**Missouri State University**

**GRADUATE COLLEGE**

**Research Funding**

## Guidelines (Pages 1-2)

Application (Pages 3-4)

### General Funding Information

The intent of Research Funding is to support student research by providing financial assistance to be used toward the costs incurred in research projects.

All research funding awards are transferred directly into the budget of the academic department through which the student is working. It is the responsibility of the Department Head to ensure that these funds enable the student project. Research funding is intended to help defray the real costs of supplies, materials, and travel needed to facilitate student research. This funding is not a cash grant to the student or to be used as payment for work. Departments receiving research funds will be accountable to the general intent and purpose of the funding.

### Eligibility

All graduate student research projects initiated during the semester of application are eligible for funding. At the time of application, the student and research advisor should be sufficiently committed to a project to know the scope of the research and potential costs that may be involved. If the student has not progressed to the point where there is clarity in his/her research goals, the request for support should be delayed until the next semester.

Research Funding is a one-time award. Applications for funding will not be accepted from any student previously funded under this program.

### Application Procedures

The application should be completed by the student in consultation with his/her research advisor or the graduate director of the program. The final research project may take a different turn from the initial planning information required on the application and the title certainly may change. However, the application does require enough specific information about the proposed project to show that the initial steps toward a thesis or non-thesis project are underway and that there is sufficient planning to know how the funding award will be used.

For projects that involve human subjects or non-human vertebrates, students must receive approval from the Institutional Review Board for the Protection of Human Subjects (IRB) or Institutional Animal Care and Use Committee (IACUC) respectively. The first step in this approval is to complete the appropriate online training modules. ***A copy of the certificate received upon training completion must be submitted with the research funding application.*** There are also policies for research activities using potentially biohazardous materials and recombinant DNA, as well as radioactive materials. Please visit the website for the Office of Sponsored Research and Programs (<http://www.srp.missouristate.edu/>) for institutional research policies and training information.

Signatures of the student’s research advisor and department head are required prior to submission to the Graduate College, located in Carrington Hall, room 306.

### Nature of Proposed Expenses

These funds are intended to help defray the real costs of supplies and materials needed to conduct research. There is considerable variation in the proposed use of research funding according to the nature of the research project. Travel required for various types of field work, consumable supplies (such as laboratory chemicals or postage stamps for questionnaire mailing), and/or other materials deemed necessary for successful work on research are valid uses of funding. Funds could also be applied as part of the cost of an instrument that the student (and other students) would use in data collection. Purchase of instrumentation that will have long-term, multiple uses within the department is encouraged. Additions to university or departmental libraries also are valid expenditures.

Research funding is not to be used for books, duplicating materials, or other items purchased with the intent that they become the personal property of the student. Funds are not to be used to pay the student doing the research for the work involved, or to hire another student to do the work of data collection or other aspects of the research project normally expected in the discipline as part of the research done by the investigator. Research funding is not to be used for printing and binding of the thesis, as that is a student’s personal expense.

Requests for travel funding to support presentation of research results at conferences should not be included in research funding proposal. Such requests are handled through a separate application process. An “Application for Student Travel Funding” is located on the Graduate College website under Funding Opportunities.

### Additional Funding Sources

If additional funding toward the expenses associated with the research project is anticipated, such as from an external grant source or an academic department, please provide this information in the space provided.

### Funding Amounts

Each academic year the Graduate College has a set budget established to support research funding. The dollar amount of awards depends, in part, on the number of applications received. Given the past history of applications we anticipate awards of approximately $200 for each non-thesis project and $500 for each thesis project, but this is not a fixed amount. Some projects may not require this much funding.

### Conditions of Funding

Completion of the research project and fulfillment of all degree requirements are the conditions of funding. Students receiving funding are ***expected*** to present their research findings at the Graduate College 3 Minute Thesis Competition (3MT) and/or the Interdisciplinary Research Forum (IDF). If a student cannot do so, he/she should contact the Graduate College about reasons and options.

**Application for Research Funding**

*Please provide the information requested below. Use a separate form for each student.*

1. **Name of student : Nicholas Maxwell M-number#: M02775480**
2. **Student’s mailing address: 2010 E. Page Street Apt. D5 Springfield MO 65802**

*Street Address City State Zip Code*

1. **Faculty advisor for research: Erin Buchanan Academic Dept: Psychology**
2. **Degree being sought: Master of Science Anticipated Graduation Date: 05/18**
3. **Proposed title of the study: Investigating the interaction between Associative, Semantic, and Thematic Database Norms for Memory Judgments and Retrieval**

**Research funding being requested for X Thesis or Non-thesis Project (check one)**

1. **Research Abstract:** The abstract should specify the topic of the research, provide a brief foundation upon which the research is proposed, explain the research design and methods to be utilized (including data analysis), and suggest time line for progress.

**Foundation:**

This study will examine the interactive relationship between semantic, thematic, and associative word pair strength in the prediction of judgments and cued-recall performance. Judgment of learning tasks (JOLs) can be manipulated to investigate perceptions of word pair relationships by having participants judge how related they believe the stimuli to be (Maki 2007a, Maki 2007b). Judged values can then be compared to the normed databases values such as forward strength or cosine to create a similar accuracy function or correlation as is created in JOL studies. When presented with the item pair, participants are asked to estimate the number of people out of 100 who would provide the target word when shown only the cue, which mimics how the association word norms were created. These judgments have been investigated within the context of associative memory (Maki 2007a) and responses were found to greatly overestimate the strength of relationship for pairs that were weak associates, while underestimating strong associates. This finding replicates the Koriat and Bjork (2005) findings for judgments on memory, rather than on learning. However, these judgments have been studied in individual word-pair relation contexts, rather than a combined view, and we seek to understand judgments in a larger context of psycholinguistic literature (i.e. from multiple normed sources).

**Research Design and Analysis:**

Participants will be shown word pairs of varying relatedness, and asked to judge these word pairs for their semantic, thematic, and associative strength. After completing a distractor task, participants then will complete a cued recall task. Several hundred word pairs will be created based on their associative, semantic, and thematic relatedness, and each participant will see approximately 60 word pairs. Associative relatedness is measured in forward strength (FSG), semantic relatedness is measured in cosine (COS), and thematic relatedness is measured through latent semantic analysis (LSA). The data will be analyzed through the use of multilevel modeling. We plan on running 300 participants for this study via Amazon’s Mechanical Turk. Each participant will be payed $2.00 for participating, and Mechanical Turk charges a 40% fee for each participant, meaning each participant will cost us $2.40. The large number of participants is needed due to the amount of words we will be testing.

**Time Line:**

The thesis proposal will be submitted in October. Data collection will begin in November and continue through December. The thesis writeup will begin in January.

**7) Responsible Conduct of Research** (circle the appropriate response)

This project involves: **Human Subjects** Yes X

No

*If yes, attach copy of training certificate.*

* + **Non-Human Vertebrates** Yes
  + **Radioactive Materials** Yes

No X No X

*If yes, attach copy of training certificate.*

* + **Materials requiring Bio-safety Precautions** Yes

No X

1. **Research Project Budget:** Provide a list of research related items/supplies needed along with their estimated cost. (Examples: chemical supplies, instrument costs, specialized library acquisitions, postage, survey printing, student travel during data collection, etc.)

**Description of Items/Supplies Needed Estimated Cost**

Participant Payment -- We plan on running 300 participants for this study via Amazon

Mechanical Turk. Each participant will be payed $2.00 for participating, and Mechanical

Turk charges a 40% fee for each participant, meaning each participant will cost us $2.40.

The large number of participants is needed due to the amount of words we will be

testing. $700

**Estimated Research Project Expenses: $700**

1. **Additional Funding Assistance:** Will you be receiving any other funding to assist with your research

expenses? Yes

No X

If yes, please describe the source and indicate the amount of funding.

**Source: Amount ($):**

Has this funding already been awarded? Yes

No

1. **Total research funding being requested from the Graduate College: $ 700**

**REQUIRED SIGNATURES**

**Research Advisor**

Printed Name *Signature*

**Department Head**

Printed Name *Signature*

**Must be completed by Department Head**

Budget account (FOP) to receive transfer funds if awarded:

*Departmental Budget Account Title* FOP *Number*

Revised 8/2015