about what you can achieve
  • Scope
  • Timing
More help

• Other workshops
  • Dissertations: getting started
  • How to proofread (Bitesize)
  • RefWorks
  • Writing a literature review

• Learning Hub
  • Appointments with learning advisors for writing
  • LRS team appointments for help with literature searching
References


• Sage Research Methods
Questions?

Thank you for your attention