

1. PURPOSE OF STUDY

a) What are your specific objectives? Provide a thesis or brief abstract.

Studies on auditory imagery help inform us on how auditory information is stored, whether it is in propositional form or perceptually based. This project will replicate and extend Geiselman and Glenny's (1977) study on auditory imagery for spoken words. Participants will listen to a male and a female voice to familiarize themselves not with the content of the spoken utterances, but the characteristics of the voices. Once the voices are learned, participants will be shown words visually one at a time and asked to imagine either the male voice saying the word, the female voice saying the word, or their own voice saying the word. An auditory recognition test will then be given. Words that were presented by the same voice at retrieval as they were imagined in during encoding should be remembered better than words presented in a different voice than the one in which they were imagined. Geiselman and Glenny assumed their results were due to a propositional tag of male or female voice on the auditory events. Our second experiment will refute this claim by including novel male and female voices at test that sound more or less like the imagined voices from the study phase. If auditory events are stored with their perceptual details, then words presented by the voice that sounds perceptually similar to the imagined voice should be better remembered than words presented by the voice that sounds perceptually distinct. This is not predicted by a propositional model of memory.

b) How does this research project further your course of study? How are you qualified to undertake it? What specific courses have you taken which prepare you for the work?

I have always known that I would be attending graduate school for my master's degree or possibly my Ph.D., and the key to getting into a competitive graduate program is having research experience. This senior research project will emphasize my abilities to develop and perform researching skills, as learned in my Psychology Statistics and Methods courses. The hands-on experience will further my knowledge base as a student and add to my growing awareness and appreciation for all the fields of psychology. My recent completion of the Statistics and Methods sequence will benefit my ability to carry out this project by equipping me with the proper steps involved, ethics, methods, and analysis techniques. I have also taken Introduction to Psychology, and Brain Behavior Connection to establish my understanding of the cognitive principles involved with this endeavor.

2. REQUIRED ACADEMIC TIME

What activities (conferences, library research, laboratory research, studio work, writing, etc.) will you undertake to meet your objectives? How many hours do you estimate each activity to require during a typical week of the term. To earn four semester hours of credit you should average 9-12 hours of work per week in the fall or spring.

FALL 2004: Library research, 2-3 hours
Learning software packages, 1 hour
Designing experiment, 1-2 hours
Running participants (collecting data), 5-6 hours
Conferences with faculty sponsor, 1-2 hours

SPRING 2005: Library research, 1-2 hours
Analyzing data, 2-3 hours
Writing paper, 5-6 hours
Conferences with faculty sponsor, 1-2 hours

3. PRELIMINARY BIBLIOGRAPHY

Which books, periodicals, journals, primary documents, and other sources will you explore? Use a proper bibliographic form accepted by the discipline in which your project falls. Attach a separate sheet if necessary.

Please see attached sheet.

4. MEANS OF EVALUATION

Indicate the criteria upon which your grade will be based. Please estimate the percentage of each category that applies to your study and provide a brief, but specific, description of each (i.e., a 50-page paper, ten journal entries of 250 words, nine laboratories, seven finished sculptures, etc.).

a) 50 % PAPER

A 50 page APA research paper _____

b) 0 % JOURNAL

c) 25 % LAB/STUDIO

Laboratory time will consist of data collection as well as data analysis and presentation preparation. _____

d) 15 % EXAM: ORAL

NOTE: If the project is for the Honors Degree Program or Honors in the Major Field, indicate in item "d" the percentage of your grade which will be determined by your presentation to the Examining Committee/Readers.

Oral defense to committee members and sponsors. _____

e) 10 % OTHER

Setting up meeting times with faculty sponsor to establish and maintain a timeline and schedule of events. _____

5. STUDENT, SPONSOR, AND ADVISOR SIGNATURES

STUDENT: _____

Date: _____

SPONSOR: _____

Date: _____

SPONSOR: _____

Date: _____

ADVISOR: _____

Date: _____

6. DEPARTMENT CHAIR AND PROGRAM DIRECTOR APPROVAL AND SIGNATURE

(To be completed by faculty sponsor's department chair. If the project fulfills a requirement for a special program, e.g., Honors, LACA, International Relations, you must also obtain approval from the program director.)

_____ APPROVED; I certify that a majority of the department's members have approved this study.
(Forward to the Office of Dean of Faculty.)

_____ MODIFICATIONS REQUIRED; list modifications on separate sheet and return proposal to student. If student wishes to pursue the project, s/he must make the modifications required and return the proposal for departmental approval. If subsequently approved, the department chair should initial below that the changes have been made, and forward to the Dean's Office.

_____ APPROVED; I certify that the majority of the members of the department have approved this study as amended.

_____ DECLINED; the department will not reconsider this proposal. (List reasons and return to student.)

CHAIR: _____ Date: _____

PROGRAM DIRECTOR: _____ Date: _____

7. DEAN'S OFFICE APPROVAL AND SIGNATURE

(To be completed by the Assistant Dean.)

_____ APPROVED; forward to the Office of Student Records.

_____ MODIFICATIONS REQUIRED; the Academic Affairs Subcommittee and/or Dean of the Faculty will approve this project if you will make the modifications and/or additions specified on the attached sheet and submit them in the form of a written statement to the Assistant Dean of the Faculty within five days. This written statement must be signed by your faculty sponsor and attached to this form.

_____ APPROVED; the Academic Affairs Subcommittee and/or Dean of the Faculty approve this study as amended.
(Forward to the Office of Student Records.)

_____ DECLINED; the Academic Affairs Subcommittee and/or Dean of the Faculty will not approve this project for the reasons specified below. The project will not be reconsidered.

Assistant Dean: _____

Date: _____

References

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- Farah, M. J., Levine, D. N., & Calvanio, R. (1988). A case study of mental imagery deficit. *Brain & Cognition, 8*, 147-164.
- Geiselman, R. E., & Glenny, J. (1977). Effects of imagining speakers' voices on the retention of words presented visually. *Memory & Cognition, 5*, 499-504.
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- Reisberg, D. (1992). *Auditory imagery*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Reisberg, D., Wilson, M., & Smith, J. D. (1991). Auditory imagery and inner speech. In R.H. Logie & M. Denis (Eds.), *Mental images in human cognition* (pp. 59-81). Oxford, England: North-Holland.
- Smith, J. D., Wilson, M., & Reisberg, D. (1995). The role of subvocalization in auditory imagery. *Neuropsychologia, 33*, 1433-1454.
- Tracy, R. J., & Barker, C. H. (1993-1994). A comparison of visual versus auditory imagery in predicting word recall. *Imagination, Cognition & Personality, 13*, 147-161.
- Winnick, W. A., & Brody, N. (1984). Auditory and visual imagery in free recall. *Journal of Psychology, 118*, 17-29.