Mission to Mars:
What Psychological Stressors Might You Encounter?
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My Passion for Open Science and How Psi Chi Members Can Benefit

In my position statement for the role of Western Regional Vice-President, I introduced the goal of expanding student opportunities by collaborating in large-scale collaborative research projects. I reiterated my call for change when I ran for Psi Chi President. Over the past six years, Psi Chi has responded to that call with a number of successful initiatives and efforts:

• encouraged members to join the Open Science Collaboration’s Reproducibility Project;
• collaborated with Psi Beta to conduct a national extension of the International Situations Project;
• cosponsored the Collaborative Replications and Education Project with the Center for Open Science;
• endorsed The Noba Project and partnered to create the Noba Video Contest (submissions due May 12, 2017);
• adopted Open Science Badges for Psi Chi Journal;
• made Psi Chi Journal Open Access so that anyone can read these research articles for free.

Finally, we created the position of Psi Chi Research Director and the Research Advisory committee. This group is further exploring other initiatives to create more collaboration across chapters and around the world. Together, these initiatives reflect major changes in the way that Psi Chi members can interact with each other as well as with other researchers and academics, and we did this for the benefit of all of our members. These changes occurred through support from the Psi Chi Board of Directors and the Psi Chi Central Office, and I appreciate their willingness to consider my passion for these issues and experiment with vehicles for change.

My passion for these initiatives emerged from many years of working with undergraduates in research methods and capstone courses and seeing students’ frustrations in making meaning out of their classroom experiences. Knowing that research skills are applicable for any future career whether in academia or the business world, it is important for students to embrace them and to complete as many research opportunities as possible throughout their academic career. In contrast, Open Science initiatives emerged as a result of scientists’ frustrations with systems that tolerated, if not encouraged, Questionable Research Practices that emerge from experimenter degrees of freedom and closed science. Although there are valid debates about the causes, consequences, and appropriate responses to the Replication Crisis, there is little doubt that the last five years reflect major changes to the way psychology and other fields conduct science. The Open Science movement includes three categories of changes to improve our science (see right sidebar).

Although my ideas resulted from personal goals to increase potential contributions of students and their instructors, Psi Chi members and the organization benefit greatly from all three categories (research tools, increased transparency, broader participation) of scientific change. As this spring semester develops and the experiences and wonders of research progress into the future, keep connecting with Psi Chi as we continue to provide access to these changes in science. The Research Advisory Committee continues to work on identifying and developing better access or new tools and they share these on Psi Chi’s Conducting Research webpage (www.psichi.org/?ConductingResearch). Further, Psi Chi members with a desire to complete research with others can find Open Invitation Research Projects listed on the Research Opportunities webpage (www.psichi.org/?page=Res_Opps). Otherwise known as crowd-sourcing research, these open invitation projects are great opportunities to learn about research while getting access to great data sets and publication opportunities.

Perhaps the biggest research benefits for our members are related to Psi Chi Journal, which is now Open Access (meaning that all articles are available for anyone to download for free) and awards Open Science Badges (data, materials, preregistered, and replication). Other journals’ Open Access charges range from hundreds to thousands of dollars. Our members can publish Open Access because of their lifetime membership for no extra charge. Further, the Open Science badges provide opportunity for more researchers to access our research and disseminate it through meta-analyses or replication. Finally, the Research Advisory Committee and Psi Chi Journal Editor are beginning to work with the Psi Chi Central Office to further develop programs to connect chapters across institutions and countries for increased cross-cultural research.

Psi Chi as an organization offers many resources to its members such as information about attending graduate school or conventions, and the new jobs board connecting members to employers. And, of course, the bulk of Psi Chi resources is directed at providing awards, grants, and scholarships to our members. I am excited by these research initiatives because they leverage the common interest and size of the organization to allow members to find benefits by developing their own research skills and by connecting with each other for mutual benefits. In this final message as President, I am very happy to invite you to continue developing your scholarship with us and with your fellow Psi Chi members.
Wisdom From the Workplace | Paul Hettich, PhD

Is the Student Parent to the Employee?

College Experiences That Lead to a Good Job and a Better Life

The child is father of the man, as English poet William Wordsworth (1807) claims in the poem “My Heart Leaps Up,” could we infer that the student is parent to the employee? To what extent will your experiences during college influence your subsequent work life and well-being? According to Great Jobs. Great Lives. The 2014 Gallup-Purdue Index, the ultimate outcome of achieving a college degree is your belief that you will increase the chances of obtaining a good job and experience a better life (Gallup, 2014). What college experiences contribute to these two interrelated beliefs?

Drawing upon interviews with over 30,000 U.S. college graduates and several years of studying workplace engagement and well-being, Gallup identified several elements of the college experience that related positively with subsequent workplace engagement (the good job) and well-being (the better life).

Workplace Engagement

Workplace engagement is the extent to which an employee is committed to an organization’s mission and goals; it is influenced by the interrelationships of the employee and the employer. According to the Gallup-Purdue Index, about 39% of college graduates employed full time for an employer (i.e., excluding the self-employed) are engaged in the workplace, 49% are not engaged, and 12% are actively disengaged. Slightly more female college graduates than male graduates are engaged (42% vs. 36%).

The results of this study revealed no differences on employee engagement between Top 100 U.S News & World Report college graduates and graduates of other schools, or between graduates of public and private institutions, but there were substantial differences between graduates of for-profit schools (less engagement) and other institutions. No differences were found in workplace engagement across race, ethnicity, or first in the family to attend college (Gallup, 2014).

According to the graduates interviewed, the odds of being engaged at work are higher if

- Your college prepared you well for life outside of college (2.6 x higher).
- Your college was passionate about the long-term success of its students (2.4 x).
- You had a mentor who encouraged you to pursue your goals and dreams (2.2 x).
- You had at least one professor who made you excited about learning (2.0 x).
- Your professors cared about you as a person (1.9 x).
- You had an internship or job that allowed you to apply what you were learning in the classroom (2.0 x).
- You were extremely active in extracurricular activities and organizations during college (1.8 x).
- You worked on a project that took a semester or more to complete (1.8 x).
The first two elements pertain to the institution, the next three to relationships, and the last three to activities students can participate in. The report did not further address the first two elements (the institution), but it did the remaining six elements. If graduates recalled having a mentor who encouraged them to pursue their goals and dreams, and professors who made them excited about learning and cared for them as a person, the odds of being engaged at work more than doubled: 57% who experienced all three relationships reported being engaged versus 25% who experienced none. Fourteen percent of the graduates strongly agreed that they received strong support in the three relationship elements.

Only 6% strongly agreed that they participated in all three activities, but 59% who did participate reported that they are engaged in their work versus 30% who participated in none of the activities. In short, the data suggest that your level of workplace engagement after college can be substantially influenced by having received strong support and by actively engaging in deep learning experiences during college (Gallup, 2014).

**Well-Being**

The Gallup-Purdue Index identified five interrelated elements of well-being (i.e., commonly regarded as a state of happiness): purpose well-being, social well-being, financial well-being, community well-being, and physical well-being. Graduates thrive better in some elements than others: 54% thrive in purpose well-being, 49% in social, 47% in community, 42% in financial, and 35% in physical. About 55% of the graduates thrived in zero elements and 35% in three to five elements, with well-being reaching higher levels with age. The odds of thriving in all five elements of well-being are higher if

- Graduates are engaged at work (4.6 x).
- Your school prepared you well for life outside of college (2.5 x).
- You were emotionally attached to school (2.0 x).
- Your school was passionate about the long-term success of its students (1.9 x).
- You had a mentor who encouraged you to pursue your goals and dreams (1.7 x).
- You had at least one professor who made you excited about learning (2.0 x).
- Your professors cared about you as a person (1.7 x).
- You had an internship or job that allowed you to apply what you were learning in the classroom (1.5 x).
- You were extremely active in extracurricular activities and organizations while attending (1.4 x).
- You worked on a project that took a semester or more to complete (1.1 x).

Thriving in all five elements was not significantly related to the type of school attended (i.e., public vs. private; selective vs. nonselective) unless the person graduated from a for-profit institution where fewer graduates thrived in all five elements.

Notice the very powerful influence that workplace engagement exerts on well-being (4.6 x), compared to the types of college experience. According to the report, ”Workplace engagement also increases for graduates as the number of elements they are thriving in also increases” (p. 14). Only 12% of the graduates who were thriving in none of the elements were engaged in their work, whereas 23% who were thriving in one element, 40% in two elements, 50% in three elements, 63% in four elements, and 72% thriving in five elements were engaged. In addition, student loan debt influenced well-being negatively, with higher debt being associated with lower levels of well-being (Gallup, 2014).

The report does not indicate that the elements above are the only variables that affect workplace engagement; characteristics of the workplace and other aspects of your life will also play a role. Similarly, well-being is a complex construct that may be influenced by factors other than the five elements mentioned above. Although causal relationships were not established, the findings of the Gallup-Purdue Index are worth a serious examination. For example, one implication of the findings is that you could view the elements of workplace engagement as a checklist or progress report on the achievement of your educational outcomes that are likely to promote positive workplace experiences after graduation. Some elements are not under your control while others are.

- For instance, to what extent have you sought to establish a mentoring relationship with a teacher, advisor, counselor, or someone else?
- What steps have you taken to obtain an internship in a prospective career area?
- What extracurricular activities and organizations would you enjoy, given other responsibilities such as a job or family?
- What courses within your department or other departments involve semester-long projects?
- Who are the teachers within and outside of your department who have a reputation for caring for students and/or for making students excited about learning?

As the architect of your future, it is up to you to actively seek these kinds of experiences. After all, you are responsible for parenting that “child” who will soon enter the workplace in search of a good job and a better life.

**References**


Can a degree or background in psychology provide a stepping stone toward a future path in medicine? If you had asked me 10 years ago if I would dream of working in a healthcare setting, my answer would have been a definite “no.” However, after many twists and turns, the psychology degree that I am pursuing reignited a passion for the sciences that I had left behind years ago and led me further to a newfound interest in medicine.

Psychology as a Transitional Entry Into Medicine

At its core, psychology has had much in common with medicine since their humble beginnings, which branched from the ancient field of philosophy (Laycock, 1936). The countless celebrated and ongoing advancements that came to distinguish the two disciplines uniquely from each other have led both to garner their own groups of well-respected pioneers and followers over the centuries. For a period of time, psychology and medicine grew and progressed independently of each other. The former received profound contributions in the form of theories that revolutionize our way of thinking of the human mind, emotion, and behavior, and the latter made major strides in drug discoveries and biomedical interventions to ease human suffering from the burden of physical ailments.

You might assume that these two disciplines could continue on their own divergent paths without any collaborative effort to better the lives of many in need. Yet, there are increasing opportunities for cross-disciplinary communication and exchange as professionals realize that this manner of approaching and seeking solutions to urgent world problems is beneficial. As a result, psychology and medicine are now opening up to each other, and their timely interaction could be further aided by interconnecting young disciplines that utilize the foundational knowledge from both fields to optimize strategies and advanced technology to speed up results.

As a modern-day example, we could look into the growing field of the neurosciences and see that a psychology specialization in behavioral neuroscience opens up many avenues for overlapping work with the medical branch of nervous system disorders and treatment intervention. Although research experience in both psychology and the neurosciences may not guarantee your spot in a medical school, having background knowledge gleaned from them such as neuroanatomy, health psychology, or a related subject provides a foundation of confidence and relevant experience upon which more intensive future study of medicine can build.
Sharing of Common Goals and Initiatives

Perhaps the most significant overlap between psychological science and medicine is that they both focus on the human life and a continual effort in experimenting to find new ways to improve and optimize health. Students of both fields are taught to prize humanity and are made increasingly aware of the psychophysiological challenges and limitations that human nature imposes. During the process of obtaining a degree, students are sensitized to the frailties of life in the face of obstacles to our goals, both psychological and physical.

The greater opportunity for community service learning provided and encouraged by involvement in the psychology or medical field is a purpose-driven engagement that cultivates character. Such involvement in the community is fueled by a common motivation of compassion and self-sacrifice to serve and better the lives of those who are in need. For physicians or clinical workers who work long shift hours and those suffering from burnouts due to overwhelming workload in healthcare settings, it is important to not lose sight of the underlying, yet easily overlooked, motivation to be responsible for the health and well-being of others.

If you are inclined to make serving others who are in need of care and treatment one of your important career goals, it may be worth considering pooling your psychology skills to take on the challenge of the medical field. As the issue of physician shortage becomes more pressing, even in developed countries, one countermeasure is to broaden the scope of potential medical school applicants’ backgrounds to ensure that enough graduates or future doctors will be available to meet the needs of the community (AAMC, 2016c; Islam, 2014).

Cross-Disciplinary Interest

Medicine has a long list of specialties and subspecialties, which could overwhelm a prospective medical school applicant. However, many subdisciplines also connect the clinical component of psychology with these medical specialties. As Castelnuovo (2010) described, “Today there is no medical area without a corresponding field in Clinical Psychology: psycho-cardiology, psycho-oncology, psycho-geriatrics are only three examples” (p. 1). Familiarity with the basic behavioral neurosciences gained while an undergraduate junior inspired my interest in brain health and neurodegenerative disorders, which is a rapidly expanding concentration of research.

Similarly, one could also consider the increasing problem of obesity and mental disorders in the world, which are widely researched by psychologists and medical clinicians. Exploration of these issues from a research perspective might allow a student to exercise practical applications and problem solving under the medical specialties of diabetes, endocrinology, and psychiatry, to name a few.

One of the ways in which modern psychology is distinguished from its historical roots is that there is now an increased focus on application of theories in real-world issues and settings outside the laboratory and classroom. Thus, content knowledge that one could gain while pursuing a psychology degree not only serves as motivation, but also provides foundational basics one could build upon to acquire more focused and specialized skills in improving the well-being of vulnerable populations.

Another advantage for psychology students who plan to apply for medical school is that the Medical College Admission Test (MCAT) includes a section of questions that test one’s knowledge of psychological and social foundations of behavior (AAMC, 2016a). Test takers may be asked questions about common terms used in the psychology literature and excerpts taken from existing research in the field.

Psychosocial Issues and Treatment Outcomes

It is now known that many physical diseases can stem from psychosocial causes. For instance, stress-induced cardiomyopathy, colloquially known as “broken heart syndrome,” often results from the experience of intense emotional distress and can be fatal, but may be misinterpreted as a heart attack by healthcare providers (Mayo Foundation for Medical Education and Research, 2017). A knowledge of a patient’s current psychosocial health status helps eliminate diagnostic inaccuracy and saves time in providing timely treatment in the most urgent circumstances.

In consideration of the psychosocial causes of modern medical conditions, it should be noted that substance abuse and suicides are examples that demonstrate the community’s need for physicians who are also experienced in psychology. The Health Officers Council of British Columbia in Canada (2007) reported that 47,000 deaths per year in Canada were attributable to substance use. Based on the 2012 Canadian community health survey, about 6 million Canadians suffer from substance use disorders, demonstrating that the problem of addiction leads to debilitating disorders that require medical attention (Statistics Canada, 2012). Likewise, mental illness is the most significant risk factor for suicide, one of the leading causes of death in Canada (Statistics Canada, 2009). Bastiampillai, Sharfstein, and Allison (2016) associated the increase in suicide rates in the United States with the reduction in the number of inpatient psychiatric beds and long waits in hospital emergency departments for psychiatric patients in need of hospitalization. With depression as the most common mental illness causing suicide (Regents of the University of California, 2016), medical emergencies require the proper combination of psychological counselling and medical care in order to be more effectively handled for lasting positive outcomes.

Having a complementary knowledge of psychology and medicine provides professionals with a more comprehensive and beneficial understanding of treatment intervention, such as the best pharmacological option(s) and preventive measures to avoid a future recurrence. This allows these professionals to create a combined strategy to more adequately address both the causes and symptoms of a condition together, instead of employing a one-sided biomedical focus. Additionally, when a condition may
be long term or chronic, traditional medical treatment alone might not sufficiently attend to the psychological and social discomforts and rehabilitation that a patient might have to endure. Physicians who are sensitive to and good communicators of both the physical and psychosocial needs of vulnerable patients are valuable and in high demand by the current healthcare system.

**A Diverse Group of Future Physicians**

Admission to medical schools is becoming increasingly diverse in terms of age, sex, racial groups, and background disciplines of students (AAMC, 2016b). This shift mirrors the change in the patient population in Western countries, which is also becoming more diverse, making the call for physicians who are able to cater to the changing modern demographics of the population even more urgent.

Psychology graduates have the added advantage of being more exposed to the variable cultural needs and sensitivities of diverse racial and marginalized groups from coursework and interactions with fellow members of their psychology classes. Thus, a venture into the medical field is still one of the possible better options available for psychology students after graduation with a bachelor’s degree. Armed with knowledge and skills that are complementary to the medical sciences, graduates could put their education to good use in present and future clinical settings to ensure that the future of medicine is nondiscriminatory, unbiased, compassionate, and embraces all creeds and colors.

**References**


The science fiction book *Wool*, which Amazon.com describes as a “suspense-filled, post-apocalyptic thriller,” was recently recommended to me by a psychology book club in my department, and I thoroughly enjoyed it. I was especially fascinated by the psychological themes present in the book. The author, Hugh Howey, agreed to an e-mail interview to be shared with psychology students and this publication.

Can you comment on the psychological themes in *Wool*? What was your thought process or research that led you to write about some of these themes (e.g., in-groups/outgroups) in a post-apocalyptic setting?

I’ve always been fascinated with the human condition. Most of what I read is nonfiction: history, philosophy, psychology, and science. When I sit down to write a novel, there’s always some bigger issue I want to explore (as well as many smaller themes). If I don’t have an issue like this at the core of the novel, it’s difficult for me to be motivated to push the story forward every day. For me, novels need to both entertain and elucidate. They should take some complex issue and either attempt an answer or pose questions for the reader to mull over.

With *Wool*, one of the themes I wanted to tackle is the frustrating waste that is tribalism. So many of our resources are spent protecting ourselves from our own kind or making war with our own kind. Meanwhile, we live in a very fragile bubble.

The trillions of dollars spent squabbling over finite resources could instead be spent securing a foothold elsewhere. And so I explored a world of silos, cut off from one another, where valuable time and material is wasted fighting amongst perceived out-groups, when in reality those groups should see themselves as a single in-group.

Are there any other psychological topics and principles that you find particularly fascinating or interesting?

Most of my reading these days is in the realm of evolutionary psychology. I think so much of the misery of the human condition can be explained by two facts: The first is that we live in a world for which we were not suited, which leads to a lot of internal conflict and external strife. The second is that our purpose for existence is not to be happy, but rather that happiness is a tool used to help ensure our existence. That is, our bodies aren’t concerned with maximizing happiness so much as using happiness as a reward for behaviors that maximize our reproductive success. I believe a better understanding of these two issues by more people would alleviate a lot of suffering and confusion.

Besides your own, can you recommend any other authors or books that psychology students might really enjoy?

Isaac Asimov’s *Foundation Saga*, of course. Here you have a psychological historian who can predict the future through advanced knowledge of human proclivities. Great books and psychology is at the heart of them. *Gulliver’s Travels* is a favorite of mine for delving into the human condition with incisive wit. But really, most great books are built on keen observations of what makes people tick, and so writing a novel without either an innate knowledge of or directed study of psychology is nearly impossible. Books are primarily about people, their struggles, and the choices they make. Psychology is our window into these obscure truths. This is why novels and psychology so perfectly intersect.

Thanks for considering and taking a look at this!

My pleasure! Give my best to your students. Cheers, Hugh.

Jonathan Hammersley, PhD
Western Illinois University

Jonathan Hammersley, PhD, is coadviser of the Psi Chi chapter at Western Illinois University, the advisor for a new substance abuse minor, and on the steering committee of an experimental psychology master’s program. He earned a BS in psychology from University of Southern Indiana, and an MA and PhD in clinical psychology from Southern Illinois University-Carbondale. He completed predoctoral internship training at Indiana University School of Medicine, and postdoctoral training in neuropsychological and disability assessments. His Clinical and Addiction Research Lab examines topics such as psychological disorders and symptoms, drug use, and treatments. He spends occasional free time cooking, playing fantasy football, reading, or chasing his kids around like a zombie.
Mission to Mars:
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There is danger during space missions—danger such as the potential for equipment to break down or a micrometeoroid attack. The effects of a microgravity environment cause bone loss, atrophy of muscles, and fluid shifts. Radiation is also heightened, especially beyond the Van Allen belt, which deflects most radiation away from Earth. According to esteemed space psychologist Nick Kanas, MD, these perils affect crewmembers psychologically in a number of ways.

For example, crewmembers face the notion of being in a weightless environment where they have some problems maneuvering around, their faces are all puffy, and they experience many other changes in their bodies such as bulging of the optic nerve. Monotony and separation from family and friends exist, and crewmembers have the same people around them a lot, which can lead to stress as well. As challenging as this all sounds, Dr. Kanas says, “These are only some of the psychological stressors to expect, especially on a long-duration mission, such as a mission to Mars.”

Meet Dr. Kanas

For 15 years, Dr. Kanas was a NASA-funded principal investigator, first doing psychological research on astronauts and cosmonauts aboard the Russian Mir space station for approximately seven years and then conducting a follow-up study for about the same amount of time on astronauts and cosmonauts aboard the International Space Station (ISS). He is the author of more than 200 professional publications including his most recent book, Humans in Space: The Psychological Hurdles. This book pulls together everything he has learned about space psychology over the last 50+ years into one readable entity for the public. It received the 2016 International Academy of Astronautics Life Science Book Award.

Dr. Kanas has also extrapolated his and others’ research through three science fiction novels published with Springer. These include The New Martian, about a six-person crew returning from Mars, The Protos Mandate, about an interstellar, multigenerational mission spanning 107 years, and The Caloris Network, about a crew traveling to Mercury to discover the source of a mysterious signal.

Dr. Kanas sees himself as sort of a space cadet, explaining that he watched space shows and read a lot of science fiction when he was a boy. He says, “I remember going out to look at Sputnik coming over Portland, Oregon when I was 12. I could see the flashing light, probably not of Sputnik itself, but of the stage of the rocket that was close to it. Then, somebody had a telescope nearby, so I went over and got my first look at Saturn through a telescope. I became really interested in space.”

Although many people are “interested” in space, few go on to become a teaching assistant for a summer space biology institute at the University of California, Los Angeles School of Medicine. After that, in his own words, “One thing led to another, and then the opportunities opened up in the 90s when NASA started getting interested in crew interaction and behavior. At that time, I had already done some work on space psychology funded by the European Space Agency, as well as in group therapy research with patients, so I was used to studying small groups of people interacting under stressful conditions.”

Psychological Support for Crewmembers

An amateur astronomer for nearly 60 years, Dr. Kanas sits in his den, surrounded by old prints of celestial astronomical themes. When asked to provide a little background of psychological support in space, he faces some signed photographs of astronauts he has met in his career, such as Fred Haise, Millie Hughes-Fulford, and Valery Polyakov.

He says, “The Russians really pioneered psychological support for crewmembers. Even as far back as the 1980s, they had a team that listened to communications 24/7 to determine how the cosmonauts were doing and intervene if necessary to talk to them or ask if they needed any support.”

“However, it was not so easy to communicate back then because they didn’t have satellite relays,” he continues. “They couldn’t really speak to their families very often, but when they did, the psychological support team would increase the frequency of communication with families, as well as with famous movie stars and sports heroes. This gave the cosmonauts a sense of importance, novelty, and the opportunity to talk to somebody other than to each other. They also often received surprise presents such as guitars, letters from home, and things like that.”

The Americans, he adds, built a psychological support program too. “It is now common for space programs to have 24/7 psychological support, so people can talk to family and friends when they wish, receive surprise gifts sent up on orbit, and also get counselling if they need it. If someone gets a little despondent, they can talk to a counselor.”

The space environment has a full complement of psychoactive medications that crewmembers can take. That is sometimes needed, he explains, but usually just talking can help.

Seeing Earth

Another big support mechanism for crewmembers is seeing Earth. Dr. Kanas conducted a study of 39 astronauts who had flown in space to ask them about positive factors of being in space. None of these factors were significant in terms of changes in their attitudes, except for seeing Earth. That one, he says, led to many thoughts such as

• humans are one,
• there are no natural boundaries between people,
• Earth is a beautiful orb, and
• we are all lucky to live there.

He says, “Many astronauts said that they did some public service as a result of the experience of seeing Earth in all of its beauty, and realizing that humans are really one species and should get along better. They became more humanitarian in their outlook on people. Seeing Earth served as a profound psychological influence to the astronauts.”

He pauses before starting into the primary topic of today’s interview.

“Unfortunately, these positive or support factors will not be present in a long-duration mission to Mars.”
The Psychological Stressors of Long-Duration Space Travel

1. Communication delays. As Dr. Kanas already indicated, astronauts have become very dependent upon the ability to communicate with family, friends, and Mission Control in real time. “Right now, astronauts can talk to ground control through satellite links whenever they want, and often they can talk to people at home too. During free time, they can just dial up their family for a private conversation.”

“However, going to Mars, you have a long, long way to go—tens of millions of miles. At that distance, even with signals traveling at the speed of light, there are significant communication delays. For example, if you are on Mars when Mars is on one side of the sun and Earth is on the other in their orbits, you might ask ‘How is everybody down there?’ but you won’t get an answer back until 40 minutes later. This creates a sense of being really far away.”

The average two-way time delay between Mars and Earth, he says, will be 25 minutes. What this means is that crewmembers can’t talk to people in real time to deal with emergencies. Nor can they carry out ordinary conversations with family, friends, or counselors. They can’t receive surprise presents either because it would take seven months for resupply to occur. “So all of the helpful countermeasures to dealing with the stress of isolation and confinement away from family are taken away on a Mars mission. Therefore, we need to look at other supportive activities to help these astronauts deal with their situation.”

One countermeasure he suggests is to train crewmembers to increase their efficiency in communications. Basically, this involves not only asking open-ended questions, but also specifics to convey as much information as they can, and then responding and asking for further questions in return.

For example, a crewmember might send an e-mail to his wife saying, “Hello dear. How are you? What’s going on?” In addition to these open-ended questions, he might also ask more specific demand questions at the end of the communication such as, “How is Jane doing with her prom dress? How is Charlie doing with his sports activities? How is your mom doing with her sickness? Is she getting better? What about the loan we wanted to buy the car?”

Then, 25 or so minutes later, he might get a response back from his wife saying, “Fine dear. Everything is great. I am feeling happy. The house is looking good. Jane has bought her prom dress; how much do you think we can spend for her limousine? Charlie is enjoying being on the football team, but he feels like he wants to improve his academics, so he is studying harder. What do you think about getting a tutor? Mother is doing better and is out of the hospital. The loan has come through. What do you think about maybe adding a room to our house? Should we get another loan?”

Dr. Kanas says, “This sort of communication strategy is going to take a little work; right now, people mainly just ask open questions back and forth.”

2. Earth out of view. Dr. Kanas asks you to consider this: “People have always either been on Earth, under Earth, or in space close enough to see Earth as a beautiful, round ball without boundaries. But from Mars, Earth will appear like no more than an insignificant dot. Yes, a telescope can help you see it, but only as it was 10 to 15 minutes earlier than your current time. That is really not the same.”

Because of this, Dr. Kanas and his colleague Dr. Dietrich Manzey wrote years ago about something called, Earth-out-of-view phenomenon. This refers to the notion that “because humans have never, ever experienced Earth as an insignificant dot in the heavens, the psychological ramifications of this experience are really unknown.”

“One of the countermeasures to test the effects of Earth-out-of-view phenomenon,” he recommends, “would be to provide a telescope or some sort of virtual reality system where crewmembers can see Earth or experience what it is like to see Earth virtually. For a Mars mission, I think that might help crewmembers deal with the sense of loneliness that seeing Earth as an insignificant dot causes.”

3. Increased autonomy. Current missions are primarily controlled from the ground in terms of the schedule. However, astronauts have the ability to do some activities on their own. Dr. Kanas gives this example: “There is a job jar on the ISS, so if someone has some free time, he or she can pick a job such as conducting a study or some experiment to fill the time.”

Thus, there is some flexibility. However, on a Mars mission, Dr. Kanas expects that the crew would be more autonomous. He says, “They will not be directed much from the ground because of the time delay, so they will have to plan their own schedules, and they will do what they want. Mission Control will mainly have a broad overreaching effect, but not a day-by-day, time-by-time effect as is the case for on-orbit missions.”

“This will create a whole different environment,” he explains. “Some colleagues and I studied autonomy in three space simulation environments on Earth, and the crewmembers seemed to like being autonomous, such as having the ability to plan their own schedule rather than having to be dependent upon the ground.” Thus, autonomy seems acceptable so far, but Dr. Kanas believes that more research should be conducted on this area.

4. Intercultural crewmembers. Dr. Kanas expects that crews going to Mars will be heterogeneous, with men, women, and people from different cultures. “This is because a long-term space mission will be expensive, so it will probably involve a consortium of countries adding money and resources to pull it off. These countries will, of course, want to have representatives of their own people there. For example, on a six- or seven-person Mars mission, I expect that the crew will draw from Americans, Russians, Chinese, Europeans, Canadians, Japanese, and people from all around represented in some way, probably based on how much they spend on a mission.”

“That intercultural situation will probably be very positive in the long run because it enables people with different backgrounds and interests to interact with each other during the long periods.” However, in the short run, he warns that caution is needed because different cultural groups expect different things.

“For example, a person who is used to small spaces might get into the comfort zone of another who is used to a more extended body space. Or, people who maneuver a lot with their hands might feel less constrained doing that, although people
who are not so elaborate in their motions might see this as a sign of aggression. These cultural differences could create problems and should be worked out before launch.”

5. Displacement. During Dr. Kanas’s studies, he and his colleagues found evidence suggesting the occurrence of displacement. At the group level, he defines this as “the tendency of people in a group who can’t resolve interpersonal tensions with each other to transfer these tensions to someone else outside of the group who is completely innocent and just happens to be safe and available.”

An example of displacement he gives is when an employee cannot “tell off” a boss for being a jerk, so the employee goes home and yells at a family member instead. In his studies, he says, “The weeks when there were high levels of tension between crewmembers were the same weeks that the crewmembers perceived Mission Control as not being very supportive or helpful, so we feel that they were displacing the tension onboard outwardly to the ground.”

“However, it will be difficult for crewmembers to displace their emotions during a Mars mission because they won’t be talking to the ground very much. Thus, it is important that any tension between the crewmembers be resolved among them before it fester and causes fights, territorial behavior, or the crew to split up and not be very cohesive. For example, we are recommending that, built into the Mars mission, there be training for the crew to look for sources of tension, and also time that they be scheduled to sit down and ask each other, ‘How are we doing? What problems are we having?’ so that they can work out any issues to relieve the pressure internally.”

Preventing for These Challenges

Dr. Kanas strongly believes that there is a need to conduct more studies simulating the outbound and return phases of a mission to Mars. Preferably, these studies should take place for six or seven months on a real space station with microgravity and other real dangers, simulating progressive communication delays with the ground, and more crewmember autonomy.

The best ground-based simulator to date for the psychological and interpersonal issues of a Mars mission was the Mars 500 Project. This was a 520-day simulation in Moscow where six people were confined in a series of containers and simulated going to Mars. The study included built-in time delays for communication with the outside, autonomy, and an area where participants could put on a spacesuit and pretend that they were on the martian surface. “That kind of a simulation is pretty good because it simulated a lot of the psychological and interpersonal factors, as well as some of the operational and engineering factors that are needed.” However, he adds, not even the best simulators are able to capture all of the psychological aspects of long-duration space travel. “For example, you don’t get microgravity in any ground-based simulators. And crewmembers do not experience real danger and irreversible commitment. If somebody wants to go leave, they knock on the door, say, ‘I quit being a subject,’ and go home.”

Another good ground-based simulator that does involve danger is the Antarctic. There, he says, participants are isolated during the course of a year, especially during the wintering over when people are confined indoors and storms cause communication problems and make it difficult for planes to fly in with supplies. “In some ways, people in the Antarctic are more isolated than astronauts are. But the problem with the Antarctic is that the older missions were better simulators because the crews were smaller and experienced more danger. These days, the American Antarctic base has some 30 or 40 people during the wintering over and more than 100 during
the summer, so it is more like a small town than a six-person crew going to Mars.”

Some submersibles have been used as effective simulators too, where people would go under the water in an oxygenated container and then float out into the water to do aquatic science and experience wearing a suit for oxygen and moving in reduced gravity.

But to him, the most effective way to expose new psychological issues and help understand the effects of a mission to Mars is clear. “We need to have a real crew simulate a trip to Mars by landing on the moon, an asteroid, or some other space body where they can be in a partial gravity environment, tapping on real rocks and going outside in a spacesuit for a period of time to get a feel of what that might be like. Then, they need to return to the space station to simulate the return phase of the journey.”

The Marvels of Space

Despite the countless dangers, it is no wonder that Dr. Kanas and many others have become fascinated by these missions, which undoubtedly play a big role in humanity’s sense of adventure, patriotism, and one day—who knows?—perhaps even our continued existence as a species. In this spirit, we conclude today’s interview by asking Dr. Kanas to describe what it was like when he once experienced the thrill of true weightlessness.

This once-in-a-lifetime encounter occurred aboard a genuine loop-the-loop, “vomit-comet” mission, which he got permission to ride while he was still a student working at Johnson Space Center. About the flight, he says, “The plane made about 20 giant parabolas in the sky. As it made an arc and began its descent, we were weightless for about 30 seconds to allow the astronauts on board to practice a weightless docking maneuver. For me, it was really kind of fun, like when you are on a rollercoaster and your body rises up against the straps just as you go over a fast hill. It was like that except that it lasted longer, and I literally floated up, up into the air.”

Would Dr. Kanas go on a long-duration mission if given the opportunity? Not when he was younger. But now that his children have grown up, he chuckles, “I don’t have 20 million dollars to pay for it like some space tourists have done on trips to the ISS. But I would certainly be tempted to go for free if the trip wasn’t too long.”

Nick Kanas, MD, is an Emeritus Professor of Psychiatry at the University of California, San Francisco. For over 35 years, he conducted research on people under stress. He is the recipient of the Dr. J. Elliott Royer Award for academic psychiatry. Since 1970, he has studied and written about psychological and interpersonal issues affecting people living and working in space. He is a member and former trustee of the International Academy of Astronautics. Together with Dietrich Manzey, he is the coauthor of the textbook entitled Space Psychology and Psychiatry (2nd ed.), which was given the 2004 International Academy of Astronautics Life Science Book Award. In 1999, Dr. Kanas received the Aerospace Medical Association Raymondt F. Longacre Award for Outstanding Accomplishment in the Psychological and Psychiatric Aspects of Aerospace Medicine. In 2008, he received the International Academy of Astronautics Life Science Award.
As an undergraduate psychology student, you might be pondering your next career move, especially if you are on the cusp of graduating. One option worth exploring is public health, which has numerous payoffs for undergraduate psychology majors in terms of impacting your community and society, as well as augmenting your job prospects. If your notion of public health starts and stops with exotic diseases such as Ebola and West Nile Virus, you might be wondering how public health can have anything to do with psychology. We are here to shine a spotlight on public health and how it relates to your current studies.

Psychology and public health have similar foundations. Both of these fields share core values such as humanitarianism, universalism, altruism, unwavering optimism, and the idea that there is a solution for every problem. Furthermore, the field of public health is broad and has numerous career possibilities in a variety of specialized fields. Thus, public health is an ideal “next step” for those who have studied psychology and want to apply their training to help others.

But what is public health, exactly? The Association of Schools and Programs of Public Health characterizes it by the breadth of the field’s aims and actions: “Public health protects and improves the health of individuals, families, communities, and populations, locally and globally” (2016). Given the complexity of this overarching mission, it is not surprising that public health is deeply interdisciplinary.

To help you focus your interests into the right discipline, it is beneficial to know the many concentrations within public health because each has its own approach to...
protecting and improving health. Examples of these approaches include using interventions to change health behaviors (Health Promotion and Behavior); developing and analyzing policies that may influence well-being at the local, regional, or national level (Health Policy and Management); and applying scientific investigation and statistics to real-world health problems and research questions (Epidemiology and Biostatistics). Other notable areas of emphasis for public health research and practice include understanding the physical, biological, and chemical environments that encompass an individual or a population (Environmental Health) and assisting with provision of lifesaving health infrastructure and interventions in an international context (Global Health; Berkeley School of Public Health, 2016).

Some public health professionals contribute to the public health field through extensive analysis and number crunching, thereby generating new knowledge for use in prevention policies. Others develop plans and strategies to minimize potential harm from disasters. This might be at the local, regional, or national level. Still others converse one-on-one with community members in conveying the most-up-to-date recommendations to improve personal health. All, however, participate in working toward the greater goal of protecting and promoting the well-being of society.

As a psychology major, you have specific skillsets that are invaluable to public health. For example, understanding how the human mind works is fundamental to improving public health, and as a psychology major, you are in a unique position to provide insight into the human mind. As another example, a public health professional might want to conduct interviews with community members to understand why fewer people in that community are being vaccinated than expected. Your studies in psychology will have equipped you with an understanding of qualitative methods, ideas for how to generate follow-up probe questions, and knowledge of the ethical evaluation of human subjects. The findings from that work could benefit many people through creation of health marketing campaigns to create awareness of resources or through proposal of new policies to minimize barriers in receiving care.

Psychology also plays an important role in the development of those potential interventions; understanding the specific origins and motivations of human behavior is critical in tailoring efforts to influence or persuade people to change their health-related actions. Public health poses an opportunity for you to amplify the impact of what you have learned in your psychology courses. Although psychology coursework generally focuses on the thoughts and behaviors of an individual, public health offers the opportunity to apply that understanding to groups and communities.

Jessica Pratt, MPH, works as the Practicum & Career Coordinator for the Georgia State University School of Public Health. She summed up the key advantages of public health for a psychology student as follows: "Psychology majors are uniquely positioned to work in public health because of their understanding of human behavior and decision-making, focus on research methods, and their desire to help people lead healthy lives. Public health offers the opportunity to utilize these key skills from psychology training to implement change at a population level, which carries impact..."
Beyond individuals and applies it to entire communities.”

Public health is a great career to consider because of the job prospects available in the field and because it is one of the largest and fastest growing fields in the nation. Although obtaining a masters in public health (MPH) would open the most doors, there are many opportunities to gain related experience even without formal public health training. According to the Bureau of Labor Statistics (BLS), the demand for health educators and community health workers is projected to grow 13% from 2014 to 2024, which is faster than the national average of 7% for all fields combined (2015b). Health education professionals generally need at least a bachelor’s degree in health promotion or health education, and possibly a Community Health Education Specialist certification. For a few of the higher paying public health jobs, a master’s degree is typically required. Epidemiologists earn a median pay of $69,450/year based on 2015 BLS estimates (2015a). The job outlook is even rosier for statisticians, or “biostatisticians” as they are known within public health; people in this profession received median annual wages of $80,110 in 2015 and will likely see demand for their skills surge by 34% by 2024 (2015c).

How can you as a psychology student or recent graduate get started with public health? Here are some steps:

1. Read up on different topic areas of public health to see which subdisciplines interest you. Potential starting points include the websites of the American Public Health Association (http://www.apha.org/), and the Associated Schools and Programs of Public Health (http://www.aspph.org/discover/). Consider joining LinkedIn groups related to your topic of interest.

2. Reach out to people in your professional or academic network who may have wisdom to share about a career in public health. Ask for informational interviews to learn firsthand about the day-to-day responsibilities, expectations, and requirements for careers you are interested in. Even extremely busy professionals are often happy to share their wisdom if you ask nicely and are respectful of their time.

3. Get hands-on experience if possible—the sooner, the better. Work, volunteer, intern, or shadow in an area of public health you are interested in. Health departments, clinics, and nonprofits have traditionally been strong places to learn about the interaction of human health and society, but other great organizations to consider include those concerned with urban planning and health advocacy. Having experience, paid or not, helps you get a better sense of your interests and may be attractive to graduate school admissions. It may also help you determine if graduate school is even necessary for the specific career you hope to pursue.

4. Apply to graduate school or certificate programs to deepen your knowledge and expertise in the field. The types of degrees offered by schools of public health vary from institution to institution, but generally an MPH, Master of Science in Public Health (MSPH), or an MPH with a specific concentration could be leveraged as evidence of having a tangible skillset in public health. In most cases, a distinct background will set job candidates apart from those who do not have specialized public health training. Pursuing and acquiring such advantages could be crucial in marketing yourself to potential employers, especially for soon-to-be psychologists who are competing against hundreds of thousands of public health professionals. For example, during the 2013–14 school year, over 117,000 undergraduates pursuing a bachelor’s degree were psychology majors (National Center for Education Statistics, 2016).

5. Go forth and make the world a better place!

If you are graduating soon, and if working in the public health field seems even remotely interesting to you, go out and explore your options. There are numerous ways to make an impact, and public health can provide you with many opportunities to make a difference. Considering the extensive overlap in core values between psychology and public health, you are very likely to find an avenue of public health that complements your interests and can make you a stronger contender in the workforce.

References


Michelle P. Lee is currently a master of public health student with a concentration in biostatistics at Georgia State University’s School of Public Health. Prior to that, she received her BA in public health from the University of California, Berkeley and worked for several years in nonprofit and government organizations in public health capacities that have ranged from health communications, to surveillance and epidemiology, to public health preparedness.

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Betty S. Lai, PhD, is an assistant professor in the Division of Epidemiology and Biostatistics in the School of Public Health at Georgia State University. She received her PhD in clinical psychology, with a specialization in children and families, from the University of Miami, and she completed her clinical internship in the Department of Psychiatry and Behavioral Sciences of the Stanford University School of Medicine. Dr. Lai is a Next Generation of Hazard and Disasters Researchers Fellow, and she is also a National Scholar for the Academy on Violence and Abuse. Dr. Lai’s research focuses on how children and families respond to disasters and other traumatic stressors. Her recent work has focused on children’s mental health symptoms, physical health symptoms, and school functioning following disasters (e.g., Hurricanes Katrina, Ike, Charley, bushfires in Australia). Her work also examines how advanced statistical modeling strategies may be applied to better understand how to minimize the effects of disasters on children’s functioning.
Most students are aware that they will have to provide letters of recommendation as part of the graduate application packet and that they are an important factor in admissions (Norcross, Kohout, & Wicherski, 2005). What might be less well-known is the format of these letters and how they can be used to help you write your personal statement. This brief article is intended to help you understand and use the recommendation form to your advantage as you prepare your graduate application.

Thinking Beyond the Classroom

Many years ago, when we were undergraduate students, we assumed that the purpose of the letter of recommendation was to help graduate selection committees realize what excellent students we were in the classroom so that they would simultaneously appreciate our ability to get good grades in graduate school. Like students today, we thought a great deal about our grades and grade point average, the tangible measures of success. When we started preparing for graduate school and considering potential letter writers, we focused on faculty in whose classes we earned the highest grades. This strategy might be fairly common but perhaps not the wisest.

Brown (2004) compared the personal statements of successful and unsuccessful graduate applicants and discovered that successful applicants emphasized future endeavors and an identity of being a young scientist or emerging professional. Students who simply highlighted their current academic accomplishments were not the ones who were selected. In other words, your application and your letters of recommendation should not be just about the grades you earned in your undergraduate classes. Grade point averages are important selection criteria. However, they are often used early in the process to help narrow the number of applicants. Students who meet a threshold GPA and GRE score continue to be examined, while others are no longer considered. Once grades get a student through that initial hurdle, their importance diminishes (see Handelsman, VanderStoep, & Landrum, 2013, for a brief discussion of this process). The selection committee then turns its attention to identifying students who can succeed as young professionals not only in the graduate classroom but in the subsequent job market.

Letters of recommendation inform this process because they help reviewers more fully understand the individual applicant’s personality, potential, and strengths, and they offer some predictive value regarding
which students will ultimately graduate (Kuncel, Kochevar, & Ones, 2014). This information is not completely contained in a grade point average. Recommenders typically are provided with a Likert-type scale and asked to rate the applicant on a variety of skills and characteristics. In many cases, this form is mandatory, whereas writing a full letter to accompany the form is optional. Appleby, Keenan, and Mauer (1999) identified the most common skills and characteristics found on these forms, and Appleby and Appleby (2017) discussed them in more detail. We recently examined recommendation forms from a variety of graduate programs and found that the same characteristics are valued today, with new additions to the list found here and there (see Figure 1). Notice the common themes, but also the breadth of characteristics on which you might be evaluated. We see “appreciation of diversity” more frequently than we did in the past and were both surprised to see “professional appearance” occasionally appear on forms (especially for students entering the field of education).

This list of descriptors should motivate you to carefully select your letter writers. You need recommender who have witnessed these characteristics, which might not be possible if your only interaction has been two days a week in the classroom. You do not want your recommenders to select “not applicable/unknown” or to leave a specific rating blank. Your goal in the application is to convey as much information to the selection committee as possible, and blank responses not only fail to convey information, they may reduce the impact of the recommendation by implying that your recommender does not know you well.

This list of descriptors should also help you realize that you have been auditioning for this letter of recommendation since you first met your recommenders. Norcross and Cannon (2008) cleverly stated that “you’re writing your own letter of recommendation.” Their article, along with that of Appleby and Appleby (2017), provide specific advice on how to demonstrate valued characteristics to your letter writers. As current faculty members, we know how difficult it is to rate personal characteristics when all we know about some students is that they came to class and earned top grades. (And, imagine the difficulty of evaluating “professional appearance” when you have only seen a student in an 8:00 am class wearing sweatpants every day!) Every personal interaction that you have with your recommenders is revealing to them who you are and what you value; this information is being conveyed through your words, attitude, behavior, and appearance. You truly are “writing your own letter of recommendation” (Norcross & Cannon, 2008).

Using Your Letters to Inform Your Personal Statement

In addition to being a critical component of graduate admission themselves, letters of recommendation can further enhance your application by helping you write your personal statement. Similar to letters of recommendation, students often think the purpose of the personal statement is to convince the selection committee that they are good students who can earn good grades in graduate school. However, most committee faculty already realize this if your application has gotten to the point in the process where your statement is being reviewed; your success as a student was established with your transcript. You do not want to waste the limited space available in a personal statement repeating information of which the selection committee is already aware.

Before writing your personal statement, examine the recommendation forms for the schools to which you plan to apply. Create a list of the characteristics on which you will be evaluated. These are the skills that the graduate faculty believe you need in order to succeed in their program and subsequently obtain a job. When you see the same characteristics across multiple schools, these are likely to be universally valued. Thus, these are the skills that you need to emphasize in your personal statement.

The instructions for your personal statement will likely include a list of questions, sometimes very specific and sometimes very vague, that need to be answered. Figure out how you plan to organize the answers to these questions in your personal statement (see Sleigh, 2017, for assistance).

Then, think about how you can incorporate the specific skills and characteristics that the school is seeking into these paragraphs. Again, we urge you to think beyond the classroom setting. Your leadership positions, hobbies, volunteer work, jobs, and life experiences are all situations in which you may have developed or exhibited these skills. Here’s an example of using a personal experience as evidence of an appreciation of diversity: “My parents are missionaries, and...”

**Figure 1**

**List of Descriptors**

- Ability to analyze problems and formulate solutions
- Ability to work under pressure
- Ability to work with others/teamwork
- Adaptability
- Analytic/mathematical abilities
- Breadth of general knowledge
- Dependability
- Discipline
- Emotional maturity/maturity level
- Energy level
- Initiative
- Integrity
- Interpersonal skills
- Knowledge in subject of proposed study
- Laboratory skills
- Leadership potential
- Motivation for graduate study
- Oral communication skills
- Originality/intellectual creativity
- Perseverance toward goals
- Planning and organizing ability
- Potential as a teacher
- Potential as a researcher
- Professional appearance
- Professionalism
- Responsibility
- Responsiveness to feedback
- Self-awareness
- Self-confidence
- Sensitivity to others/awareness of diversity
- Written communication skills
as we traveled across three continents helping impoverished communities dig wells for fresh water, I developed an appreciation for the incredible diversity of culture and economic status that characterizes our world." Your goal is to clearly describe how something you have done reveals a skill that you have.

You might think of your personal statement as the letter of recommendation you are writing for yourself. If your “letter” matches those provided by others, the overall message is strengthened and the consistency makes it easier for the selection committee to establish a mental image of you as an individual. For example, if your letter writers emphasize your emotional maturity, it will enhance the believability if your personal statement also reveals evidence of your emotional maturity. As a recommender, I might know that you were the treasurer of Psi Chi or a summer camp counselor. I can use this knowledge to some extent to illustrate your characteristics. However, my perspective of what you did in those positions is limited. You have the advantage of knowing the details of the context and your role. It is to your advantage to take an experience that is mentioned in a recommender’s letter and repeat it from a different perspective. The repetition helps the review committee connect the associated characteristic with you as an individual.

We can’t emphasize enough that you want the selection committee members to see you as a person rather than as merely one of the many applications they are reviewing.

One criticism of letters of recommendation is that they tend to be universally positive, and thus, do not differentiate among applicants (Stedman, Hatch, & Schoenfeld, 2009). Your personal statement is an opportunity to overcome this problem by taking the ratings provided by your recommender and elaborating on them. You can provide detail that will further convince the selection committee of the validity of these descriptors. Morgan, Elder, and King (2013) found that, when recommenders are required to elaborate on their ratings, the letters have less bias and are thus a better selection tool. Your personal statement is an external way to elaborate on the recommender’s ratings, one that you control.

Once your personal statement is written, a good strategy is to look at each paragraph. List the skills and characteristics that you have addressed in each paragraph one by one. Then, compare this list to the characteristics on your recommendation forms. Make sure that your overall emphasis is in line with what the graduate school values. Now, this being stated, you may have described personal aspects that go beyond the recommendation form characteristics. This is perfectly appropriate, particularly if your highlighted traits complement the form and, as Brown (2004) suggested, speak to your future potential as a young researcher, practitioner, or professional. Hopefully, seeing the link between your letters of recommendation and personal statement will make both seem (slightly) more manageable.

References


Merry J. Sleigh, PhD, is an associate professor at Winthrop University (SC) and Director of Undergraduate Research for the College of Arts and Sciences. She was Psi Chi’s Southeastern Regional Vice-President from 2012–16. Dr. Sleigh has won numerous awards for her mentoring, teaching, and advising. She is particularly passionate about helping students develop skills for future success through participation in undergraduate research.

Darren R. Ritzer, PhD, is currently an associate professor of psychology at Winthrop University. He earned his undergraduate degree in psychology from Lafayette College in Easton, PA and, he earned his PhD in industrial/organizational psychology from Virginia Tech. Before arriving at Winthrop University, Dr. Ritzer was a major in the U.S. Army.
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Ten Job Skills You Already Have
Impress present or future employers by being able to communicate the 10 skills that all psychology students develop. This concise list includes specific examples that you can use in your resumé and during interviews to show exactly when and how you developed each skill.
There are few things in the life of an undergraduate psychology major that cause more dread than applying to graduate school. This dread leads to immense stress, occasional tears, and a huge amount of avoidance. Unfortunately, just as was true for Harry Potter when forced to face Voldemort in the Forbidden Forest, the dread must be overcome and the graduate application conquered in order to claim victory by defeating the Dark Lord: obtaining a graduate degree, a professional license, and becoming a very important muggle. Victory is not easy.

The dread caused by the application process is so strong that many undergraduates would rather confront Voldemort—armed only with Ron Weasley’s wand—than to proceed into the arduous task of completing their applications.

So what is so foreboding about the application process? The smothering uncertainty of the whole thing. The graduate application process is complicated and requires work—a cause of procrastination and avoidance in itself—but, more than just the effort involved, it is unclear...
what exactly is needed for a competitive graduate application, as well as the odds of a successful one. Think about everything that is needed for a complete application. GRE scores and GPA? What is high enough for these scores? What is too low? Securing letters of recommendation? Who do I ask? When do I ask? Writing a personal statement? What do I say? Completing any required essays or writing samples. Really? And different essays for each program? And these are just the uncertainties that fit into our word limit!

Palms sweaty, knees weak, arms heavy? Blindly putting an application together, unknowing if it’s competitive enough for your program, can be a huge source of stress and potential disappointment! If only it were possible to talk with graduate faculty and ask them, “What are you really looking for in an application?” Unfortunately, a personal, direct interview that would provide this type insight is not possible for most applicants. So, we did it for you.

The National Survey of Applicant Expectations in Psychology (NSAEP; funded in part by a Mamie Phipps Clark grant from Psi Chi) surveyed graduate faculty from across the United States on topics related to the graduate application process. One question asked the respondents for the top piece of advice they would share with applicants. The question received 581 responses from faculty members across the nation.

After reading through the answers (yes, all of them), we categorized responses into six dimensions of the graduate application process. Figure 1 shows that the category with the most advice was “Goodness of Fit” (41% of the comments), followed by research experience (34%), and then (with a much smaller market share) writing a high-quality statement of purpose or cover letter (12%), the applicant’s GPA and GRE scores (8%), and the quality of letters of recommendation (5%). The following sections elaborate on the specific advice given in each of these categories (see Figure 1).

**Goodness of Fit**
Graduate training is a completely different type of training from what is provided by undergraduate programs. Undergraduate programs offer generalized training in large classes. Graduate programs are more of a mentor model of training. Classes are smaller and graduate faculty spend more time with each individual student.

Admissions is not as much about picking students who can complete graduate degrees, but rather picking students who will benefit most from the program. The majority of students applying to graduate programs are intellectually capable of succeeding in graduate school and have the ambition to succeed. So, graduate programs tend to look most for students who will complement work they are doing in their labs and clinics. In short, graduate admissions are about fit. For example:

Do your homework: Research the graduate program carefully so that you can talk specifically about the fit between your professional goals and the kinds of expertise they have to offer.

And:

Be thoughtful about what you're
applying to and why. What is your career goal and how will this program help you get there? Especially for psychology PhD programs, your fit with the graduate program (and often with a particular advisor/research supervisor) is essential. You could be the best applicant in an objective sense (scores, GPA, honors) but if you’re saying you’re really interested in XYZ and the program doesn’t do that, it’s not a good fit. You won’t get in and it’s a waste of time and money.

Both of these quotes speak directly to the “fit” between you and potential programs. In order to maximize fit, here are a couple suggestions for you to keep in mind as you research programs:

First, remember you’ll be working closely with faculty and other students in the program for several years.

Apply to programs based on fit (professional goals, research interests) and not on aspects such as location.

Make certain the programs you apply to are in areas that you can enjoy living in, but the first priority should be finding programs that will provide the experiences and the network that will get you into the career that provides you the lifestyle and opportunities that you want.

Second, pay attention to where students who graduate from particular programs are working after graduation. As commented by one respondent:

Before you apply, check out where the students who earn their PHD with a particular program get jobs. Is that what you want to do?

Where graduates are employed speaks highly to the type of training the program provides. Also, the alumni network of the program will become a major part of your professional network. If the graduates of the program aren’t working in the areas that you desire, they won’t be able to help open doors for you.

In researching graduate programs, remember it is about both the program as a whole, and the individual faculty members who are available to serve as mentors.

Make sure there is at least one faculty member in the graduate program that you really want to work with and that you can explain why that person should be able to help you toward your goals.

And:

We select based on interest match between our faculty and the applicant. So students need to learn about the faculty, choose potential advisors that truly match their interests, and do a good job articulating that match in their personal statement.

Choosing the correct mentor and graduate program is extremely important. As reflected in multiple responses to the survey, it’s important to initiate your relationship with programs before sending in applications. One of the best ways to do this is to e-mail the program directors and potential research advisors. As an applicant, it’s in your best interest to be open about your research interests and professional objectives when communicating with potential mentors. Ask the mentor if they and the program will be accepting new students and make these connections early!

Begin building relationships early with potential graduate programs because the week before applications are due is too late. Waiting until the last minute speaks poorly to your commitment to their program and preparation for graduate school.

Research Experience

Being engaged in research is a critical part of showing commitment to a professional career in psychology. Research, regardless if it’s in the same area you want to work in, shows: (a) the applicant is engaged beyond the classroom and (b) the applicant has developed critical thinking, time management, and interpersonal skills that are needed in graduate school.

In the NSAEp, forty respondents (7% of the total) stated that their current research interest is in psychology. The consistency in this wording makes clear that it’s best to get research experience directly related to your future graduate plans. As much as possible, seek mentoring from psychologists well-known in your desired field. However, graduate admissions committees understand your experiences will be constrained by the faculty at your undergraduate institutions. The type of research you conduct is secondary to your level of involvement in the research. Consider these two answers:

Be clear, specific, and concrete in your evaluation of your research experiences. Present your work, network with professionals, and practice skills necessary to be a successful graduate student.

Get immersed in a research lab: develop your own ideas; don’t just show up and do the work. Better yet, conduct your own research and present/publish it somewhere.

Along these lines:

Act as much like a graduate student as you can: initiate research or take an active role in shaping the direction of the research you are involved in, and take responsibility for submitting the research to conferences or for publication. Even if your undergraduate research is not exactly in the area you want to do your graduate work in, being involved with all aspects of the research process from start to finish shows me that you understand how research works and know enough about whether you enjoy it to be successful in a research-oriented graduate program.

The theme of these two responses—deep involvement in research—was reflected in dozens of responses. Several respondents mentioned that depth of involvement in research will become particularly evident during interviews as committees ask about your experiences. The interview is often where your enthusiasm and knowledge for previous research experiences is best evaluated.

Gaining valuable research experience is a major perk of membership in Psi Chi. The Psi Chi grants and awards programs are the perfect opportunity to demonstrate your enthusiasm for research. Applying for these grants and awards lets you write about your interests and shows initiative. Winning a Psi Chi grant/award speaks highly of the quality of your ideas, writing, and potential. Participating in Psi Chi regional conventions provides an opportunity to present your work, network with professionals, and practice skills necessary to be a successful graduate student.

Personal Statement

The personal statement is critical to your application because this is where you market yourself to the graduate committee. You have the knowledge and skills needed to succeed in graduate school. The personal statement is your opportunity to explain:

Be clear, specific, and concrete in your...
personal statement. Address goodness of fit between applicant and the graduate program. Articulate clearly professional development and future career goals in terms of the graduate program that you are applying to.

Most applicants will apply to more than one graduate program. It is very difficult (impossible?) to write a single strong personal statement that will apply equally well to each of these programs. It’s necessary to change the letter to match each program:

Customize their statement to the program, show you’ve done your homework about our program and make as clear as possible the match between your interests and our expertise.

As you work on your personal statement, we would recommend keeping the following comment in mind:

Beyond the obvious (good grades, good scores on GRE), students should be clear on their interests and goals and make it clear why they want to go to graduate school to study this HERE.

In the personal statement, I see a lot of what students have done in the past, and that’s really useful when it’s in the service of where you’re headed. We are making an investment in the student: It costs money to train you, it takes time too, and we are foregoing other students when we select you, so we need to know it is going to be worth your while.

Academic Success: GPA and GRE

GPA and GRE tend to be a sensitive subject. Members of graduate review committees understand that these scores can be influenced by a number of different factors (e.g., “I’m not a good test taker” or “It took me a couple of semesters to get my bearings as a college student.”), but they also know that these scores can be useful in understanding an applicant’s abilities and commitment to academics. Scores are frequently used by programs as a first filter of applications:

- Get your GREs and GPAs up to a level that your letters of recommendation and description of skills/experiences get considered. The first pass of most review processes is to eliminate applications on the basis of minimum scores or GPA.

- It’s important to understand that GPA and GRE scores won’t get you a spot in a graduate program, but they could cost you a spot in a program. For example:
  - GPA and GRE scores are necessary but not sufficient. We consider only applicants who have a [specific GPA and GRE combination], but once you make that cut, we care about fit, research experience, and strong letters of recommendation.
  - What is a high GPA? What is a good score on the GRE? This is hard to answer directly. As with so much of the application process, this depends on where you’re applying. The more competitive the program, the higher they can set this bar. There are excellent resources for determining how your GPA and GRE scores compare to programs. For APA accredited programs, information on typical ranges for these scores are published in the APA’s annual publication, Graduate Study in Psychology (http://www.apa.org/pubs/books/4270100.aspx). For programs that don’t publish their scores, contacting the admissions director for the program can usually net some useful information.
  - What is important to remember here is this: strong academic scores can be pulled down by lack of experience while weaker scores can be brought up by solid experiences.

Letters of Recommendation

Letters of recommendation are an important element of the graduate application. The letter allows you to choose individuals that know you well to argue your case to the admissions committee. When selecting your letter writers, keep in mind the following advice:

- Be very careful in selecting individuals for your recommendation letters. I have seen lukewarm letters and wondered why the student selected this person to write a letter. If a person does not know you well, do not select them.

The choice of letter writer says a lot about how you approached your undergraduate education. A student who has three letter writers who only know them from class was likely not engaged outside of the formal coursework. Part of getting involved in research is building the rapport with a faculty member that is needed to get a strong letter of recommendation:

Build your research experience so that you can both describe in detail the work you have done and receive a strong letter from a faculty member who has supervised or observed your research work.

Conclusion

As you read through these comments and suggestions, we hope you took away one major lesson about the graduate application process: Be strategic! Remember:

- Make sure your packet communicates what distinguishes you from other applicants. Plenty of applicants will have good grades and research experience. What is unique within the classes you’ve taken, your background, or your personal experiences that can help illustrate your interests in a particular research area?

- Harry would have no chance of defeating Voldemort without a plan and the right tools. The same is true of your graduate application process. You are now better prepared to develop and execute your graduate battle plan. So, get to conquering!

Shawn R. Charlton, PhD, earned a BA degree from Utah State University (2011) and a MS and PhD from the University of California, San Diego (2006). His research interests explore decision-making in a variety of contexts. Research on professional development in higher education is a growing emphasis for his Behavioral and Social Decisions Laboratory.

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Can Toughness Be Hazardous to Your Health?

Matthew C. Genuchi, PhD
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women (Kessler et al., 2005). Furthermore, men seek out professional medical and psychological help much less often than women and are much more likely to die from suicide (Centers for Disease Control and Prevention, 2015). What does all of this mean to the study of men and masculinity, especially related to issues such as depression and suicide?

Conformity to Masculine Norms and Depression

Interestingly, at one point in the study of gender and mental health, lower rates of depression in men were thought to mean that perhaps men were somewhat protected from depression, especially when masculinity was primarily conceptualized as consisting of a group of socially desirable characteristics such as being active, competitive, self-confident, and independent (Spence, Helmrich, & Stapp, 1978). Research focused on masculinity and depression supported the idea of masculinity as protective because generally participants who endorsed higher levels of masculinity reported less depression (Sharpe & Heppner, 1991).

However, the perception of masculinity has broadened to also conceptualize masculinity as consisting of a group of socially established rules and standards that influence men’s gendered thoughts, emotions, and behavior (Mahalik et al., 2003). Furthermore, men may or may not conform to these established rules, which can significantly influence their psychological and physical health. For example, conformity might appear to be boys not crying in front of others or refraining from expressing their fears, which many boys learn allows them to avoid taunting and even physical harm by others. Unfortunately, the consequences of such conformity can be boys developing into men who are limited in their ability to fully express their emotional experience (O’Neil, 2013) and avoid seeking out help when needed (Addis & Mahalik, 2003).

Although many of us likely have a sense of what these masculine rules or norms look like, a number of researchers have focused on establishing and measuring them. A fairly encompassing list of the predominant masculine gender role norms in the United States includes winning, achievement/status, emotional control, risk-taking, violence, aggression, dominance, toughness, power over women, nonrelational sex, self-reliance, primacy of work, and heterosexual self-presentation (Levant, Rankin, Williams, Hasan, & Smalley, 2010; Mahalik et al., 2003). More recent study on depression in men has included a significant focus on how conformity to masculine gender role norms is related to various depressive symptoms.

More specifically, some theorists and researchers have critiqued our standard diagnostic models of depression by noting that the lower rates of depression in men may exist because some men may experience depression differently than women (Cochran & Rabinowitz, 2000; Kilmartin, 2005). Instead, some men who conform more strongly to masculine gender role norms may experience and express their depression in a manner that is more consistent with their masculinity. What might this masculine depression look like? Instead of appearing primarily sad, down, and blue, these men may present as angry, irritable, and more hostile (Genuchi, 2015). Men may also engage in behaviors that allow them to manage their depressive experience in a way that they have learned is more consistent with masculine gender role norms such as drinking alcohol, using drugs, sexual activity, and working (Magovcevic & Addis, 2008). When engaging in such behaviors, men may instead “mask” their depression and not appear depressed in characteristic ways (Cochran & Rabinowitz, 2003).

Accurately identifying symptoms is not the only major barrier to helping men with depression. Another major concern with men suffering from any mental health issue, including depression, is that of seeking out help. Men seek out help for psychological concerns at much lower rates than women, and are therefore much less likely to receive the necessary support (personal or professional) and treatment needed when they experience depression. Good and Wood (1995) described men who conform to traditional masculine norms as men who are in “double jeopardy” because they are at an increased risk for depression and less likely to seek out help. We might further this analogy and state that many men suffering from depression and experiencing suicidal thoughts are further jeopardized because of their risk of death from suicide.

Conformity to Masculine Norms and Suicide

Researchers are helping us learn much more about the relationship between conformity to masculine norms and men’s experiences of suicidal thoughts and behaviors. First, men tend to use more violent and therefore lethal means of suicide such as firearms, hanging, and jumping (Miller, Lippman, Azrael, & Hemenway, 2007). Qualitative research provides further insight into some of the nuances surrounding masculinity and suicide. Men have described suicide as an acceptable “escape” because they did not reach certain traditional masculine ideals in their lives (Oliffe, Ogrodniczuk, Bottruff, Johnson, and Hoyak, 2010). The same men reported hesitancy to disclose their suicidality, even to treatment providers, because of fears surrounding vulnerability, weakness, and loss of control. Other men have described awareness of how a “real man” should handle distress as well as stigma associated with seeking help and therefore often did not seek out help for...
their suicidal thoughts until they were in acute crisis (Jordan et al., 2012). Some men have even articulated that the option of suicide provided them with the perception of control and power when they felt out of control and powerless with regard to all other areas of their lives (Emslie, Ridge, Ziebland, & Hunt, 2005). Therefore, the intersection between masculine norms and suicide is established and quite concerning.

Moving Forward

The picture painted to this point surrounding men, masculinity, depression, and suicide is a striking and even disturbing one. Now that you are aware of this sobering information and important research, what might be some areas of further consideration or resources?

1. The National Institute of Mental Health (NIMH) has developed a public health awareness campaign titled, *Real Men Real Depression*. The Real Men Real Depression website contains a number of resources to help everyone better understand depression in men. The site includes a series of very powerful video testimonies of men explaining their personal experiences with depression.

2. *Man Therapy* is a website that contains a number of resources to educate men about mental health, masculinity, and resources for seeking out help. Dr. Rich Mahagony, the man therapist, engages site visitors in a humorous and disarming manner in order to provide information specifically targeted to men who conform more to masculine norms.

3. Although conformity to masculine norms may place some men at increased risk for mental health concerns, masculinity can also be a source of healthy strength and motivation for men (Kisielica & Englar-Carlson, 2010). For instance, a man who conforms more strongly to traditional masculine norms may strongly identify with his role as a provider and positive father figure in his family. Such areas of his masculinity can be focused on as strengths and areas of motivation for seeking out support surrounding his depression and/or thoughts of self-harm.

4. Berger, Addis, Green, Mackowiack, and Goldberg (2012) found men, regardless of their conformity to masculine norms, to be quite hesitant to accept the label of “depressed” and more willing to accept the label “anxious.” These findings remind us to be extremely thoughtful in our use of language and labels when attempting to engage men experiencing psychological distress. In the same study, Berger et al. (2012) found that men preferred psychotherapy to other forms of help seeking (e.g., friends/family, psychiatrist, and community programs), though these men were still generally ambivalent about psychotherapy. Though there is no “one size fits all” approach for men, we must similarly consider forms of help that may be more amenable to men.

5. For a host of other resources focused on men’s studies, spend some time investigating Division 51 of the American Psychological Association (The Society for the Psychological Study of Men and Masculinity), and investigate some of the excellent scientific journals specifically targeted toward research on men and masculinity: *Psychology of Men and Masculinity, Journal of Men’s Studies, American Journal of Men’s Health*, and the *International Journal of Men’s Health.*

References


Matthew C. Genuchi, PhD, is an assistant professor of psychology at Boise State University (ID). He received his BA in psychology from Baylor University (TX), and his MA and PhD in counseling psychology from the University of Denver (CO). He completed his APA-accredited doctoral internship at the University of Idaho Counseling and Testing Center. Dr. Genuchi’s primary research area is in the psychology of men and masculinity, specifically how masculine role socialization affects depressive symptom presentation. He has published research focused on anger, aggression, hostility, and substance use as components of atypical depression in men. Because he is trained as a practitioner as well as a researcher, Dr. Genuchi also maintains interests in clinical issues including clinical supervision and methods for engaging men in the counseling process. Dr. Genuchi believes strongly in mentorship of undergraduate psychology students and has worked with a number of undergraduate research and teaching assistants during his time at Boise State. He is a member of the American Psychological Association as well as APA’s Division 51, the Society for the Psychological Study of Men and Masculinity.
You’re Admitted!

But Which Program Should You Attend?

Part II

Kelly C. Burke and Bette L. Bottoms, PhD
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In the last issue of Eye on Psi Chi, we covered several important factors you should think about when deciding among offers of admission from various graduate programs including the fit between your research and your advisor, the quality of the program, and the training opportunities offered to you. We’d like to continue this discussion now by looking at a few additional factors you should take into account.

Socioemotional Environment of the Program

First, it is necessary to consider the overall atmosphere and environment of the department, program/division, and research laboratory you will be working in. The socioemotional fit between you and those you will be spending the majority of your time with over the next 5 or 6 years is key. Did you feel comfortable when you visited the school and met with the current graduate students, your potential advisor, and the other faculty? Will you fit in and “mesh” with those around you?

Consider whether graduate students collaborate with faculty members other than their major advisor within the program and/or department and beyond. If they do, you’re likely to have more opportunities. That is, if you’re interested in examining a certain concept or approach, but your primary advisor isn’t as knowledgeable in that area as someone else, you might be able to collaborate with another professor who does specialize in this area and who can provide you with valuable guidance that will enrich your main program of research with your advisor. Exposure to different perspectives or approaches can also benefit you. Furthermore, if something happens, and your primary advisor leaves, or you choose to leave that advisor’s laboratory, having a strong relationship with a different faculty member might help, perhaps even giving you an alternative nest in which to land. Keep in mind, however, that you will be very busy during graduate school, and you don’t want to spread yourself too thin across multiple research labs or projects. You will also want to keep an open line of communication between you, your primary advisor, and any other professors you collaborate with so that everyone is aware of what you’re working on and with whom.

Another way to evaluate the overall environment of the program is to find out if the graduate students’ relationships within and outside of school are competitive or collaborative (Choukas-Bradley, 2011). If you prefer a collaborative environment, then you should think twice before joining a research laboratory that fosters highly competitive relationships. Alternatively, if competition motivates you, then a competitive environment might be good for you. But be careful, we mean healthy competitive relationships. Remember that you’re going to be working on research projects either jointly with other students, or on projects that are related, for many years. If you aren’t willing to put your competitive spirit aside when it’s necessary for collaboration, your work and the work of fellow graduate students might suffer.

You can also determine the atmosphere of the program and your advisor’s research laboratory by considering how graduate students seem to get along with each other. Do they enjoy each other’s company or do they seem to have rivalries and feuds? For that matter, you should consider whether the faculty members get along because bad relationships between faculty can
sometimes (but not always) spill over into graduate student relationships. When you consider this, be sure not to base your judgment on what you hear from one or two people. Instead, go by what you hear (and don’t hear) from most faculty and students. You don’t want to judge an entire program by one or two disgruntled students (or faculty).

Assessing the Financial Package
You should also evaluate the resources for research and financial packages that are offered by different programs. Most high-quality graduate programs in psychology, especially research-oriented programs, are quite different than professional schools (e.g., business, law, medicine). Instead of charging you tuition, many psychology programs pay you to attend by covering your tuition and offering you a teaching or research assistantship. Consider exactly what will be included in your financial package—what level of tuition remission will you receive? Will it cover the various student fees charged by the university (activity, transportation, health insurance)? What health insurance options are offered? If you’re offered teaching or research assistantships, how many hours per week will you be working and what will the stipend be? If the assistance is a fellowship, is service expected in return (it shouldn’t be—a fellowship should free you from other work so you can focus on your research and classes)? How many years are you guaranteed funding or assistance? Will your advisor’s work be funded by grants that might support your stipend and research? Does the department have funds for student research? Are there opportunities to apply for fellowships? As you review all of these financial components and compare among schools, also consider the cost of living in that area of the country and how the financial package approaches this cost (Klement, 2011).

You also want to find out if circumstances might necessitate you picking up the cost of your research. The school you are considering should offer you access to the facilities and equipment you will need to conduct your research. Depending on what you want to study, your needs might include participant time on an MRI machine, funds to pay participants, etc. (Norcross & Hogan, n.d.). Will your advisor cover these expenses? Does the department or college offer student research grants? Are your advisor’s graduate advisees successful in winning external grants?

Once you’ve determined the true financial benefits and costs of the schools you are considering, how should you weigh that information in your decision? On the one hand, the level of financial assistance through tuition remission and a stipend isn’t likely to differ too much among quality programs, and in the long run, small differences in your financial package won’t matter much and shouldn’t affect your decision unless all other things are equal. (That is, if your primary concern is how much money you will make while in graduate school, you’re in the wrong field!) But large differences among programs should influence your decision. For example, if one of your choices offers you no stipend or tuition remission, and another reasonable choice does, this could mean the difference between a clear financial start after graduation versus many years of crushing debt.

Quality of Life
Finally, think about personal factors that are important to you. How do you define quality of life, and will you find elements that sustain quality of life in this program? After all, if you’re really unhappy, you might not perform well. Is there proximity to your family (or lack thereof!) that will make you happy? Can you find a balance here of both personal and professional factors? Does this university provide what you need in terms of its support for the diversity of the students and faculty in terms of racial, ethnic, LGBTQ, disability, religion, and other considerations? Does this physical area of the country offer a place to escape that you enjoy? Even as we raise that issue, however, we also offer a strong caution: Although it might be tempting to choose a school because it is located within the comfort zone of your family and friends, or simply because you are familiar with or want to live in that particular physical area, think hard before making it the determining factor. Five (or six) years is actually a short amount of time in the long run, and those key years will lay the foundation for the entire rest of your professional life. You want to attend the graduate program that will give you the best possible training, that will launch you to the best possible job and the best chances of life-long success. Realistically, you can live anywhere for five years (case in point, the second author obtained her doctoral degree from the State University of New York at BUFFALO). If you’re working as hard as you should be to be successful in graduate school, you won’t have much time to think about your surroundings outside of the psychology department building anyway.

How to Gather the Information
All of the information mentioned above will be very useful to you, but you need to know how to gather it in order to be able to utilize it. To begin with, you can review a program or professor’s website for many of the more general questions. A website can tell you only so much, however. You should speak directly with your potential advisor in-depth (preferably in person, but at least via a program such as Skype) to assess the socioemotional fit between the two of you as well as the match between each of your research interests. Your advisor can also inform you of the training opportunities available within the department.

Speaking with current and former graduate students who worked with your potential advisor will also provide you with invaluable information. These individuals are arguably one of your best resources because they have first-hand knowledge of your potential advisor, the program, and the school. Furthermore, they probably don’t have anything to gain or lose by you joining the program, so they should be an honest source of information. You can refer to Oudekerk and Bottoms (2007) for useful questions to ask graduate students, your potential advisor, and other faculty members.

It will also be extremely helpful for you to visit the schools you are considering if you haven’t already done so for an interview. This visit will allow you to evaluate the overall environment of the school, the program, and the research laboratory. You will also be able to examine the quality of life at the institution and any of the personal factors that might be important to you (Klement, 2011).

Conclusion
After you’ve gathered all the data and considered all the factors we’ve discussed, and discussed it all with close friends and mentors, you really just need to sit back...
and think about what your gut is telling you: Where will you feel most at home and happy? You’ll probably know the answer. We should also underscore this important point: Your gut might be telling you that you’re not ready for graduate school at all. Sometimes it’s difficult to really understand what graduate school is like until you interview at a program. If it isn’t what you expected, if going to any program just doesn’t feel right, then you shouldn’t accept any offer. Instead, think about what alternative careers would make you happy. If you still think psychology might be for you, gather more information by volunteering at a mental health clinic or seeking more research experience. Either way—whether you’re feeling, “this program is it, this is where I belong” or, alternatively, “this just doesn’t feel like it should”—listen to what your gut feeling is telling you, and make the decision you believe is really in your best interests, not what someone else might want or what you think you “ought” to do. Some of the saddest moments in the second author’s professional life have been seeing students drop out of a program because they learned too late that graduate school wasn’t for them. But the happiest moments have been watching the successes of her students! So, make sure you want this before you accept any offer, then start reaping the benefits of excellent training. (One important footnote of caution to this paragraph: We aren’t encouraging you to rethink graduate school because of irrational self-doubts about your abilities. If you have a great record, the confidence of faculty who know you well, and a good program wants you, then believe in yourself and go. Google “imposter syndrome” for more on this point.)

In conclusion, we hope you found this article helpful! Good luck as you narrow down your choices. You have accomplished much to get this far, and a wonderful career awaits you in the field of psychology!

References

Kelly C. Burke writes this article having just been through this process herself. She obtained her bachelor’s degree from the University of Kansas, where she conducted research on in-group/out-group identification and entitlement. She will be a graduate student in the Social Psychology Program at the University of Illinois at Chicago in Fall 2016. She will study research in the field of psychology and law with her new advisor, Professor Bottoms.

Bette L. Bottoms, PhD, has been on the other side of the fence for 24 years. A professor at the University of Illinois at Chicago, she enjoys her work with graduate and undergraduate students on issues such as jury decision making in cases involving child and juvenile offenders. She has published widely within her field and won a dozen teaching and mentoring awards including awards from the national American Psychology/Law Society and the Society for the Teaching of Psychology. She obtained her BA from Randolph-Macon Woman’s College, her MA from the University of Denver, and her PhD from the State University of New York at Buffalo.

In conclusion, we hope you found this article helpful! Good luck as you narrow down your choices. You have accomplished much to get this far, and a wonderful career awaits you in the field of psychology!

References
This article is a reversed version of an old pedagogical technique called Show and Tell that is used to help children develop public speaking skills by requiring them to bring an object from home, show it to their classmates, and then tell the class interesting information about it. Thus far, the authors have provided you with information about an object from which they assume you are quite interested because you have chosen to read this article.

This object is a letter of recommendation (LOR)—or more precisely, at least three strong LORs—that you will need to gain acceptance to graduate school. Thus far in this series, we have helped you understand the purpose and importance of these documents, provided you with a strategy to prepare yourself to receive strong LORs by developing the skills, knowledge, and characteristics that graduate programs value in their applicants, and offered you a procedure to select appropriate LOR authors and then help these authors write you strong LORs. In other words, the authors have done the “telling” part of Show and Tell, but not the “showing” part.

It is now time to show you examples of paragraphs from real LORs written by the first author during his 40-year academic career to convince graduate school admissions committees that his students possess the skills, knowledge, and characteristics that they want to read about in LORs. These paragraphs—are printed in italics and arranged in order of the 12 most frequent applicant characteristics that graduate programs request LOR authors to rate (Appleby, Keenan, & Mauer, 1999)—are preceded by short paragraphs written by the second author (who has evaluated hundreds of LORs as the graduate coordinator of her department), which explain why the possession of these characteristics is crucial for success as a graduate student. When you finish reading these paragraphs, you will have fulfilled the desire of the authors of this article to both show you examples of what strong LORs contain and tell you about the nature and importance of these documents.
Motivated and Hardworking

Perhaps the most fundamental disposition a student must possess to be a successful graduate student is to be motivated and hardworking. Students can display their motivation and high work ethic in a number of ways in their undergraduate careers such as through their “active involvement” or volunteerism in on-campus clubs and groups or off-campus through professionally relevant organizations (Arnold & Horrigan, 2002, para. 8). Other ways students can show their motivation for the profession is by displaying a genuine interest and passion for the subject matter through showing enthusiasm for course material (Gomez, et al., 2011), consistently submitting high quality work, or by volunteering as a teaching or research assistant for a faculty member.

**John** exhibits one of the highest levels of motivation that I have experienced in an undergraduate student. He gave up a great deal to re-enter school—after a 17-year absence—and he is firmly committed to his classes in particular and his education in general. It is a true pleasure to have students like John in class who want to use the information they acquire to better their lives, their careers, and—ultimately—the lives of others. John is, of course, interested in earning high grades—which he does quite successfully—but I am firmly convinced that he works as hard as he does to acquire the knowledge, skills, and characteristics that are the student learning outcomes of his classes, rather than just to obtain high grades.

**Amber** has an exceptionally strong work ethic. She has worked for one of my colleagues (Gary Taylor) as a 20-hour per week assistant, and I am aware—because my office is next door to Gary’s lab—that she often puts in 30 to 40 hours per week. She does this because she knows that it is necessary to get the job done, and she does it willingly, efficiently, and with a wonderfully positive attitude.

High Intellectual/Scholarly Ability

Graduate school is intellectually rigorous and, therefore, requires strong scholarly ability. The faculty members who you ask to write LORs for you should be those who can speak to your high academic abilities and performance in the classroom (Appleby & Appleby, 2006). Skills such as writing, public speaking, problem solving, mastering difficult course material, and research skills should be some of the academic assets that faculty members choose to highlight your intellectual strengths. Other indicators of academic success, of course, are GRE scores and grade point average (GPA). It should be noted, however, that all GPAs are not equal. In the first author’s experience evaluating graduate level transcripts of prospective students, he tends to look for patterns of improvement if a student’s GPA is not as high as one would expect for a graduate applicant. If your grades indicate that you have improved throughout your undergraduate career, this can show graduate schools that you have made a conscientious effort to improve your academic skills over the years. There are, however, red flags that may point to potential academic problems such as low grades in program-specific or methods courses, withdrawals from classes, a high amount of easy electives, or a curriculum that shows no practical application of a student’s ability (Appleby, 2003). During your undergraduate career, make sure you steer clear of these “red flags!”

**John** is an exceptionally strong student. The class he took from me requires students to read a chapter of complex material each week, watch video lectures containing large quantities of information, complete a chapter in a comprehensive study guide, and participate in active learning exercises in class. John was always present, prepared, and willing to participate. He scored higher than any other student in the class on each of the five exams and, as a result, earned the only A+ in the class.

After excelling in my two classes and as my TA, **Ashley** continued her pursuit of academic excellence by not only graduating as an IUPUI Honors student, but also receiving our department’s highest academic award, which is bestowed on the graduating senior who has earned the highest cumulative GPA. She has also been named to IUPUI’s Top 100 Students list for the past two years, and last year she was further selected as one of IUPUI’s Top 10 Female Students, which is a truly incredible honor on a campus with 30,000+ students. I would be remiss if I did not include the fact that Ashley maintained her extraordinarily high academic record while also working 18 hours a week at an Indianapolis law firm.

Although she experienced a slow start during her first two years, **Geeta** has transformed herself into an excellent student. Even a cursory glance at her transcript reveals that she is on a strong, upward academic trajectory. I have been particularly impressed with the electives in which she has enrolled during the past year. Introduction to Law, Torts, Legal Research and Writing, and Ethics (all taken last summer and all resulting in final grades of “A”) have provided her with a strong undergraduate foundation in legal studies.

Although **Maddi** had been in the United States for only a few months—and English was not her native language—she performed extremely well in my class. She earned a final grade of A, which is not small feat because usually less than 5% of my class earns an A. I was amazed at how quickly Maddi became proficient in both English and psychology. She is very bright and a very quick study!
Buskist (2001, para 7) stated that “one of the most important activities in which an undergraduate can participate is research.” When you enter graduate school, you will be expected to have a well-developed array of research skills. Therefore, it is critical that, during your undergraduate career, you get involved in some type of research activity. When analyzing LORs, the first author seeks out descriptions of students that emphasize the ability to perform research in an effective and appropriate manner. Comments that highlight a student’s ethical responsibility when conducting research (e.g., adhering to appropriate APA guidelines to avoid plagiarism and successfully submitting a human subjects proposal for institutional review) effectively demonstrate that a student understands and is willing and able to make the commitments a successful researcher must possess. Other key factors that graduate faculty seek in LORs are specific research skills such as synthesizing peer-reviewed literature; choosing, designing, or implementing appropriate instrumentation; and analyzing statistical or qualitative data. Presenting and disseminating your research is also important. If a faculty member can express that you have presented your findings in a scholarly context, submitted your research to a professional publication, or published the findings of your research, this clearly indicates that you possess a high ethical commitment to the profession of psychology and understand the importance of sharing research findings in a professionally appropriate context.

Jessica is a skillful and experienced researcher. Our department offers its undergraduates a wide variety of research experiences, and Jessica has taken full advantage of our offer. As a very active member of our

Being a graduate student is challenging because it requires the demonstration of high levels of dedication, commitment, and responsibility. All of this can, unfortunately, lead to stress. Therefore, another key indicator of a student’s potential success in graduate school is the ability to successfully manage stress in an emotionally stable and mature manner. As Gomez et al. (2011, para. 11) indicated, “Informative comments about your classroom performance combined with a character reference make the strongest letters of recommendation.” You can display your strong, professional personality dispositions in a number of ways such as balancing a full-time job with your education or personal life, by completing all degree requirements in a timely (if not early!) fashion, or by volunteering for meaningful community work. Be aware that your behaviors in undergraduate school—both in and out of the classroom—reflect on your emotional stability and maturity and, therefore, your ability to be a successful graduate student.

It is important to know that Shawn has experienced some significant stressors during his undergraduate education that have tested both his emotional stability and his maturity. During these challenges, I have observed that Shawn has maintained his composure, exhibited a positive attitude, continued to produce high quality academic work, and—most importantly—developed effective ways to cope with similar stressors in the future.

One of the things that makes Ashley stand out in my mind as an emotionally mature and stable student is that she completed her degree in a very timely manner despite the fact that she is a single mother. Each of our graduating seniors must write a “senior reflection” essay, and I include the following quote from Ashley’s essay to provide you with an idea of how she turned a potentially college-stopping event (i.e., the birth of her child) into a college-motivating event. “When I graduate, my daughter will watch me accomplish one of the hardest tasks of my life. I have not earned a grade lower than a B since August 2000 thanks to her. Graduation will be a great experience for her to see and share with me.”

It is important to mention that Scott is a well-balanced, humane, and mature person. He has served as a Residence Assistant in his residence hall, a position that requires a great deal of energy, wisdom, and old-fashioned common sense. Scott has also volunteered his time and talents to a variety of good causes such as Special Olympics, the Red Cross, First Start Children’s Christmas Program, and the Physical Therapy Department of the Henry County Memorial Hospital. These types of experiences, and his ability to profit from them, will serve him well both in medical school and in his professional life as his world expands beyond the confines of undergraduate school.
Psychology Biology of Addictions research team, she has learned how to operate operant conditioning equipment and software; trained several strains of alcohol-preferring and nonpreferring rats; performed a variety of surgical, histological, and microinfusion techniques; used Excel and SPSS software to store and analyze data; and performed critical reviews of the neuroscience and addictions literature. She has also completed an independent research project on the role of the medial forebrain bundle in alcohol drinking behavior under the guidance of her faculty mentor.

David enrolled in my Capstone Seminar in Psychology, in which he worked as a member of a team that researched the face validity of the Collegiate Learning Assessment, a newly created and nationally standardized test that colleges and universities nationwide may begin requiring their graduating seniors to take. He headed the Data Analysis Team during this project, and exhibited an exceptionally strong work ethic by completing all of his tasks on-time (and even earlier in many instances), creating easy-to-comprehend graphs, and presenting his fellow researchers with the results of his statistical analyses in a professional and understandable manner. The good work of David and his classmates resulted in the presentation of their results at the National Assessment Institute at the invitation of Dr. Trudy Banta, the institute’s director. David’s presentation to a national audience at the Assessment Institute was poised, professional, and lucid. David was a very competent and enthusiastic participant in this project, his work was of the highest quality, and he demonstrated genuine competence in the every stage of the research process.

Being an effective and professional writer is essential for success in graduate school and, fortunately, writing is a skill that can be learned and perfected. Obviously, the best way to demonstrate that you are an effectual writer is by writing papers and assignments for class in a manner that reflects both stylistic competence and mastery of the subject matter. Professional writing is clear, concise, and organized. It is also devoid of spelling, grammatical, mechanical, and formatting errors. During your undergraduate career, you have a wonderful opportunity to refine your writing skills because you will get feedback on papers and other written assignments from your professors. One of the best ways to show that you are working on your writing skills is to take this feedback seriously and integrate it in your final assignments. Another important aspect related to your writing skills is your ability to be an ethical writer. Ethical writers in psychology cite sources appropriately throughout their writing by following appropriate APA formatting guidelines in all aspects of their written work. Students whose LOR authors speak positively to these important skills are viewed positively by graduate admissions committees.

Scot served as both a TA and the Lead TA in my Orientation to the Major in Psychology class for five semesters. During that time, he helped me improve the class in many ways, one of which was his totally unsolicited offer to create a document that we titled “Scot’s Quick Guide to Navigating the 6th Edition of the APA Publication Manual” that he wrote in response to APA’s newest edition of its Publication Manual. He also edited the evaluation form used by my TAs to score student writing assignments to include specific reference points in the APA Publication Manual for each of its scoring parameters including categories to measure students’ ability to conform to APA’s ethical compliance guidelines for citing sources. I have taught thousands of psychology majors, and I would put Scot at the top of this list in regard to his ability to write in APA style, his ability to teach others how to write in APA style, and—perhaps most importantly in his capacity as a Lead TA—to mentor those who teach others how to write in APA style.

I would be remiss if I did not bring Eileen’s strong writing skills to your attention. Her experiences as both a psychology and an English major provided her with abundant opportunities to master basic writing skills (e.g., grammar, spelling, and punctuation) and to become fluent in three professional writing styles (i.e., APA and MLA), which have helped her to tailor manuscripts to the specifications of journals with different stylistic requirements. She also served as the senior editor of IUPUI’s literary magazine during which she collaborated with a team of editors to select submissions for each issue, made editorial suggestions, designed the layout, and worked with a publishing company to produce two issues of the magazine. Her strong writing skills and writing-related experiences have enabled her to be a coauthor on a manuscript published in Cancer Nursing and to be the lead author on an article in preparation that examines the psychometrics of the CES-D scale and its applications to cancer populations.
Speaking Skills

In the first author’s teaching experience, he has found that students generally fall into one of two categories: those who love and those who abhor public speaking. Regardless of which of these categories describes you, you should know that the ability to publicly speak in a professional manner is a skill that graduate admissions committees take very seriously. When you are in graduate school, your expectations to speak publicly will increase significantly. You will, of course, still be expected to give presentations in class. However, you will also be expected to present research at professional meetings and conferences, perhaps help teach and lecture in academic courses, and defend a thesis, dissertation, or project successfully in front of a committee composed of graduate faculty. Much like writing, public speaking is a skill that can be practiced and strengthened. Just being comfortable in front of a group does not make you an effective presenter. Excellent public speakers are those who are professionally confident and poised; who give carefully practiced, engaging, and organized presentations; and whose strong knowledge of their subject matter enable them to think on their feet by providing convincing answers to challenging questions.

Perhaps one of Katya’s most amazing honors was that her midterm and final papers in her Power of Persuasion speech class were chosen by her instructor to be exemplars for future classes and that her final speech received one of the highest grades in the class. For an international student who has been in the United States for only one year, these accomplishments are truly exceptional.

Andrea has a very effective presentation style that results from a combination of natural poise, careful preparation, and clear and precise articulation of ideas. The mini-lecture she presented in my History and Systems class was accompanied by clearly written handout and an appropriately chosen short video. The class learned the material she presented (as evidenced by their peer assessments of her lecture and their performance on the next test that covered its contents), and she was able to objectively evaluate her own performance and suggest ways to improve her future presentations in her self-assessment. She has further sharpened her oral skills during her Marian years by serving on the Freshman Orientation Staff and as an Admissions Department Student Assistant who gives prospective students and their parents campus tours.

Dr. Trudy Banta, who is one of IUPUI’s vice chancellors and a nationally known expert on assessment, was so impressed with the assessment project conducted by my Senior Capstone class that she asked me to invite several of my students to present a synopsis of our final report at the National Assessment Institute she hosts annually at IUPUI.

Kristina was one of the students I chose, and I could not provide a better choice. With very little coaching from me, she explained the survey portion of the project, presented its results, and ended with a conclusion which included questions for future research. I was immensely impressed—also Dr. Banta—with the clarity of her presentation and the poise with which she presented it. This was the first time that undergraduate students presented at this national conference, and Kristina and her fellow presenters were so impressive that Dr. Banta invited my B454 students to present their work at her next two conferences.

The final article in this three-article series will complete the set of 12 paragons (i.e., best examples) of passages taken from strong letters of recommendation written by the first author that enabled his students to be accepted into the graduate programs of their choice. This final set of most frequent applicant characteristics that graduate programs request LOR authors to rate are teaching skills or potential, works well with others, creative and original, strong knowledge of area of study, strong character or integrity, and special skills.

References


Drew C. Appleby, PhD, received his BA from Simpson College in 1969 and his PhD from Iowa State University in 1972. He served as the Chair of the Marian University (IN) Psychology Department, the Director of Undergraduate Studies in the Indiana University – Purdue University Indianapolis (IUPUI) Psychology Department, and the Associate Dean of IUPUI’s Honors College during his 40-year career. He has used the results of his research on teaching, learning, academic advising, and mentoring to create strategies to enable college students to adapt successfully to their educational environment, acquire academic competence, identify and set realistic goals, and achieve their career aspirations. He has published over 100 books and articles including The Savvy Psychology Major and made over 600 conference and other professional presentations including 20 invited keynote addresses. He created the Society for the Teaching of Psychology’s (STP) Project Syllabus, transformed STP’s Mentoring Service into an online clearinghouse, and founded and served as the director of the Indiana High School Psychology Teachers Conference. He was honored for his outstanding contributions to the science and profession of psychology by being named a Fellow of the American Psychological Association, the Midwestern Psychological Association, and a Distinguished Member of Psi Chi. He has received 44 national, regional, and institutional awards and recognitions for teaching, advising, mentoring, and service. His work with IUPUI’s varsity athletes led him to be named “My Favorite Professor” by 71 student-athletes, and he was designated as a mentor by 777 IUPUI psychology majors, 222 of whom indicated that he was their most influential mentor by selecting the following sentence to describe his impact: “This professor influenced the whole course of my life, and his effect on me has been invaluable.” Dr. Appleby retired from IUPUI in 2011 with the rank of Professor Emeritus.

Karen M. Appleby, PhD, received her BA from Hanover College (IN) in 1998 and her doctorate from the University of Tennessee, Knoxville in 2004. Currently, Dr. Appleby is a full professor in the Sport Science and Physical Education Department at Idaho State University where she teaches classes in sport psychology, research and writing, senior capstone, and marketing and management in sport. She has conducted research in the areas of student professional development in higher education, women’s experiences in sport and physical activity, and life quality issues in the master’s athlete population. She has published in journals such as Teaching of Psychology; Women in Sport and Physical Activity Journal; the Journal of Physical Education, Recreation, and Dance; the Journal of Sport; and the Qualitative Report. Dr. Appleby was named the Outstanding Collegiate Educator by the Idaho Association for Health, Physical Education, Recreation, and Dance; was awarded the Idaho State University Distinguished Teacher Award; and is a three-time National Masters Cycling champion. In her spare time, she likes to cross country ski, race her road bike, and run with her husband and dogs in the Idaho mountains.
Alice Eagly
Northwestern University (IL)

Alice Eagly is professor of psychology and of management and organizations, James Padilla Chair of Arts and Sciences, and faculty fellow in the Institute for Policy Research, all at Northwestern University. She has also held faculty positions at Michigan State University, University of Massachusetts in Amherst, and Purdue University.

Eagly received her bachelor's degree from Harvard/Radcliffe and her PhD from the University of Michigan. She is a social psychologist with research interests in many topics, including gender, feminism, attitudes, prejudice, stereotyping, and leadership. She is the author of several books and over 300 articles, chapters, and other contributions. Her most recent book, written with Linda Carli, is Through the Labyrinth: The Truth About How Women Become Leaders.

Alice Eagly has made fundamental contributions to the psychology of gender, especially to leadership, prosocial behavior, partner preferences, aggression, and sociopolitical attitudes. She developed the influential social role theory to account for sex differences and similarities in these behaviors (Eagly, 1987). She tested this model through numerous meta-analytic projects and primary empirical studies. She developed the social role perspective into a broader evolutionary model that highlights the flexibility in men's and women's behaviors across societies and historical time.

Alice Eagly has received several awards for her contributions, including the Distinguished Scientific Contribution Award from the American Psychological Association, the Gold Medal Award for Life Achievement in the Science of Psychology, and the Eminent Leadership Scholar Award from the Network of Leadership Scholars of the Academy of Management. She is also a member of the American Academy of Arts and Sciences.

Robert Rosenthal, PhD
University of California–Riverside

Robert Rosenthal is a distinguished professor of psychology at University of California, Riverside, and Edgar Pierce Professor of Psychology, Emeritus of Harvard University. Professor Rosenthal's research has centered for over 40 years on the role of the self-fulfilling prophecy in everyday life and in laboratory situations. Special interests include the effects of teacher's expectations on students' academic and physical performance, the effects of experimenters' expectations on the results of their research, and the effects of clinicians' expectations on their patients' mental and physical health. For some 40 years, he has been studying the role of nonverbal communication in (a) the mediation of interpersonal expectancy effects and in (b) the relationship between members of small work groups and small social groups. He also has strong interests in sources of artifact in behavioral research and in various quantitative procedures. In the realm of data analysis, his special interests are in experimental design and analysis, contrast analysis, and meta-analysis. His most recent books and articles are about these areas of data analysis and about the nature of nonverbal communication in teacher—student, doctor-patient, manager-employee, judge-jury, and psychotherapist—client interaction. He is cochair of the Task Force on Statistical Inference of the American Psychological Association.

Dr. Rosenthal's has received several awards including the Gold Medal Award for Life Achievement from the American Psychological Foundation, James McKeen Cattell Award from the American Psychological Society, and Distinguished Scientific Award for Applications of Psychology from the American Psychological Association.
With more than 1,100 chapters, Psi Chi members can make a significant impact in their communities. Reviewing Chapter Activities in Eye on Psi Chi is a great way to find inspirational ideas for your chapter and keep in touch with your chapter after you graduate.

Activities are listed in the following categories:

- **COMMUNITY SERVICE**
- **CONVENTION/CONFERENCE**
- **FUND-RAISING**
- **INDUCTION CEREMONY**
- **MEETING/SPEAKER EVENT**
- **RECRUITMENT**
- **SOCIAL EVENT**

Share your chapter’s accomplishments with others in the next issue of Eye on Psi Chi! Chapter officers and advisors are encouraged to visit www.psichi.org/default.asp?page=chapter_activities

Submission deadlines*

- **Fall:** June 30
- **Winter:** September 30
- **Spring:** November 30
- **Summer:** January 30

*Reports received (postmarked) after the deadline will appear in the next issue of Eye on Psi Chi.

**EAST**

**Clark University (MA)**

**INDUCTION CEREMONY:** On October 28, Seana Moran (advisor) welcomed seven new members and introduced them to membership benefits. The chapter secretary recited the Platonic myth as the chapter president lit the new inductees’ candles and let them spread the light of knowledge among themselves. The ceremony was followed by a reception where new and old members, their families, and psychology faculty enjoyed cake and sparkling cider as they got to know each other.

**MEETING/SPEAKER EVENT:** In November, the chapter hosted a series of events to explore clinical, counseling, and school psychology. Representatives from neighboring universities were invited to speak about their programs and relevant information for each field. In one event, representatives spoke about the difference between clinical and counseling psychology, and how to obtain counselor licensure. In the school psychology event, they spoke about job prospects for school psychology graduates and the necessary qualifications for working in schools. This series was well-received by members because many psychology majors plan to enter these fields.

**SOCIAL EVENT:** In the Thanksgiving spirit, the chapter hosted a social event concerning the psychology of gratitude. Officers and members discussed research findings including the benefits of practicing gratitude and how it can be applied in daily life. Officers and members then employed one of the gratitude practicing strategies: they created their own gratitude journals from scratch and entered their first entries about what they are grateful for.

**Lehman College (CUNY)**

**INDUCTION CEREMONY:** The chapter had its fall 2016 induction ceremony on November 14, 2016. The Executive Committee of the Lehman Chapter welcomed the nine new members and, along with the chair of the psychology department and numerous psychology professors, congratulated these students on their merits and achievements. They also encouraged participation in community service initiatives, conferences, research, and spoke about the various speaker events that have been, and continue to be, planned for the school year. It was a fun celebration, and students were very enthusiastic!

**Monmouth University (NJ)**

**MEETING/SPEAKER EVENT:** Undergraduate psychology majors are required to complete a challenging research sequence that consists of four research classes. To help students early in this research sequence, officers organized a peer-mentoring program. Kelly Faxon (president) reserved the psychology study lab every other week of the semester, and Psi Chi members signed up to be present for at least one mentoring session. Students who took advantage of these sessions received help in understanding research concepts, APA style writing, SPSS, and effective study techniques.

**Slippery Rock University (PA)**

**COMMUNITY SERVICE:** Members enjoyed spending time every couple weeks with a local senior citizen personal care facility called Home 2 Me. They often play games such as bingo and left, right, center. Members traveled to Concordia in Butler to play bingo with the senior citizens as well. A new activity members participated in community service is a Psychology of Gratitude social event. Psi Chi members showcased their gratitude journals at the Psychology of Gratitude social event.

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in this holiday season was volunteering at NET Outreach in Butler at an event called Cooking Up A Difference. Eight members traveled to Butler with two homemade lasagnas, cups, plates, and silverware to serve to the homeless. After dinner, whoever came was able to stay for the night.

**MEETING/SPEAKER EVENT:** On campus, members put together an educational process from two psychology professors on what it takes to get into graduate school. Members and many other psychology students took time to come listen to the stories of the professors on their journeys to finishing graduate school

**SOCIAL EVENT:** There were three socials each month for members to come together and participate in various activities outside of the psychology department. Some of the activities included a movie night watching *Inside Out*, a group dinner at the school cafeteria, and a trip to get frozen yogurt.

**MIDWEST**

*DePaul University (IL)*

**MEETING/SPEAKER EVENT:** The chapter invited former undergraduate, graduate, and doctoral students to host a panel about graduate school, research lab opportunities, and employment after college. About 30 students attended who were curious about what they can do with a psychology degree. The panelists also informed students about the advantages and disadvantages of attending graduate school immediately after earning a bachelor’s degree. They gave helpful tips about how to prepare strong applications and what experiences helped them secure a position in the workforce or in graduate school. Panelists answered questions and provided their contact information for students who had further questions.

**COMMUNITY SERVICE:** Members collaborated with Psychology Club and Psychology Peer Mentors to show that there is no better gift than giving this holiday season. Gently used and new clothing were collected for the Lincoln Park Community Shelter, and nonperishables were collected for a food drive benefiting the Vincentian Food Pantry located on campus. Announcements were made in meetings, flyers were posted for students to see, and psychology students came together to benefit two charities before the year ended.

**The Ohio State University at Newark Campus**

**FUND-RAISER:** The chapter conducted several fund-raisers to benefit local organizations during the 2016–17 academic year. Members raised money through a penny drive and a pretzel sale, both of which benefited the Licking County Food Pantry. Members collected donations of household and family items to donate to the local domestic violence shelter.

**University of Victoria (Canada)**

**MEETING/SPEAKER EVENT:** The chapter organized an experienced psychology honors student and a Canadian Psychology Association representative to host a workshop on the preparation and practical challenges of presenting research at formal conferences and forums. Attendees engaged in the live creation of a research poster and were shown how to use relevant software to create attractive displays. A large portion of the event also covered how to make the most of attending a conference including the knowledge and experience of some of the chapter’s executive members.

**MEETING/SPEAKER EVENT:** The chapter hosted two panels as part of their Pursuing Psychology series, which aims to educate students about career options in their chosen field. The themes of these panels were lifespan development, and mind and brain. Each panel consisted of current graduate students, university faculty, and members of the community who were employed in these fields. The expert panelists educated and inspired students by relaying their experiences and offering their advice about how to excel in the workforce.

**SOUTHEAST**

*Davidson College (NC)*

**INDUCTION CEREMONY:** On November 29, 2016, members and faculty welcomed new inductees and congratulated them on their achievements thus far.

**COMMUNITY SERVICE:** On November 30, 2016, members participated in a community service event to aid an organization on campus that helps underprivileged students gain access to photography. Members helped set up and execute the event to celebrate the students’ achievements.

**Roanoke College (VA)**

**MEETING/SPEAKER EVENT:** In October, new professors of the department—Drs. Laura Mills-Smith and Athena Buckthought—gave a lecture on their academic paths and current research interests. Students were delighted in the opportunity to go through the same demonstrations that would be requested of them in their studies.

**MEETING/SPEAKER EVENT:** The chapter hosted an event on the psychology of stress and mindfulness in November.

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Dr. Edward Whitson described the psychological theories of stress and shared empirically supported techniques to reduce stress and anxiety. Attendees then made and decorated their own stress balls.

University of Central Missouri

SOCIAL EVENT: Psi Chi sponsored a kick-off event to begin the fall semester. Students and professors in the psychology department enjoyed free food, yard games, and getting to know each other. This was an informal way for students to meet each other and professors before biweekly meetings began. The chapter is in the process of reviving and participating. The chapter sponsored a similar event to end the previous year with only 15 people in attendance compared to the event in August, which was a great success with more than 50 in attendance.

MEETING/SPEAKER EVENT: For the first meeting of the year, the chapter sponsored a meet-the-professors event. Five professors from the department of psychological science spoke about their educational background, current course offerings, research interests, and mentoring or research opportunities for students. Pizza was provided, and students were encouraged to ask questions regarding their own interests.

COMMUNITY SERVICE: The chapter donated $150 to sponsor the local Run for Freedom to benefit the Missouri Veteran’s Home. Psi Chi members volunteered as race monitors, directing racers to their appropriate routes. Members also encouraged and cheered for the racers as well as the veterans who participated.

University of Mary Washington (VA)

COMMUNITY SERVICE: The chapter teamed up with another local organization to help them host their Pumpkin Palooza event. The Community Outreach and Resources (COAR) hosts this event every year to provide a safe place for children of the local Frederickburg community to trick-or-treat and participate in Halloween activities. The chapter was in charge of running the “doughnut on a string” station.

COMMUNITY SERVICE: In November, members and students came together to write holiday cards to soldiers overseas who are unable to come home for the holidays. Participants produced over 50 cards along with some handmade snowflakes to send to a troop that a member has an affiliation with.

MEETING/SPEAKER EVENT: The chapter hosted two events for the department of psychological science to guide prospective interested students through the rigorous graduate school application process. Also, a CV writing workshop and personal statement workshop gave tips and guidance for these two important components for graduate school.

University of North Georgia

COMMUNITY SERVICE: The chapter worked with Prevent Child Abuse Club and the Lumpkin County Family Connections to raise food awareness across the county. Together, they devoted a combined total of more than 500 hours to canned food drives over the past year to feed insecure teens in the county.

COMMUNITY SERVICE: The chapter plans to offer members mock ups of these tests to help them achieve their professional goals. The chapter invited two companies that offer GRE and EXADEP reviews. An EXADEP is the test offered specifically in Puerto Rico. In the presentations, the two speakers gave tricks and tips on how best to study and answer the tests. In the future, the chapter plans to offer members mock ups of these tests to help them achieve their professional goals.

COMMUNITY SERVICE: The chapter participated in a walkathon aimed at raising awareness about breast cancer in October. This activity is close to the hearts of the chapter because a faculty
advisor is a breast cancer survivor.

**FUND-RAISER:** Twice a month, the chapter hosts different sales with the purpose of earning enough money to cover the expenses of the annual induction ceremony. Generally, members sell hot dogs, frappes, and cupcakes. These funds allow the chapter to invite all active members, new members, faculty, and family to celebrate a year well done.

**SOUTHWEST**

University of Arkansas at Monticello

**INDUCTION CEREMONY:** All members, their families, and friends were invited via e-mail and invitation letters to attend the chapter’s formal induction ceremony on April 6, 2016. Michael Pickett (2015–16 president), Gina Ashcraft (2015–16 vice-president), and Seungyeon Lee, PhD (advisor), handled the scheduling of the room and sought out Dr. Richard Clubb, the Dean of Social and Behavioral Sciences and professor of psychology, who served as the keynote speaker of the event. He described the future of psychology practice and science. Six new members were inducted: Cassidy Mansur, Janna Alvarez, James Alexander, Sanpreet Kaur, Dakota Bays, and Falon Lantrip.

**CONVENTION/CONFERENCE:** On October 20, 2016, three undergraduate students and two psychology faculty attended the Arkansas Psychological Association (ArPA) conference in Conway, AR. Janna Alvarez (2016–17 president), Terry Jordan (2016–17 vice-president), and Jayme Burris presented a poster along with other students from other universities in Arkansas. Drs. Seungyeon Lee and Eric C. Prichard assisted them as the faculty mentors. The event provided a great opportunity for students to practice their presentation skills. The event was open to all ArPA members who were students, faculty, and other related professionals. Dr. Seungyeon Lee won the Early Career Psychologist Award, which is given to an early career psychologist who contributed significantly to the field of psychology and shows promise of sustained success.

**COMMUNITY SERVICE:** On October 25, 2016, officers and members participated in the 6th annual Bullying Awareness Event. The purpose was to raise awareness about the dangers of bullying. Members, as well as Psychology Club, reserved a booth and designed the table to emphasize the importance of bullying awareness. They passed out goodie bags, balloons with encouraging notes, and stress-relieving kits. Students had the opportunity to serve the community as well as representing the School of Social and Behavioral Sciences through their efforts.

**WEST**

Pacific University (OR)

**CONVENTION/CONFERENCE:** Undergraduate members presented several research projects, with the assistance and supervision of professors Erica Kleinknecht and Dawn Salgado at the 2016 Pacific University Undergraduate Research Conference held in November. Presenters discussed their research on mental health literacy (Alicia Vasquez, president; Pali Kaloi Jordan, public relations officer), attitudes toward professional help seeking on campus among first generation college students (Ashley Eddy, treasurer; Julia Wengeler), embodied cognition and autobiographical memory (Tyler Boulanger, secretary; Chloe Chambers; and Josie Kochendörfer), and the effectiveness of developing social emotional learning skills among youth involved in a STEAM-based program call Pixel Arts (Emma McMain, Sophie Rice, and Katilyn Lomartire). Alicia Vasquez (president) was awarded the 2016 Undergraduate Research Award in the Social Sciences for her qualitative research study titled, “Examining Mental Health Literacy Among College Students.”

**MEETING/SPEAKER EVENT:** The chapter hosted its annual fall retreat in October to discuss goals, events, and service projects for the fall and spring semester. In early November, John White, PhD, OTR/L, and Mason Munson, OTD, were invited to give a talk titled, “The Occupations of Gender: Developing Foundational Knowledge in Transgender Healthcare,” which focused on the treatment needs and challenges of transgender clients seeking services, and the role of providers in increasing the quality of care provided to them.
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