

# Champions of Psychology: Nora Newcombe

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*This is an ongoing series in which highly regarded professors share advice on the successes and challenges facing graduate students.*

Nora S. Newcombe is a Professor of cognitive psychology and James H. Glackin Fellow at Temple University. A Fellow of the Association for Psychological Science, she received her PhD from Harvard University. Her research focuses on spatial development and the development of episodic memory. Newcombe is the author of over 150 chapters, articles, and books, including *Making Space* (with Janellen Huttenlocher). Newcombe's awards include APA's George A. Miller Award, G. Stanley Hall Award, and Award for Distinguished Service to Psychological Science. She has served as Editor of the *Journal of Experimental Psychology: General*, Associate Editor of *Psychological Bulletin*, and Action Editor of *Cognitive Psychology*. She is currently Principal Investigator of the National Science Foundation-funded Spatial Intelligence and Learning Center.

**APSSC:** What led you to choose psychology as your career path?

**Newcombe:** Like most psychology majors, I originally wanted to become a clinical psychologist in order to help people. However, because I attended Antioch College, I had the opportunity to hold several co-op jobs in the field, and began to see that, at least at the time, we lacked a scientific basis for understanding psychopathology and for choosing treatments. Coming from a scientific family, I was troubled by that situation. At the same time, I was increasingly attracted to the study of cognitive development as a potential empirical solution to the fascinating philosophical questions surrounding the origins and epistemological status of human knowledge.

**APSSC:** What were the most rewarding aspects of graduate school for you?

**Newcombe:** Although when I arrived at Harvard in 1972 they had just abolished the Social Relations

Department, the spirit of interdisciplinary inquiry lingered. So primate studies, cross-cultural studies, and sociology were all seen as relevant to problems of development. I was fortunate to arrive around the same time as some other wonderfully smart and wide-ranging people, including Nathan Fox, Barbara Rogoff, Helen Tager-Flusberg and many others. My advisor was Jerry Kagan, who gave me an amazing amount of freedom to develop my own interests.

**APSSC:** How did you go about developing your current research interests?

**Newcombe:** To say “go about” implies a plan — and I am not sure I had one. I remember being fascinated by papers on spatial cognition and being happy about going to Penn State for my first job in part because I heard that there were people there, such as Roger Downs, doing cognitive geography. But I have also been interested in memory and in sex differences and in a few other topics on a life-long basis, and it is hard to say why, or to predict how my work on these issues will wax or wane, or inter-mix and mingle.

**APSSC:** What common mistakes do you see graduate students and young professionals making? What advice would you give to graduate students seeking careers in academia?

**Newcombe:** I think people must be guided by their passions. One of the common mistakes people make is to pick a problem because it is currently well-funded or in vogue or because their advisor works on it. You can’t ignore funding, and to work on a problem your advisor knows nothing at all about is a mistake — but *don’t settle for the tame and tractable*, don’t do an experiment just because someone published a paper to which you could add a control or for which you could use a different dependent variable. The other important ingredient is *persistence*. The smartest and most passionate of us will not succeed if you are not willing to work hard and do so even when faced with criticism.

**APSSC:** Writing and publishing are often anxiety-provoking events for graduate students. You are a prolific writer, editor, and reviewer. What do you wish students understood about both the writing and publication processes?

**Newcombe:** I believe that students need to understand that, most of the time although regrettably not always, editors and reviewers are genuinely trying to locate and polish the best science they can find. Accomplished professionals still need to revise, sometimes for several rounds. Volunteering to review is also important — ask your advisor and other senior people to recommend you, once you have a PhD.

**APSSC:** You also have a long history of grant awards and participating in the grant process, another area of concern for students. What advice would you give students about applying for and managing grants?

**Newcombe:** What I have said about passion and persistence applies here too. People talk about grantsmanship but there is no substitute for a good idea. Where grantsmanship comes in is to find out where to send that idea and how to present it. Don’t be afraid to ask for help.

**APSSC:** Much of your work has contained some measurement of sex or gender differences, yet you have also shown support for a growing movement in psychological research to move away from binary measurements of sex and return to a more individualistic approach. My question is two fold: First, how have your professional views of this area changed since you began your career, and second, what should students consider before incorporating sex and gender measurements into their research?

**Newcombe:** A focus on sex differences sometimes seems to downgrade a focus on individual differences, and vice versa. I see both topics as part of the same general question of the sources of

variability in human performance. Understanding variability needs to be pursued in a theory-guided way. I strongly object to reflexive analysis of sex (or any other variable such as ethnicity) in any and every investigation — we get too many false positives, and have no way of explaining even the true positives.

**APSSC:** While we are on the topic of sex and gender, many of today's students believe that women in psychological science and academia either no longer face or are minimally exposed to sex based discrimination; I wonder if you agree with this view and, if not, what advice you would give future female psychologists about facing and changing the barriers that still exist?

**Newcombe:** Barriers are fewer and lower all the time. That's the good news, but I still think women are under-represented at the highest levels of academia for a variety of reasons. One of the most potent occurs early in their careers. I see many young women dropping out of academia as they face work-family decisions. That may feel like a choice rather than like discrimination, but the way our society frames the problem and supports (or doesn't support) women and men in balancing work and family is actually profoundly sexist.

**APSSC:** You gave a paper presentation in southern California comparing clinical psychologists' training and that of teachers' education. One point you made during this presentation was that teacher training programs should rethink "student teaching" practicums due to their lack of supervision. How do your views on this topic translate to the teaching experiences and faculty preparation that today's graduate students receive? (Editor's Note: See Newcombe, N.S., 2002, Biology is to Medicine as Psychology is to Education: True or False? *New Directions for Teaching and Learning*, No. 89)

**Newcombe:** Psychology has much to offer to an understanding of teaching and learning — it's very ironic that we have no structured ways to apply our knowledge to our own practice.

**APSSC:** Psychology has historically had a problem with factions forming due to the complex nature of its influences and subject matter. In your 2006 candidate statement for APA president you stated, "knowledge is simultaneously becoming more specialized and more interdisciplinary. Therefore, many scientists' allegiance is no longer to the traditional discipline of psychology." If the latter is true, then it would seem to be a danger to the very existence of psychology as a discipline. What do you believe students, professionals, and national organizations can do to address this issue?

**Newcombe:** Psychology as a discipline may or may not be the best way to organize teaching and research — if problems are better addressed with different disciplinary divisions (e.g., neuroscience, cognitive science, social relations) that will end up winning in the marketplace of ideas. Psychology has to re-explain and re-justify itself — what do social psychologists have in common with cognitive psychologists and are those ties closer than ties with sociologists? I am agnostic about these questions, but I would like to see people struggle more with them.

**APSSC:** What do you see as the future of cognitive psychology?

**Newcombe:** I hope that it will be increasingly integrated with allied disciplines to form a neuroscience and a learning science that will both illuminate fundamental questions and help us to improve the human condition. ?