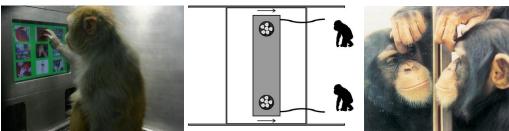
## **Research Proposal Project: The Research Proposal**



Images from: www.sciencedoex.com, Melis et al. (2006), www.sharedsymbolicstorage.blogspot.com

Assignment: For the second half of the semester, your writing assignments will all focus on one major writing project: the research proposal. This research proposal will revolve around an aspect of primate cognition that you want to investigate via a focused research project. The first step of this writing project is determining which cognitive ability and which primate species you wish to concentrate on. Your assignment is to write a research proposal that includes a review of the current understanding of the topic, a clearly stated hypothesis, a description of the experimental or observational methods you would use to test your hypothesis, and a discussion of how your research will contribute to the field of primate cognitive psychology. Before you begin writing your proposal, you must conduct considerable research to determine what studies have been done and what questions remain unanswered. This library research should continue as you write to help you dig deeper into the topic, formulate your ideas, and devise your methods. Be prepared to make room for this back and forth between research and writing as you consider and reconsider your project ideas and begin drafting your proposal.

## As you decide which aspect of primate cognition you would like to explore and what kind of research project you will propose, consider the following possibilities:

- A laboratory study with an experimental design (e.g., Hare et al. 2001)
- A field study that uses observational techniques (e.g., Whiten 2002)
- A field study that uses an experimental technique (e.g. Seyfarth & Cheney 2002)
- A comparative project that examines how primate species A differs from primate species

B or how primate species A compares to human children in a certain cognitive task (e.g., Tomasello & Herrmann 2010)

- Applying a method used in research with non-primates to a particular primate species
- Expanding and improving upon a study we have read about in class

Writing Objectives: This writing project will enable you to experience what goes on behind the scenes of scientific research. Your initial ideas and observations must be transformed into a carefully designed project that could feasibly be conducted and published in a peer-reviewed journal. Even though you will not be able to collect and analyze data, you still need to work hard to ensure that you have considered all variables and have devised a solid, replicable study that tests a specific hypothesis. While writing your proposal, imagine that you must convince a funding agency that your project is worthy of funding support. To make a convincing case for why your project is valuable, you not only need to review what's been done so far and what you intend to do in your study, but you also need to situate your work within the broader context of the field and clearly explain why your study is unique, important, and represents a significant contribution to the field. Refer to the research articles we have discussed in class as models for the particular style, structure, and ways previous research is referred to in this genre of scientific writing.

**Grading:** Assignments related to the research proposal are worth paper 40% of your grade. The research proposal itself is worth 30% of your grade, so it will constitute a large portion of your course grade. A successful research proposal will have an organized and cohesive literature review, a clear hypothesis and comprehensive account of the methods used to test this hypothesis, and a clear description of how your project builds on previous work and contributes something new to the field. Your grade will also depend on your adherence to the formatting guidelines laid out in The Fine Print and Format sections of this prompt.

Due Dates: The first draft of this research proposal is due in your Sakai Small Group folder by 8pm on Tuesday, November 6<sup>th</sup>. The second draft is due in your Sakai Small Group folder by 8pm on Tuesday, November 20<sup>th</sup>. The final version is due in Sakai Assignments by 11:59pm on Thursday, December 6<sup>th</sup>.

Looking Ahead: Leading up to the research proposal, you will write a pre-proposal to help develop your project, and we will discuss this in our student-teacher conference on October 30<sup>th</sup> or 31<sup>st</sup>. After your project has been "cleared" in this conference, you will reshape your pre-proposal into the first draft of your research proposal. Your research proposal will go through two drafts before the final version is due, and during this drafting process, you will receive feedback from your UWT, your peers, and me. These experiences should help you strengthen your ideas, organize your information, refine your methodology, and polish your writing style and clarity. Please refer to the syllabus for the UWT appointment sign-up deadline and the dates of your small group workshops. At the end of the semester, you will also give a brief oral presentation of your research proposal during class.

The Fine Print: This proposal should be 7-9 double-spaced pages with 1-inch margins, using a 12point font comparable to Times New Roman. Please put your name, course section number, date, and the title of your research project at the top of the first page and number all pages. Please save documents uploaded to Sakai by your first initial, last name, and assignment title (e.g., LSmith\_Research Proposal Draft 2). Your Works Cited section will appear at the end of the proposal, but it does not have to go on a separate page. For this assignment, you must also attach a cover letter to your drafts and to the final paper.

Sources: You must use at least 10 sources for this paper: at least 4 sources from class and at least 6 from academic journal articles or book chapters that you find on your own. For this assignment, popular magazine or newspaper articles are not considered appropriate sources (even if we used them previously in the semester). If you have questions about whether a source is appropriate, please check with me. All of your sources must be cited properly within your paper AND in the Works Cited section.

**Format:** Just like a standard scientific research article, your research proposal must be divided into sections using headings (in bold). The four main sections of your research proposal are described below along with the different page limits for each section:

**Background (3-4 pgs.):** This section should accomplish two major goals, in this order: 1. Discuss important findings from previous studies that are relevant to your project so that your reader can gauge the current understanding of the topic, and 2. Present your study's major objectives and detailed hypothesis. To successfully accomplish these goals, you must:

• Provide sufficient background information to explain the cognitive ability you are investigating and define all key terms/concepts.

- Give common and scientific (Latin) names for all species you refer to (Latin names are only necessary at the first mention of the species, then common names suffice).
- Demonstrate that you have a good knowledge of the primate cognition literature relevant to your topic- this requires doing your research so you don't exclude important studies!
- Be explicit in showing how your research expands on previous findings (you can number the unique aspects of your study to make this very obvious).
- Go beyond summarizing other studies- clearly demonstrate how your study builds on existing scholarship by pointing out key aspects of the design and/or results of previous research as it relates to your project.
- Formulate a research question that is narrowly focused on one aspect of primate cognition. In one study, you won't be able to resolve whether all primates have theory of mind, for example. Instead, concentrate on collecting data on one piece of the puzzle. Investigating whether orangutans demonstrate the ability to understand the intentions of conspecifics contributes to the larger issue of theory of mind in primates, but is a manageable research question based on a testable hypothesis.

Note: In scientific writing, it is acceptable to use the first person. For example, you may use phrases like "I hypothesize that squirrel monkeys will not be able to recognize themselves in mirrors."

**Methods (2-3 pgs.):** This section should lay out what data you will need to collect to answer your research question and how you will go about collecting these data (the "who, what, when, where, how" of your project). You may also use subheadings (in italics) to further divide this section if you find it useful (e.g., *Study Group, Experimental Protocol*). A successful Methods section will include:

- Information about the sample size and group composition (*i.e.*, how many males, females, adults, infants, etc.)
- Key details about the location of the study (e.g., Ometepe Biological Field Station, Nicaragua; the Duke Lemur Center, etc.). Determining where to conduct your research will involve researching different facilities or field sites that contain the primate you wish to study in an environment suitable for your project.
- A detailed description of what data you will collect and how you will collect these data. Be as specific as possible so that someone could replicate your study just by reading this section. (*i.e.*, How many days a week will you collect data? At what time? What will your experimental apparatus look like? How many trials will you conduct? What variables are you controlling for and how?)
- Visual aids of your experimental design or a map of the study site to make sure your reader understands the study conditions (you can take these directly from research articles or other sources as long as you properly cite them or you can create your own).

Note: This section should be written in future tense since you have not completed the research (*i.e.*, "I will collect data on 14 individuals living in a free-ranging habitat in the Kakamega Forest, Kenya").

**Broader Implications (1-2 pgs.):** In this section, you must make a case for what contribution your project makes to the discipline and how the results of your study will help answer the unresolved question you are investigating. A successful Broader Implications section will:

• Emphasize the contribution of the proposed research not only to the specific area of research being addressed but also to the broader field of primate cognition (*i.e.*, Why does this project matter in the grand scheme of primate cognitive psychology?)

• Offer potential future directions of this research. Your project contributes one piece of the larger puzzle, but what other pieces are missing? What other information is needed before this research question can fully be answered?

Note: Parts of this section will be written in future tense since you are considering the contribution your results would make to the field (*i.e.*, "The results of this research will help to resolve the question of whether gorillas are self aware"). Other parts will be in present tense (*i.e.*, "Determining whether gorillas possess self recognition sheds light on whether there is a true phylogenetic divide between great apes and other primates in the possession of this ability.").

**Works Cited:** List all sources you refer to in your proposal in **APA style** (a minimum of 10). Remember that **only academic sources are acceptable for this assignment** (articles from peerreviewed journals or book chapters from edited volumes like your textbook). Refer to the APA Quick Reference Guide if you have questions about in-text citing or formatting sources for this section.

Remember to take time to proofread your work, paying special attention to spelling, grammar, and punctuation.