## Katherine Sledge Statement of Purpose – Great University Psychology: Cognition Page 1 of 2

I first became interested in human perception and performance while enrolled in Research Experiments in Cognitive Science in my sophomore year. Like many students in the class, I had been struggling with the labs. Then, in one of our six experiments on human information processing, a study on the psychological refractory period, I came into my own. Not only had I understood how the experimental manipulations tell us where the processing bottleneck occurs, but I had accomplished something that no one else in the class had: I used the data to calculate the time it takes to perform the response selection stage of the primary visual task. It was then that I discovered how satisfying it is to infer underlying cognitive mechanisms from a set of behavioral data. The course also taught me how much I enjoy applying interdisciplinary thinking to scientific discovery. For example, I used knowledge from linguistics to formulate a theory for perceiving brief visual phoneme displays, and knowledge from computer science to develop a model for motor coordination. By the end of this course, I had developed a critical thought process that, together with my scientific curiosity, has prepared me for success in every research endeavor I have met since.

I enjoyed the course so much that I subsequently enrolled in three more similar research courses on cognitive development, visual perception, and auditory perception, in each of which I completed an individual or group empirical research project. I also performed an independent study investigating time perception using a dual-task method. Through these projects, as well as my senior thesis on language, my involvement in research deepened. I discovered I have an insatiable need to investigate problems empirically, and that my curiosity regarding the outcome motivates me to analyze data as soon as I have collected them.

While I enjoyed each of these projects in different areas of cognitive psychology, I discovered I am most interested in questions concerning the limits of human information processing. In particular, I am interested in blah, stuff, and other stuff. In graduate school, I would also like to explore response selection and cognitive control. By studying the limits of human information processing and taking note of when and how failures occur, we can learn how certain cognitive mechanisms function on a regular basis. I believe behavioral methods still provide us with the best way of examining cognitive processes, but I am also eager to use converging methods in my research, and I would like to further explore fMRI or learn TMS while in graduate school.

My post-graduate experience in Ingrid Olson's lab at the Center for Cognitive Neuroscience has confirmed my desire to study the limits of human performance, and has reinforced to me that Great University would be an excellent place for me to do graduate work. My first paper with Dr. Olson, which is currently under review at *Journal of Experimental Psychology: Human Perception and Performance*, studies in a series of four experiments the effect of attention and implicit long term memory on short term memory for spatial displays. This project particularly interested me, because we were able to draw powerful conclusions concerning the cognitive processes of learning of visual displays by performing several experiments, systematically manipulating single variables. Currently, we are completing a project investigating individual differences in

**Comentado [ksm1]:** Include a header with your name, the school's name, the field, and the sub-field you are applying to. This will make it less likely your application will be lost.

**Comentado [ksm2]:** Here is the first mention of my research interests.

**Comentado [ksm3]:** This anecdote draws the reader in, while it SHOWS my intellectual development (instead of telling.)

Comentado [ksm4]: Again, examples are useful.

Comentado [ksm5]: Leads in to the next paragraph

Comentado [ksm6]: This is a list, which is usually bad (because it's on my transcript, too), but here I say I did empirical research in class, which wouldn't be clear from the transcript. If I had more room I would expand upon these experiences, but instead I opt to provide detail for more recent research experience (see below.)

**Comentado [ksm7]:** This language may be a little strong and "passion"-oriented, but in moderation it's ok.

Comentado [ksm8]: Here I say my exact interests.

**Comentado [ksm9]:** I didn't really say this, but this sentence I changed around depending on where I was applying and what I'd be likely to study at the particular school.

**Comentado [ksm10]:** Here I attempt to say why the research is interesting and important.

**Comentado [ksm11]:** It is important to mention methods in scientific fields.

Comentado [ksm12]: State your research experiences, demonstrate that you know something about the projects and weren't just a lackey, and show why these experiences prepare you for Great University.

**Comentado [ksm13]:** It is ok to mention an accomplishment (like a scientific paper) if you brought it up for another purpose, in this case to describe the specific research project.

## Katherine Sledge Statement of Purpose – Great University Psychology: Cognition Page 2 of 2

various attention and working memory tasks. We have also worked on a variety of perceptual and motor learning tasks, including a perfusion fMRI study on motor sequence learning that I will be presenting at the Cognitive Neuroscience Society meeting in April.

After I complete my PhD, my eventual goal is to become a professor at a university where I can perform research and teach. While research has been the main focus of my undergraduate and post-graduate career, my teaching and leadership experience have convinced me that I am suited to a career as an educator. As a teaching intern at Choate Rosemary Hall, I loved it when the middle school students grasped the nuances of the scientific method when I advised them on their independent empirical research projects. My interest in teaching extends beyond the classroom, as I worked on pedagogy at Penn as Treasurer of the Student Committee on Undergraduate Education (SCUE) and served as the Co-founder and Co-president of the Cognitive Science Undergraduate Advisory Board (UAB). In SCUE I worked on integrating research into undergraduate education. With the Cognitive Science UAB I helped redevelop requirements of the major, including an honors option culminating in a thesis involving empirical research. I was one of the first students to participate in this research option.

Great University is an ideal place for me to continue my research training. It is equipped with the technology, expertise, and resources in the methods I hope to explore. My interests are an excellent fit for So-and-So's lab, but I would also be interested in working with Smart Woman, Interesting Man, or Great Guy. Over e-mail or in person, each of these faculty members informed me that Great University fosters an intimate, friendly, and collaborative environment within its Psychology program. As someone who wishes to develop skills in several methods and who enjoys interdisciplinary study and group work, it is of utmost importance that I find myself in such an environment. Most importantly, Great University places an emphasis on student research, a top priority for me. For these reasons, I am eager about the possibility of continuing my research and education at Great University.

Comentado [ksm14]: You may think it's obvious, but include these goals. If there is room, you can mention teaching/tutoring experience you may have. However, admissions committees won't care as much about teaching experience because research is the focus of your program.

Comentado [ksm15]: This entire part of the paragraph I left out for essays with a shorter word length, or for essays that didn't call for it (some did ask to include it.)

**Comentado [ksm16]:** This is the paragraph you can tweak for individual schools.

Comentado [ksm17]: This is important and is something you should look for in a school. Schools are proud of it when they have it, so mention that you're aware of it if it's true!

Comentado [ksm18]: This should be a top priority for you, and make sure that the committee knows that it is. Many students apply to graduate school thinking it's 5 more years of college. Show the committee you realize that graduate school is about research and scholarship, not just taking classes.