Rising Stars

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In case there was any doubt, the future of psychological science is in good hands. In its continuing series, the *Observer* presents more Rising Stars, exemplars of today's young psychological scientists. Although they may not be advanced in years, they are already making great advancements in science.

Modupe Akinola Steve Balsis Lindsay Malloy Matthias R. Mehl Amie Grills-Taquechel Véronique Izard Kimberly Noble Chris Sibley Eddie Tong Lisa Zadro



Modupe Akinola

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www4.gsb.columbia.edu/cbs-directory/detail/731784/Modupe%20Akinola

What does your research focus on?

I study how stress affects performance. My research focuses on understanding how organizational environments, characterized by deadlines and multi-tasking, can engender stress, and how this stress can have spill-over effects on performance. I use a multi-method approach that includes behavioral observation, implicit and reaction time measures, and physiological responses (specifically hormonal and cardiovascular responses) to examine how cognitive outcomes are affected by stress.

What drew you to this line of research? Why is it exciting to you?

Prior to pursuing a PhD, I had a successful career in business and was fascinated by how my colleagues and clients reacted to the stressors of the organizational environment. Some people would thrive while others would buckle under the pressure, which affected their performance. It excites me to conduct research that will shed light on how individuals can learn from and adapt to stress in ways that may improve their performance outcomes, as well as their long term health. This research could also be valuable in helping organizations devise interventions to help individuals better manage the stressors and tensions that can be present in organizational environments.

Who were/are your mentors or psychological influences?

David Thomas at Harvard Business School exposed me to academic research when I was an undergraduate and I am truly indebted to him for investing in me and showing me that this path existed. Deborah Frable, Richard Hackman, and Jennifer Richeson introduced me to social psychology when I was an undergraduate at Harvard, and through their courses and mentorship I realized the power of experimental research. More recently, I was blessed to have a fantastic graduate school advisor, Wendy Berry Mendes who is now at UCSF and taught me the value of examining the mind-body relationship in an effort to better understand cognitive performance in organizations. Her energy and passion for research were infectious. I was also fortunate to have Max Bazerman at Harvard Business School as a graduate school advisor whose support and guidance have been invaluable.

To what do you attribute your success in the science?

I have had phenomenal mentors who have taught me everything I know, both in the business world and in academia. They have shown me the importance of doing work that has meaning and have taught me how to do this work with excellence. I also had phenomenal graduate school colleagues, particularly Dolly Chugh, Colin Fisher, Kurt Gray, Karim Kassam, Katrina Koslov, Katy Milkman, Tina Opie, and Elizabeth Paige-Gould who pushed me to be my best. They were so on top of their game that I was forced me to be on top of mine!

What's your future research agenda?

I plan to continue examining the relationship between stress and performance. My future research will explore how the stress generated by factors such as asymmetrical relationships, power dynamics, cross-race relationships, and diversity in organizations can affect various performance variables. My research to date has demonstrated that not all stress is bad and that there is a delicate balance that needs to be managed in order for adaptive and maladaptive stress responses to yield positive outcomes. Managing

this tension will require further investigation of the mechanisms underlying the effects of adaptive and maladaptive stress responses on cognitive performance. I also hope to further demonstrate the benefits of applying a multi-method approach to social psychological and organizational research by continuing to incorporate underutilized physiological measures into my research.

Any advice for even younger psychological scientists? What would you tell someone just now entering graduate school or getting their PhD?

Social support is such a critical part of graduate school. Surround yourself with people within and outside of your PhD program who will be your biggest cheerleaders. Try to find mentors very early on who are committed to working with you and teaching you all that they know. And remember, it is a marathon, not a sprint.

What publication are you most proud of or feel has been most important to your career?

Akinola, M & Mendes, W.B. (2008). The dark side of creativity: Biological vulnerability and negative emotions lead to greater artistic creativity. *Personality and Social Psychology Bulletin*, *34* (*12*), 1677-1686.

I have really enjoyed the conversations that this publication generates. From parents drawing upon the experiences of their artistic children, to entrepreneurs discussing how they came up with their business concept, to other academics discussing how they channel the dark side of the review process to come up with innovative research designs, I get to learn so much about people's experiences with creativity!



Steve Balsis

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What does your research focus on?

My research focuses on improving the assessment of clinical disorders (personality disorders, Alzheimer's disease, depression, anxiety, etc.) in older adults. This topic is timely because many of these disorders are not measured well in older adults. Further, these disorders play important roles in health outcomes, affecting not only older adults but also their families and the health care system. I focus much of my research on improving assessment instruments more generally because many of the current instruments and techniques have fundamental problems that are relevant to adults of all ages (not just older adults). A significant focus of this research is on the measurement of dementia. The goal here is to hasten the early detection of Alzheimer's disease, which is a critical step in managing the disease. My most recent studies are aimed at improving the detection of change in clinical trials of Alzheimer's disease medications.

What drew you to this line of research? Why is it exciting to you?

I was fortunate to attend an undergraduate institution that offered a minor in gerontology. It was during this time that I became interested in working with older adults. Just taking a couple of classes made me realize how much there was to be gained theoretically and clinically by studying this demographic.

Who were/are your mentors or psychological influences?

I owe large debts of gratitude to many people in this field. Tom Oltmanns, Martha Storandt, and Brian Carpenter took a chance on me as a graduate student at Washington University in St. Louis. Nothing would have been possible without their support and guidance. Les Morey and the psychology faculty at Texas A&M decided to hire me, even though I hadn't yet completed graduate school. If Les hadn't supported my hire, I never would have had a platform to pursue my ideas. Tom Widiger, University of Kentucky, has been instrumental also. He has served as a reviewer and/or action editor on several key manuscripts. Tom saw value in my research and took time and energy to help me refine my thinking throughout the review process. Dan Segal, University of Colorado, Colorado Springs, a pioneer of research on personality disorders in older adults, has been generous with his time and ideas. Over the last several years, he has become a close colleague and friend, and has made this work fun. Rachelle Doody, Baylor College of Medicine, has shepherded my ideas in dementia medical research. Her efforts have been enormously helpful. Finally, Luke Cooper and Tyler Miller, my graduate students, have been great sounding boards and critical thinkers; they also have helped move these ideas forward.

To what do you attribute your success in the science?

My success has largely been defined by the people listed above and the opportunities they have created for me.

What's your future research agenda?

Almost all of my future work will focus on the assessment of Alzheimer's disease. Without giving too much away, I'll simply share that I think it'll be the most important work I do.

Any advice for even younger psychological scientists? What would you tell someone just now entering graduate school or getting their PhD?

Show up! I think that it was Woody Allen who said 90 percent of life is showing up. The spirit behind his statement is true. The more you show up and work hard, the more you are likely to be rewarded. That may seem obvious, but people sometimes don't recognize the importance of showing up. I have seen people of enormous ability ruin their careers because they were unwilling or unable to bring their "A-

game" to work each and every day. At the same time, I've seen people of slightly lesser ability work hard and have opportunities opened up for them because they were sitting at their desk when their boss needed a hand or had an opportunity. This, of course, is not a new idea. I am cribbing a bit from several people here (see Matthews, 2002), but I think it's really good advice.

What publication are you most proud of or feel has been most important to your career?

Oltmanns, T. F., & Balsis, S. (2011). Personality disorders in later life: Questions about the measurement, course, and impact of disorders. *Annual Review of Clinical Psychology*, 7, 321-349.

Tom Oltmanns and I wrote a paper that will be published soon in *Annual Review of Clinical Psychology*. This paper seeks to transform the approach of studying personality disorders in older adults from a niche business to one that is fundamental to our pursuit of understanding personality disorders. In a way, this article opens up opportunities to see the study of other clinical disorders in older adults through a similar lens — fundamental to our most basic understandings of these constructs.



Lindsay Malloy

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What does your research focus on?

My research focuses on such questions as, what do children say about the past and why? What factors influence when(or if) and how children disclose abuse? What's the best way to question children about their eyewitness memories? How can knowledge of children's cognitive and social development facilitate their participation in the legal system — a system designed for adults but that sees millions of children each year?

What drew you to this line of research? Why is it exciting to you?

When I was 16, I started what I hoped would be a long radio career by becoming an "on-air personality" at a popular rock station in Michigan. It was exciting and, dare I say, glamorous (what teenager wouldn't want "interview favorite bands" in her job description?). After a few years, I realized that radio would not be an intellectually stimulating or academically challenging career path (no offense,

Courtney Love...I did genuinely enjoy our interview). This concerned me because my love of academia was present from an early age of wearing "I Heart School" barrettes and sneaking flashlights into my room to study late into the night. Eventually, I switched majors after taking an undergraduate seminar with Debra Poole, a psychology professor who occasionally mentioned her exciting research on children's eyewitness testimony. I didn't have a clue about graduate school until she spent countless hours advising me on my honors thesis, first conference presentation, and PhD program applications. Deb was the first of several academic mentors to change my education, career, and life.

Now I get to ask fascinating theoretical questions about developmental psychology, combine these questions with my interest in law, and potentially benefit the lives of vulnerable children.

Who were/are your mentors or psychological influences?

Jodi Quas was a truly exceptional graduate advisor. Her tireless efforts, infectious energy, remarkable productivity, and steadfast commitment to my academic and professional development were incredible. I was extremely privileged to have had the opportunity to do my postdoctoral work at the University of Cambridge (during the 800-year anniversary celebration year!) with Michael Lamb, who is not only a brilliant thinker and scholar but an amazingly kind and generous human being. How can you not be inspired by someone who had finished his PhD by age 21 and has continued such an extraordinarily prolific career? I owe a tremendous amount to Beth Cauffman and Tom Lyon. They allowed me to "crash" their labs, introduced me to new lines of research and perspectives, and were as invested and encouraging as if I was "their own." My colleagues at my new home of Florida International University have been enormously helpful and supportive, and I am absolutely thrilled to have joined this department!

To what do you attribute your success in the science?

Any success can be chalked up to outstanding mentors, excellent collaborators, enthusiastic and dedicated students, and the families, organizations, and funding agencies involved in our collaborative research. As a first-generation college student, I have a very strong appreciation for calling what I do my "job" and never take for granted the freedom and opportunities that come with it. From my parents, I learned that determination, sacrifice, hard work in the face of adversity, and perhaps most important, an almost uncompromising sense of humor, will lead to success. And, if not, at least you will have some good laughs along the way.

What's your future research agenda?

I am launching a project examining the event memory, narratives, and suggestibility of children with ADHD, a group of great interest for theoretical and practical reasons (e.g., increased risk of involvement in the legal system). Fortunately, one of the top ADHD researchers (William Pelham) is now at FIU and is contributing his expertise to this effort.

Any advice for even younger psychological scientist? What would you tell someone just now entering graduate school or getting their PhD?

When I received my first manuscript decision letter, I was devastated...and then confused that my more-

experienced co-authors were so excited! Realize early on that rejection (or what feels like rejection before you understand the "revise and resubmit" lingo) is part of the process and that critical feedback will improve your science. So, be fiercely persistent and in it for the long haul on every project. In graduate school, you will meet mentors *and* your future peers in the field (potentially, lifelong friends). Start to build supportive networks and share, share, share with colleagues at every level. I have been told that no one does this alone.

What publication are you most proud of or feel has been most important to your career?

Malloy, L.C., Lyon, T.D., Quas, J.A. (2007). Filial dependency and recantation of child sexual abuse. *Journal of the American Academy of Child & Adolescent Psychiatry*, 46, 162-170.

This paper asks, why would a child disclose sexual abuse and later "take back" those allegations? Recently, I stumbled on our paper investigating this controversial topic cited in an amicus brief submitted to the US Supreme Court — that was a very exciting moment.



Matthias R. Mehl

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What does your research focus on?

I am interested in the psychological implications of people's everyday social lives. What do people do in their daily lives? And why do they do the things they do? In most of my research, I use a naturalistic observation sampling method, the Electronically Activated Recorder (or EAR), to track people's moment-to-moment social behavior in the real world. The EAR is a digital audio recorder that periodically and unobtrusively records snippets of ambient sounds from participants' immediate environments as they go about their days. That way, it produces an acoustic log of their social behaviors and interactions as they naturally unfold. My current research focuses on (1) individual differences in everyday social life and the role they play for understanding personality, culture, and gender and (2) how people use their everyday social lives for coping with upheavals (e.g., national disasters, personal illnesses).

What drew you to this line of research? Why is it exciting to you?

What initially drew me to this research (and to the development of the EAR method) was my graduate school advisor's well-known skepticism towards self-report. It is so exciting to me because of the incredibly rich data that we obtain when we do an EAR study. The ambient sound bites are so full of fascinating, first-hand, real-world psychology that I often wish I would find more time to listen to them. Unfortunately, a lot of the vividness is lost in conversion to numbers. But we're trying hard to keep the rich flavor alive in our studies.

Who were/are your mentors or psychological influences?

I feel fortunate to have mentors on both sides of the Atlantic. The person who introduced me to research and who first fostered my academic interests is Joachim Brunstein. He also nominated me for the fellowship that ultimately allowed me to study abroad for a year. During this pre-graduate-school year at the University of Texas at Austin it was Jamie Pennebaker who metaphorically grabbed me with his excitement for research and who — advertently or inadvertently — ensured that I would not return to Germany to continue my training there as planned. Finally, in graduate school, I had the privilege to be mentored by two great people — Jamie Pennebaker and Sam Gosling — who, at least seemingly, couldn't have been more different in their mentoring styles and who complemented each other in a way that provided me with exactly what I needed. Despite their different approaches, both contributed in similar ways to making graduate school a fun and highly gratifying experience for me. I am deeply grateful to them.

To what do you attribute your success in the science?

- 1. Great mentors who believed in me (see Question 3)
- 2. Enjoyment of the research process (as a result of 1)

3. Knowing where I belong; having worked in "the real world," I happily and humbly returned to academia

- 4. Effort and persistence
- 5. Luck, luck, luck

What's your future research agenda?

I want to do interesting research at the intersection of personality, social environments, and health. And I would like to strengthen naturalistic observation as a viable research approach in psychology.

Any advice for even younger psychological scientists? What would you tell someone just now entering graduate school or getting their PhD?

I well remember the advice a professor gave me when I was still an undergraduate student. I think it is as valid today as it was back then, and I am sure it applies well beyond Germany. She said "If you want to be a professor, do what you want to do, go full steam, and reach for the stars; yet, at the same time, don't be naive — nothing in life is fully under your control, so make sure you have a viable back-up

option."

What publication you are most proud of or feel has been most important to your career?

That's a tough one. I guess, I am most proud of our Brevia in Science.

Mehl, M. R., Vazire, S., Ramírez-Esparza, N., Slatcher, R. B., & Pennebaker, J. W. (2007). Are women really more talkative than men? *Science*, *317*, 82.

Clearly, I am not a gender researcher and I am not primarily proud of it because we found that, despite the very strong stereotype, women and men seem to talk just about equally much. Rather, I am proud of it because (a) its finding rests, in essence, on a simple comparison of means and it would have been just about as compelling had we not done any significance testing — good science doesn't always require high-end statistics, and (b) we found that, whereas the least talkative person in our sample used an estimated 695 words, the most talkative one managed to utter more than 47,000 words per day (incidentally, both were male) — what a range and what graspable evidence of the magnitude of individual differences.



Amie Grills-Taquechel

University of Houston

What does your research focus on?

My primary research program focuses on examining developmental pathways to childhood anxiety disorders, as well as developing and evaluating prevention/intervention programs for childhood anxiety-related problems. My work in this area has examined the roles of peer (e.g., bullying and friendship quality), familial (e.g., parental anxiety and stress), and academic variables (e.g., achievement, attention) in the development of pediatric anxiety. I also have a secondary area of research, which pertains to risk and resiliency factors involved in the development of anxiety and related difficulties following traumatic events. I have completed several studies in this area including those with survivors of natural disasters, sexual assault, and mass shootings.

Who were/are your mentors or psychological influences?

I cannot speak highly enough of the two individuals who have been mentors to me since my early

training. Patricia DiBartolo was my undergraduate mentor at Smith College and she was largely responsible for my decision to pursue a PhD in Clinical Child Psychology. I worked with her on several studies at Smith, which fueled my drive to pursue a research career. She also helped me make the decision to attend graduate school at Virginia Tech, where I could work with Thomas Ollendick. Tom is truly the best mentor a person can ask for and I continue to be impressed by his intellectual merit, generosity, and kindness. My research and clinical abilities flourished under his mentorship. I am thrilled that I have been able to continue collaborations with both Patty and Tom over the years, and they are still among the first individuals from whom I seek advice and guidance from. I am also quite fortunate to have a wonderful team of mentors that currently support my NICHD-Mentored Clinical Scientist Research Development Award, including Jack Fletcher, David Francis, Sharon Vaughn, and Wendy Silverman. In terms of influences, my list is extensive and includes many behavioral and cognitive foremothers and fathers (e.g., Mary Cover Jones, Joseph Wolpe, John Watson, etc.), along with numerous present day researchers (e.g., Shiela Eyberg, Alan Kazdin, Philip Kendall, Ron Rapee, and John Weisz).

What drew you to this line of research? Why is it exciting to you?

I was drawn to the study of childhood anxiety in college after conducting coursework and research in this area with Patricia DiBartolo. I had always intended to work with children, but observing the work of my mentors quickly solidified my path. I find this line of research exciting on many levels, first and foremost because of the potential to improve the lives of children. Roughly one out of ten children experience significant anxiety, and while there has been remarkable progress in this field of study, there is still much work to be done. For me, the potential to identify areas that may boost the efficacy of empirically-supported treatments for child anxiety is exciting. I also enjoy collaborating with colleagues who have diverse areas of expertise that can be fused with my own interests to potentially identify additional pathways for anxiety, and/or methods for intervention and prevention. Discussions that I have with colleagues in this manner, along with attendance at conferences in my field always keep me excited about future projects as well.

To what do you attribute your success in the science?

I would not describe myself in this way, but I will identify a few main factors that I think contribute to the successes I have had: 1) a true passion for the areas that I study and dedication to my work that developed from a strong work ethic that was modeled by my family; 2) brilliant, generous, and thoughtful mentors who have been well-matched for my professional and personal needs as a mentee; and 3) the colleagues that I maintain active collaboration with and who provide me with support in times of frustration and mind-blocks.

What's your future research agenda?

In the long-term, I intend to continue my research on the study of psychosocial factors and developmental pathways associated with childhood anxiety and related difficulties, including familial and peer influences as well as comorbid conditions such as learning disabilities. Moreover, I plan to continue my research on the evaluation and dissemination of appropriate prevention/intervention programs for young anxious children and their families. I will also be continuing pursuit of my secondary area of research interest in the near future by collaborating with Heather Littleton on a

randomized clinical trial of a new, internet-based, cognitive-behavioral intervention for rape victims.

Any advice for even younger psychologists? What would you tell someone just now entering graduate school or getting their PhD?

For someone just entering grad school, I would say the most important thing is to find a mentor that fits your needs as a student but who can also treat you like a junior colleague. Also, make sure you are working with someone whose research parallels your own interests and that you are studying something you feel passionate about, because research is often a trying process. I would also strongly suggest you seek out peers/colleagues who you admire and begin active collaborations (to this day, I regularly collaborate with peers from my graduate program). Get lots of writing done–dissertation, publications, etc.—and schedule time for it! You will get exposed to lots of brilliant people in graduate school, so take advantage of all you can learn. Finally, budget time for your personal life—we all know what happens to those who spend all their time at work and leave no time for play.

For someone just getting their PhD, my latter two recommendations are critical, and in addition to these, I would recommend two things. First, try to locate a mentor, preferably someone in close proximity, who you can consult with as you adjust to your role as a new professional in the field. There are so many different paths for clinical psychologists and all of them come with challenges (e.g., getting licensed, navigating academia, mentoring students), so I think it is really important to find someone who can help you through the process. I have found it so useful to have mentors at my university who could help me with everything from basics like getting the best parking on campus to reviewing my grants before submission. Similarly, I would recommend finding other supportive links and resources in your field outside of your place of employment—for me, this has meant being involved with groups like APS and organizations like the Association for Behavioral and Cognitive Therapies.

What publication are you most proud of or feel has been most important to your career?

I really struggled with this question and the only way I could select *one* publication, was to go with the one that represented my first major, independent research project. This publication represents a portion of my college honors thesis, which was a total labor of love and took us many years to finally put together as a manuscript. Thinking about it brings a smile to my face because it reminds me of my first experience conducting research with children, applying the behavioral assessments I had learned about in courses, and running my first (and second and third...) set of analyses (including calculating Kappas by hand). The formal presentation to the faculty that followed was also my first experience feeling like a junior colleague and solidified my desire to pursue a career in academia.

DiBartolo, P. M., & Grills, A. E. (2006). Multiple informant reliability and the prediction of socially anxious behavior in children. *Journal of Anxiety Disorders, 20,* 630-645.



Véronique Izard

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What does your research focus on?

In my research, I am trying to understand the foundations of mathematical thinking. How much of mathematical thinking is grounded in universal intuitions, common to all human beings? What part of mathematics consists of cultural inventions, transmitted through generations?

What drew you to this line of research? Why is it exciting to you?

I was originally trained as an engineer, and being fascinated by the beauty of mathematics, I majored in pure maths. At the end of college, I was going to enroll for a theoretical math PhD, until, out of pure luck, I stumbled upon a leaflet on a cognitive science graduate program. I fell in love with this science instantly. It offered a method to address empirically the philosophical questions that intrigued me about math, such as: why do we do math? How is it that our mind is able to construct something so perfect and complex, while being so fallible? Why do we feel that math is about truth?

Who were/are your mentors or psychological influences?

I have had the privilege to work with two geniuses of cognitive psychology: Stanislas Dehaene and Elizabeth Spelke. I came to Stan knowing nothing of cognitive science, and I came to Liz knowing nothing of developmental psychology. They taught me everything. In a more informal way, I was also very much inspired by the people I worked with in graduate school, especially Philippe Pinel, who made me realize that a paper of science must also be a piece of art, and Christophe Pallier, who is a great example of humility and rightness.

To what do you attribute your success in the science?

You ask about my "success" but I just feel so ignorant still. If you mean how have I managed to publish the articles I did, I guess I was lucky to work at the right moment with the right people. Perhaps the fact that I haven't had the same training as my colleagues has also helped somewhat, as I bring a different perspective and different technical skills.

What's your future research agenda?

I am very excited about a new project on geometry. I am trying to take the questions that have brought us forward about numbers, and apply them to the domain of geometry: do we have abstract representations of geometric properties? Are those representations present early in life? Do they enter into geometric computations? How do our geometric representations change over a life-time, and how do they vary across cultures?

Any advice for even younger psychological scientists? What would you tell someone just now entering graduate school or getting their PhD?

I would give two pieces of advice. The first, do only what you really believe in. Do not do something just because your supervisor asks you to do it because, in the end, it is you who has to stand for your work, and you can only do so if you fully believe in every decision you take down the road. Second, remember to always listen to everybody. When people disagree with you, they have something to tell you about something you have overlooked, or something you explained poorly.

What publication are you most proud of or feel has been most important to your career?

Last summer I wrote a chapter for the upcoming Attention & Performance volume, which presents a theoretical rationale for the research I am doing in geometry. Sometimes finding out how to ask a question is already half of the work, and this is what this paper was doing for me. In fact, after the paper was published, I (finally!) started reading Randy Gallistel's 1990 book and found that he had made similar theorizing long before me, only with further depth — but still, I was quite proud to have converged with such a mind!

Izard, V., Pica, P., Dehaene, S., Hinchey, D., & Spelke, E.S. (in press). Geometry as a universal mental construction. *Attention and Performance*.



Kimberly Noble

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What does your research focus on?

I study socioeconomic disparities in children's neurocognitive development. Specifically, we've known for decades that there are broad differences in children's cognitive development and academic achievement as a function of socioeconomic status, or SES. But while classic measures of academic achievement surely reflect the function of the brain, they are relatively uninformative concerning perturbations in specific cognitive and neural processes. A cognitive neuroscience approach, in contrast, reflects the fact that different neural structures and circuits support the development of distinct cognitive skills, improving our efforts to provide targeted educational interventions.

What drew you to this line of research? Why is it exciting to you?

I have the good fortune of having my research unite several of my academic interests — child development, cognitive neuroscience, and public health. Just when I was starting grad school, my advisor, Martha Farah at the University of Pennsylvania, who had spent the last several decades becoming a renowned investigator of visual cognition, decided she was interested in switching gears and studying "real world examples of cognitive neuroscience." The opportunity to join her in that pursuit proved to be indescribably fulfilling. I get to study exactly what I'm interested in and, I hope, provide the basis for translational efforts that have real-world application. In addition to my research, two mornings a week I currently practice as a primary care pediatrician, treating underserved children and families. So the idea of ultimately putting this work to practical application is very important to me.

Who were/are your mentors or psychological influences?

I have so many! Most notably, my graduate school mentors, Martha Farah at the University of Pennsylvania and Bruce McCandliss, formerly at Cornell University and now at Vanderbilt University. Martha taught me to take academic risks, and to be willing and ready to defend those decisions. Bruce taught me that it is possible to balance the investigation of fascinating scientific questions with the study of applications that have direct relevance for educational outcomes. Here at Columbia University, Jeanne Brooks-Gunn's extensive body of work on SES disparities and child development has really shaped my thinking on how SES operates, and what types of interventions are likely to be most effective. Personally, she has also been a consistent source of encouragement and support and, along with BJ Casey at Cornell University, has served as a role model of how to be a woman in science. Frank Furstenberg at the University of Pennsylvania (who also served on my thesis committee), has guided my thoughts in terms of the construct and components of SES, as well as how best to measure it. In college, Murray Grossman and Annie Steinberg of the University of Pennsylvania showed me how it is possible to balance a research career with clinical practice. More recently, Bill Fifer here at Columbia University has been just the most outstanding mentor as I've transitioned into a faculty position, providing access to an incredible birth cohort for collecting new data, and routinely serving as a sounding board for general issues concerning career development. Plus, the way he makes everyone from students to senior faculty feel immediately comfortable is an inspiration. Most recently, I've begun collaborations with Chuck Nelson at Harvard University and Nathan Fox at the University of Maryland. Their pioneering work on the effects of early adversity on child development has been a tremendous influence on me, so I feel extremely fortunate to have the opportunity to work with them directly.

To what do you attribute your success in the science?

Without a doubt, the number one factor has been outstanding mentorship. Everybody at this stage is

smart and works hard. But without mentors to shepherd us through the process, alert us to opportunities, and serve as role models, the road would be quite a bit bumpier. I also can't deny the role that luck and good timing have played in all this — particularly in getting involved in an exciting new area of research just as it was getting off the ground. Having the academic flexibility to pursue different collaborations has also been a huge help. Part-way through my graduate training at the University of Pennsylvania, the opportunity arose for me to collaborate with Bruce McCandliss, which involved being based up at the Sackler Institute for Developmental Psychobiology in New York City. I am very grateful for the willingness of all involved — Martha, Bruce, my graduate program, and the director of the Sackler Institute, BJ Casey — to accommodate this unorthodox arrangement.

What's your future research agenda?

Our next questions focus on timing and mechanisms. First, what is the time-course of these SES effects on neurocognitive development? For instance, how early do SES-related differences in language development emerge, and do such differences occur at the same developmental stage and with the same rate as SES-related differences in memory and executive function development? This information will be critical in understanding *when* to intervene. New work we are conducting with infants is beginning to address this question. Second, what are the proximate factors by which SES disparities operate, and to what degree do these factors operate with specificity on distinct cognitive and neural outcomes? I am particularly interested in how the home linguistic environment and exposure to stress may mediate the effects we've observed. This information will be critical in understanding *how* to intervene.

Any advice for even younger psychological scientists? What would you tell someone just now entering graduate school or getting their PhD?

Surround yourself with good mentors — both senior colleagues with lots of experience and more junior ones who are closer to your stage and can advise on the day-to-day struggles. Network whenever possible. Ask your mentors to send you to conferences, and introduce yourself to people whose work you admire. Don't be shy, even if you are feeling "star-struck." Conduct pilot studies to refine procedures, and process/score/code your data as you go along — it takes time, but there's nothing worse than realizing later that something should have been changed. If you are studying an at-risk population, it can sometimes require a lot of persistence (as my former grad school lab-mates will attest, as they had to wear headphones to drown out my phone calls to families to schedule, and reschedule, and reschedule missed appointments!). Get really comfortable with statistics. Graph your data to look for unusual distributions or outliers. And when you're just embarking on a PhD — or an even longer MD/PhD — remember that life doesn't begin when it's over; the whole journey is your life. So make sure you make time to enjoy it along the way!

What publication are you most proud of or feel has been most important to your career?

Noble, K.G., Wolmetz, M.E., Ochs, L.G., Farah, M.J., McCandliss, B.D. (2006) Brain-behavior relationships in reading acquisition are modulated by socioeconomic status factors. *Developmental Science*, *9*, 642-654.

This was the first-ever study directly examining the effects of SES on brain function using functional MRI. We found that children who had similar reading skill levels but different socioeconomic

backgrounds showed different brain-behavior relationships while reading. I like this work because it demonstrates that social, cognitive and neurobiological factors are fundamentally intertwined.



Chris Sibley

The University of Auckland, New Zealand

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What does your research focus on?

My research focuses on trying to understand how and why people use ideology to justify social inequality and group hierarchy. I am particularly interested in modeling how individual differences interact with situational factors in society to predict support for different ideologies (i.e. tolerance versus prejudice). I also have a special interest in developing theories tailored specifically to intergroup relations in New Zealand, where I am from.

What drew you to this line of research? Why is it exciting to you?

I've seen a lot of group hierarchy and discrimination around me growing up. Undergraduate social psychology was a revelation for me because it gave me the vocabulary and theories to talk and think in more detail about a lot of the things that I had experienced and noticed intuitively. This is what I love about research more than anything else — that it can help us to explain and think critically about the things we see around us in our everyday lives and, hopefully, to help change them in the long-run.

Who were/are your mentors or psychological influences?

I was and am incredibly lucky to have close relationships with my PhD supervisor Jim Liu and with my post-doc supervisor, John Duckitt. Jim and John were excellent role models, both as researchers and scholars. They have considerably influenced my thinking over the years, and in very different ways.

To what do you attribute your success in the science?

More than anything, I attribute my success in psychology to my mum and dad for fostering and promoting my general interest in science from a young age, and also — whether or not they always realized it — for continually challenging me to think about issues relating to social inequality and

intergroup relations while I was growing up. I was also incredibly lucky to go through graduate school with a group of very close friends, and we continually challenged and supported each other in our very different areas of research.

What's your future research agenda?

A couple years ago I started a large-scale national longitudinal panel study in New Zealand, the New Zealand Attitudes and Values Study. I'm hoping to keep the study running for the next 20 years. It is designed to answer a broad range of research questions, but it primarily focuses on answering questions about how socio-structural factors interact with personality over long time-frames to predict ideology and intergroup attitudes in changing environments. Managing the study takes up most of my time these days.

Any advice for even younger psychological scientists? What would you tell someone just now entering graduate school or getting their PhD?

My advice would be to focus on research that you find interesting and exciting. Intrinsic motivation is absolutely critical. Paired with a passion for what you study (and hopefully contributing to it), I would also advise young scientists to develop as detailed and diverse a set of skills in different methods and analytic techniques as possible. My personal view is that, a lot of the time, we tend to be limited by our methods and ability to analyze data, so being able to apply new analytic techniques is invaluable for answering novel research questions — and the opportunity cost of learning new techniques can become increasingly large as you progress through your career. Develop these skills early on.

What publication are you most proud of or feel has been most important to your career?

The paper I am most proud of was something I developed with James Liu while working on my PhD.

Sibley, C. G., & Liu, J. H. (2010). Social Dominance Orientation: Testing a global individual difference perspective. *Political Psychology*, *31*, 175-207.

The paper looks at the extent to which Social Dominance Orientation can be characterized as a global trait-like construct. It spent an awfully long time in the pipeline (5 years from the initial ideas and data collection to publication), and I'm really happy with the final paper.



Eddie Tong

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What does your research focus on?

I am interested in a wide range of topics, but my research centers on appraisal theories of emotion. I am also interested in the cognitive processes associated with different emotions.

What drew you to this line of research? Why is it exciting to you?

I first got into appraisal research in 1999 as a masters student in the National University of Singapore. Most appraisal studies up to that point were aimed at showing which emotion is associated with which appraisal. This is important, but I realized that more could be done. For instance, how do several appraisals combine to create an emotion? Can the effect of an appraisal on an emotion be described by a precise mathematical function? How can appraisals be better measured and manipulated? How do implicit appraisals affect emotions? What are implicit appraisals anyway? Are there systematic relationships between chronic appraisal styles and physical health, the amount of money a person has, his birth order in his family, etc? Is there a genetic basis for chronic appraisal styles? The list goes on...

Who were/are your mentors or psychological influences?

Phoebe Ellsworth, my PhD advisor, has been a rich source of advice and support. George Bishop, my masters adviser, encouraged me to explore topics outside of his area of research, which helped me to develop an open and inquisitive mind. Other scholars I have learned much from and am grateful for include Chang Weining, Barbara Fredrickson, Ira Roseman, Klaus Scherer, Norbert Schwarz, Ramadhar Singh, and Craig Smith. I am inspired by several historical figures for their audacity and ingenuity, and they range from David Hume to the Beatles. And by my students, who often give me new research ideas and see things in ways that researchers, too *entrenched* in their ways of thinking, fail to see.

To what do you attribute your success in the science?

Perseverance, humility, an open mind, innovation, discipline, collaboration, courage, and some luck.

What's your future research agenda?

I hope to develop appraisal research further (see Question 2). Also, I am interested in examining the cognitive and behavioral consequences of specific positive emotions.

Any advice for even younger psychological scientist? What would you tell someone just now entering graduate school or getting their PhD?

Develop the qualities listed above (and pray for luck). It is important to work in areas that your advisors have expertise in, but you should also carve out an area of research that you can call your own. Try to do what everyone else is not doing, but not so much that no one takes you seriously. Science is an adventure where you often start out not knowing what to do and whether it will work. It is often a risky

enterprise and a gamble. Publication is as heartbreaking as it is gratifying — sometimes even more so. I have had many more rejections than acceptances. Don't be discouraged, you must keep trying.

What publication are you most proud of or feel has been most important to your career?

Tong, E. M. W., & Yang, Z. Y. (2011). Moral hypocrisy: Of proud and grateful people. *Social Psychological and Personality Science*, *2*, 159-165.

This paper is about the effect of pride and gratitude on moral hypocrisy, co-written with an undergraduate student, Jerry Yang. The paper reports a study that examined an intriguing moral phenomenon in which people would openly declare the intention to do with is right but would instead do what is wrong in the service of self interests as long as they thought they could get away with it. More importantly, the study showed that gratitude reduces this tendency towards moral hypocrisy whereas pride encourages it. The idea came to me suddenly and was uninvited. I knew keenly the idea would work. The data was collected within four months, the paper was written within two months, and the publication process (from first submission to acceptance) took about six months. The paper does not answer all questions, but the speed with which the research, writing, and publication took place was exhilarating, the findings are compelling, the design was simple, and no budget was needed. I wish my other research projects could be this enjoyable!



Lisa Zadro

University of Sydney, Australia

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What does your research focus on?

My research focuses on ostracism, the act of being excluded and ignored. I literally get to ignore people for a living.

What drew you to this line of research? Why is it exciting to you?

I come from a long line of ostracism-wielding, Italian women. No-one (and I say this with love) can ostracize quite like an Italian woman. It's in our blood. Up until my early twenties, I thought that it was completely normal to sever all connections to someone (and their loved ones...and their pets), possibly

for the next decade or so if they had crossed you in some way.

Then, in my honors year, I enrolled in Kipling Williams' classes on ostracism and everything changed. It was the first time in my undergraduate degree that a topic had completed captivated my interest. I knew ostracism. I had extensive experience giving and receiving the silent treatment so to learn that it was a topic of investigation was a revelation. By the end of the first class, I knew I wanted to do a PhD in ostracism. In the first years of my PhD, there were only a few studies conducted in the area, which was completely thrilling. You could literally run any study you wanted and it was guaranteed to be innovative and to advance knowledge in the field. I felt like a kid in a candy store. And, to some extent, I still do.

Although ostracism research has really taken off over the last decade, there is still so much more to learn and that's what motivates me to keep researching.

As an aside, doing a PhD in ostracism also helped my personal life; my mother eventually stopped giving me the silent treatment because she found it off-putting when I'd yell "You're stunting my four fundamental human needs and possibly my immune functioning!" every time she started to ignore me.

Who were/are your mentors or psychological influences?

I've been exceptionally lucky to have been exposed to many inspirational people, but the two that stand out are my PhD supervisors: Kipling Williams and Rick Richardson. Both have been extraordinarily influential in my life in completely different ways. Kip really kick-started my passion for ostracism and for research in general. He taught me that research could be fun and creative and that you shouldn't be frightened to take a risk. Rick, on the other hand, managed to wrangle all my hyperactive energy and teach me the importance of focus, dedication, and methodological rigor. Although Rick isn't a social psychologist (he only crossed over to the 'dark side' to supervise the latter half of my PhD), he represents the tenacious, hard-working, and dedicated scientist that I want to be.

I've also been very lucky to have met many researchers who have been very generous with their time and advice: Joe Forgas, Bill von Hippel, Patricia Devine, Ladd Wheeler, Lloyd Ren Sloan, Stephen Harkins, Norbert Kerr, and Mark Leary, to name a few.

To what do you attribute your success in the science?

What little success I have had is based on having brilliant collaborators, excellent mentors, a very supportive family and partner, and a lot of perseverance (though, I am more than aware that I still have a long way to go before I attain world domination).

What's your future research agenda?

For me, one of the most fulfilling aspects of research is actually building new methods and paradigms to explore ostracism. My honors student, Rani Goodacre, and I recently devised the 'O-Cam' paradigm (see http://www.psych.usyd.edu.au/research/ostracism/ for a demonstration of the paradigm. Username: guest; Password: Bach) which is a way of examining face-to-face ostracism without confederates.

We're currently playing with new ways of using O-Cam to explore aspects of ostracism that weren't able to be examined using pre-existing paradigms. I'm also developing different strategies to ameliorate the aversive effects of ostracism because, to me, the biggest question in ostracism research is: how can you help someone recover from the aversive effects of exclusion? Recently, I've also started a new collaborative project that explores factors that lead to risky driving and road rage.

Any advice for even younger psychological scientist? What would you tell someone just now entering graduate school or getting their PhD?

I'd probably start by telling them to pursue a less stressful career like bomb defusing. And if that doesn't scare them off, I'd probably tell them to actively engage in any opportunity for collaboration, to reward themselves for every success (no matter how small), to develop a thick, rhino-type skin, and to persevere, no matter what. Just because I study ostracism and rejection doesn't mean that I find getting a paper rejected — for the seventh time — any easier to handle. But what makes the rejection slightly less pointy is that I am researching a topic that I love with a great bunch of collaborators, and finding answers to questions that I personally find fascinating.

What publication are you most proud of or feel has been most important to your career?

Zadro, L., Williams, K. D., & Richardson, R. (2003). How Low Can You Go? Ostracism By A Computer Is Sufficient to Lower Self-Reported Levels of Belonging, Control, Self-Esteem, and Meaningful Existence. *Journal of Experimental Social Psychology*, *42*, 560-567.

In this paper, we had predicted that being ostracized by a human would be more aversive than being ostracized by a computer. I can still remember walking up to Kip's office and telling him that the results were in the opposite direction. And I can still remember how annoyed I was when he told me to run the study again — and again — to make sure. But the results were bullet-proof. It was the first time that I truly realized that getting the opposite of what you predicted could actually be more interesting than getting what you wanted.