MP Proposals
A Guide to Writing

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Roadmap

- Anatomy of an MP Proposal
- Writing Tips
MP Proposal

- ≤ 10 pages, double-spaced
- Includes Cover Sheet
- Includes 8 sections
MP Proposal

Guidelines:

- ≤ 10 pages, double-spaced
- Includes Cover Sheet
- Includes 8 sections

Content:

I. Introduction
II. Objectives
III. Methods
IV. Expected Results
V. Form of Final Report
VI. Citations
VII. Support Needed
VIII. Faculty Involvement
Recommendations for Writing

- Write early & often
- Don’t need to write sections in order of occurrence
Objectives

- What question(s) will you answer with your MP?
- Clear, concise, & concrete
- Consider using SMART Objectives
SMART Objectives

**Specific**
- **Not Specific:** Conduct research
- **Specific:** Formulate plans for research on topic X

**Measurable**
- **Not Measurable:** Formulate plans for research on topic X
- **Measurable:** Formulate plans for research on topic X and submit grant application to X Research Council.

**Attainable**
- **Not Time-bound:** Formulate plans for research on topic X and submit grant application to X Research Council
- **Time-bound:** Formulate plans for research on topic X and submit grant application to X Research Council by 1 June 2009.

**Realistic**

**Time-bound**

Modified from *Heriot-Watt University Performance & Development Review Handbook*
Types of Objectives

- **General Objectives:**
  - Broad goals to be achieved
  - Often over-arch specific objectives

- **Specific Objectives**
  - Short-term and narrow focus
  - Can be broken down into logical steps or parts
  - Specify what, where, & for what purpose
Types of Objectives - Verbs

- Assess
- Identify
- Find
- Determine
- Compare

- Verify
- Calculate
- Describe
- Analyze
- Establish

Modified from Patidar *Writing Research Objectives*
Types of Objectives - Examples

- **General Objective**
  To determine whether bird-window collision patterns are a product of inherent susceptibilities among taxonomic and functional groups.

- **Specific Objectives**
  - To investigate patterns of taxonomy, residency & breeding status, guild, & synanthropy on bird-window collision frequency at three sites in NC’s Research Triangle
  - To disentangle relationships between relative abundance and collision frequency using a one-year case study

Modified from Wittig 2016
Objectives ➔ Questions

➢ General Objective
  To determine whether bird-window collision patterns are a product of inherent susceptibilities among taxonomic and functional groups.

➢ Specific Questions
  • What are the patterns of taxonomy, residency & breeding status, guild, & synanthropy on bird-window collision frequency at three sites in NC’s Research Triangle?
  • What are the relationships between relative abundance and collision frequency as determined from a one-year case study?

Modified from Wittig 2016
Methods

- Allows others to replicate your work & findings
- Allows the reader to have faith in your results
- 1st person, past tense
# Methods: What to Include

## Data Collection
- **How** you will collect your data
- Why you think your data collection **approach is best**
- **Limits and assumptions** of your data collection
- Subjects, materials, instruments, & procedures

## Data Analysis
- **How** you will analyze your data
- Why you think your data analysis **approach is best**

## Assumptions/Limitations
- **Limits and assumptions** of your analysis
- Ethical concerns
Methods: General Structure

- Overview of research design
- Pilot study description (if applicable)
- Study area description
- Subject description
- Research instrument description (if applicable)
- Procedure
- Analysis
- Ethical considerations
Methods: Overview of research design

E1: “This study uses a cross-sectional survey design to assess adjustment to retirement of a sample of retired male executives.”

E2: “The park case study and supplemental historical analysis seek to determine the following:

- Using the MCDA approach, where should trees be planted to maximize environmental benefits and equity among city parks?
- Do playground, park and incinerator locations from the 1930s persist as parks? Are any of the species planted by the Olmsted Firm now classified as invasive?”
Methods: Study area description

Twenty-two study sites will be located in six preserves (Table 3.1) within the Illinois portion of the tallgrass prairie peninsula, including the United States’ first national tallgrass prairie (Midewin) and the largest remnant prairie east of the Mississippi River (Goose Lake). These sites will be located at a minimum of 1 km and a maximum of 135 km apart. Sites will be approximately contained within Illinois’s Grand Prairie natural division – a geographic region with similar soil, topography, and biota (Schwegman, 1973). Delineated by the farthest advance of the last glacial ice sheet to affect the state (McClain, 1997), this division was previously dominated by black soil prairie. Historically, these prairies were maintained by periodic fire and grazing (Robertson et al., 1997), with disturbances, such as bison wallows and mammal burrows, increasing plant species richness and heterogeneity (Matlack et al., 2001; Gibson, 1989).
Methods: Describe subjects

We will recruit 29 subjects (17 male, 12 female) from two introductory psychology classes. They will be given a choice of extra course credit or $5.00 for their participation. Subjects selected will take Pettigrew's Category Width Scale on the first day of class and score among the top or bottom 10% for their sex in their respective classes. Selected subjects will be unaware of why they are being asked to participate. All subjects will be assigned to perform the same task. For the final data analysis, the 20 subjects with the fewest missed responses in the experimental tasks will be used.

Modified from APA Method n.d.
A survey will be constructed and used that contains six simple yes or no questions dealing with honesty, cheating, stealing, and not getting caught (See appendix). A Monopoly gameboard will be used to demonstrate question one.
Subjects will be told that the study investigates the relationship between personality traits and academic performance as indicated by an anagram task and an attentional task. Subjects will be informed that a practice anagram task will follow an attentional task, and then by the main anagram test (which won’t be administered). **The intention of this misleading information about a second anagram test is to maintain state anxiety levels during the attentional task**, which last several minutes without interruption.
Methods: Analysis

**I will use** hierarchical agglomerative cluster analysis to identify groups of sites similar in snake species and abundances of those species. From these groups, **I will identify** assemblages of snakes in the study area. Cluster analyses, using PC-ORD 5.0 (McCune and Mefford, 1999), will be performed on the relativized snake species composition matrix. In this, **I will use group averaging**, a linkage method compatible with the use of Bray-Curtis distance matrices that preserves the properties of species-space (McCune and Grace, 2002), to join similar sites into groups. The number of groups ranged from one (a single group containing all 22 sites) to 21 (i.e., N-1).

Modified from Cagle 2008.
Methods: Ethical Considerations

- State procedure for protection of animals and humans
- May include statement of confidentiality
Expected Results:

Level 1 (specific)

- What kinds of information will be produced?

- If you have hypotheses, how will you know if they are supported?

- If you have objectives, how will you know if they are met?
Expected Results:

Level 2 (general)

- How will your research make an original contribution to the field?
- How does it fill gaps in existing work (summarized from intro)?
- How might it extend understanding of a particular topic (summarized from intro)?
Other Elements of the Proposal:

- **Form** of the final report & **intended audience**
- Sources & amount of **support needed** (think: materials, $)
- Faculty **advisers and cooperators** (with affiliations)
Introduction

- Introduction to the introduction
- Literature review (AKA Background)
- Problem restatement
- Response restatement
Introduction to the Introduction

- Establish a research territory (context)
- Establish a niche (problem or significance)
- Occupy the niche (response)
Introduction: Establish Your Territory

- What (briefly) does the reader need to know?
- Basic information
- A quick refresher
- e.g., “Over the past two decades, research in this field has focused on...”

Cayley 2013
Introduction: Establish Your Niche

- Describe what isn’t well-understood yet
- Explain what you want to understand or explore
- Explain why it matters

- e.g., “Yet, [topic] is poorly understood. This lack of attention is significant because knowing [this about the topic] will provide this benefit [or not knowing will incur this cost]
Introduction: Occupy Your Niche

- What are you doing in your research?

- e.g., “To address this problem, I have...”
Introduction: Occupy Your Niche

- What are you doing in your research?
- *e.g.*, “To address this problem, I have...”
- Very fast – 2 paragraphs maximum
Introduction: Occupy Your Niche

➤ What are you doing in your research?

➤ *e.g.*, “To address this problem, I have...”

“Instead of telling a story about the twists and turns of our research process, we need to tell the story about our research that the reader needs to hear.”

Cayley 2013
Introduction: Literature Review

- Provides context
- Synthesizes current knowledge on your question
- Demonstrates why your work is relevant
Introduction: Literature Review

- Usually general → specific
- Organized by topic or focal area
- Articulate pattern in the literature
- Describe “unresolved” academic issues
Introduction: Literature Review

- Identify key authors and journals
- Use computerized searches
- Scan table of contents from key journals
- Use reference lists from relevant articles, books, and book chapters
Introduction: Literature Review

- Summarize key findings
  - What were the main findings?
  - How do these findings relate to previous research?
  - What conclusions do researchers draw based on their findings?
  - What are the implications of the findings?
  - What recommendations are made?

Paltridge n.d.
Introduction: Literature Review

- Summarize key methods
  - What research designs have been used?
  - What were the key variables? What data were collected?
  - What were the sample selection procedures
  - Were there reliability or validity issues?
Introduction: Literature Review

- Restate the problem (describe in more detail)
- Restate the response (describe in more detail)
  - *e.g.*, “in this MP, I will...” or “given the centrality of x to this, this research intends to y”
Literature Cited:

- Use proper citation style (e.g., APA, MLA, CSE)
- Err on the side of over-citing
Images

https://www.nbn-nrc.org/nonprofit-resource-center/services/training/fundraising-roadmap/
https://ianbrownlee.wordpress.com/2013/08/12/the-three-key-structures-of-effective-communication/
https://www.pinterest.com/gomegan2849/ideas-for-trellis-logo/
References


