

MIND'S EYE

Psychological Science

Missouri S&T | Spring 2020

WOULDN'T
YOU LIKE TO
BE A PEPPER,
TOO?

ANDREW
PEPPER

page 2



Transforming learning into leadership

Helping students in psychology make the leap from learning to leadership will shape our future. Because advancing an understanding of the mind begins with mentoring talent.

Robin Ramsey, Psyc'17, MS Psyc'19, is a perfect example of how alumni generosity helps future students find success. Thanks to department funding, Ramsey attended the Society for Industrial and Organizational Psychology (SIOP) conference in 2018 and 2019.

The 2019 conference landed him a job.

Before the D.C. conference, Ramsey had no solid job offers, and job hunting with a full course load was daunting.

"I connected with a practitioner and recruiter who not only understood what I was capable of, but specifically came to that conference to find students like me," he says. "I had my dream job locked in a month after graduating."

Last year, your annual support helped seven undergraduate and nine graduate students in psychological science by providing travel funds that made it possible for them to present their research at major conferences, like SIOP.

Will you make a difference again?

From time to time, you may receive a phone call from a student caller. We hope you'll take the time to talk. And we hope you'll consider making a gift. Because your support will help our students navigate the path to leadership by supporting the opportunities that open doors.

-> give.mst.edu



Pictured above from top left: **Merilee Krueger**, teaching professor; **Denise A. Baker**, assistant professor; **Daniel B. Shank**, assistant professor; **Devin Burns**, assistant professor; **Jessica Cundiff**, assistant professor; **Nancy J. Stone**, professor; **Nathan Weidner**, assistant professor. From bottom left: **Anne Groniger**, administrative assistant; **Amy Belfi**, assistant professor; **Amber M. Henslee**, associate professor; **Clair Kueny**, assistant professor; **Susan Murray**, chair and professor.

Greetings from the psychological science department

Positive psychology emphasizes the importance of gratitude. As chair of psychological science at S&T, I am grateful for many things. Most importantly, our students, who allow us to assist them on their educational journey as they work toward their dreams. Our cover story on Andrew Pepper is an excellent example of a journey I've enjoyed watching and a graduate I am proud to call a Miner.

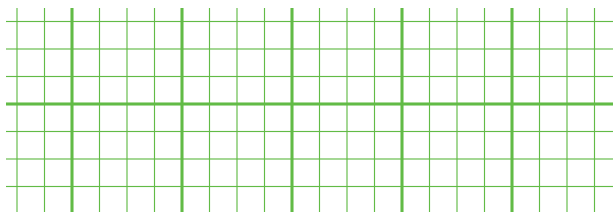
I am also appreciative of our alumni. Your contributions through the Miner Phonathon and other means supports us as we educate students and conduct research. A recent master's graduate, Robin Ramsey, is an example that comes to mind.

The December 2019 commencement was a special milestone for me. Sophia Rodriguez graduated and was commissioned into the U.S. Air Force. She was an entering freshman in the first class I taught as chair of this department. It has been rewarding to watch her and our other students as they grow at Missouri S&T. She is one of the many psychology students helped by alumni-funded scholarships.

Finally, I am grateful to the staff in the department, as well as the faculty, who all excel in teaching and research (as can be seen in the awards listed in this newsletter). Countless times I have seen a student drop into an office unannounced and leave with a solution to their problem or a better understanding of a concept from class.

With gratitude,

Susan L. Murray, Ph.D.
 Chair and Professor,
 Psychological Science



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KEEP IN TOUCH

Tell us how you're doing. We'd love to hear about new appointments, degrees earned, job promotions and other family or professional news.

Get in touch with us by emailing psych@mst.edu. Let us know what you're doing with your psychology degree so we can feature your accomplishments among our alumni achievement stories.



Wouldn't
you like to

BE A PEPPER, TOO?

Photo by Judy Ondrey

When **Andrew Pepper**, MS IOPsyc'18, transitioned back into civilian life after serving in the U.S. Army Military Police during the Iraq and Afghanistan war, he decided a career in law enforcement was not something he would enjoy.

While earning bachelor's degrees in both sociology and psychology at Drury University, he developed an interest in how psychology affects groups and cultures. S&T's industrial/organizational psychology master's program was a natural progression.

"I was excited to find an I/O psychology program so close to Fort Leonard Wood (Mo.)," he says. "I enrolled at S&T as a non-traditional student so I could have the flexibility to work full time and provide for my wife and two children."

Pepper took a job in the relatively new Title IX office as an Office of Violence Against Women Project coordinator/education coordinator. He evaluated, analyzed and revised S&T's Title IX investigation process and training program to make them more effective, efficient and equitable.

"I really love the people at The Coca-Cola Co. and making a difference in workplace wellness."

He also coordinated efforts with agencies outside of S&T, including the Rolla Police Department, Phelps Health, the Russell House and the Phelps County prosecutor's office, that respond to sexual violence in numerous ways.

"I organized a combined community response team, managing a \$300,000 budget to implement change management and develop effective strategies to reduce sexual violence on campus.

"I used the things I learned during my graduate education to analyze the learning and development performance of the departments at S&T and at Phelps Health's emergency department."

Even before he graduated, Pepper was an active member of the Society of Industrial/Organizational Psychology (SIOP). In fact, he credits SIOP with connecting him with his future employer.

"I was at the annual SIOP conference presenting on my thesis research on the negative effects of leader discrimination and the mitigating effects of organizational response when I met my future supervisor, Dr. Karmen Blue, global director of the People Insights and Reporting section of The Coca-Cola Co."

A conference attendee, Blue sat in on Pepper's symposium. Later, she invited him to apply for a job as a knowledge and insights consultant with the Global People Insights and Reporting section of The Coca Cola Co. Today he is a people analyst for the company's Global People Insights division.

As a people analyst, Pepper provides analysis, insights and customized profiles for Coca-Cola's strategic business partners and executive members to help provide a better workplace for employees.

Pepper says the work is rewarding, and he hopes to take on an additional role in HR data protection.

"Life working for The Coca-Cola Co. is wonderful," says Pepper, who works in the company's corporate office in Atlanta, where there is an unlimited supply of free drinks.

His current favorite drink is the Sparkling Smart Water, but when it's time for a soft drink, Pepper reaches for the Cherry Coke Zero.

"I really love the people at The Coca-Cola Co. and making a difference in workplace wellness," he says. "There is never a dull day, and I always have a puzzle to solve." □



'RISING STAR' RECOGNIZED FOR VOLUNTEER EFFORTS

Mullin Evans, Psyc'19, received the "Rising Star" award from Court Appointed Special Advocates (CASA) of South Central Missouri at the organization's volunteer appreciation dinner on March 22.

She was recognized for her extraordinary volunteer efforts in Phelps County serving as a court system advocate for children living in foster care as a result of abuse or neglect.

Speaking about what CASA meant to her at the group's "Justice is Served" breakfast in April, Evans told attendees about her own experiences with homelessness and as a troubled teen.

"These children need someone with confidence and someone to celebrate with them," she said. "CASA means giving kids hope for a rewarding future and CASA is not the end of their story."



Balancing

TECHNOLOGY'S

TRADE-OFF

Faculty researchers explore dehumanizing effects of video use

Many of us have wondered how a job interview conducted via Skype or another video-mediated communication (VMC) tool would hold up against face-to-face (FTF) interviews with other applicants. And that sneaking suspicion that the video interview is somehow lacking, just may be right.

Inspired by research showing people had more trust in robots in the same room than robots observed on video, three psychological science faculty members set out to determine if the same holds true for humans.

Denise Baker (above middle), **Devin Burns** (right) and **Clair Kueny** (left) are using the job interview process to define the potential dehumanizing effects of VMC tools. They have tested more than 80 participants, and so far, results show that passive observers viewing an applicant by video have more negative perceptions than passive FTF observers.

"For example, our preliminary findings suggest that if a search committee is comprised of on-site employees interviewing a job candidate as well as employees teleconferencing via VMC, the teleconferencing employees may rate the candidate more negatively than those on site," says Kueny. "This finding has relevance for higher education, where courses are offered as distance classes, and students can watch them live from anywhere in the world. The distance students may form more negative impressions of the instructor than the in-class students, for no other reason than the medium of communication."

In the next phase, the team will look at how the effect is influenced by additional variables like gender and interview quality. This time participants will wear mobile eye-tracking glasses.

"This way we can examine whether the visual cues people pay attention to differ between VMC and FTF observation, and whether this helps explain why passive observers form different opinions about the communicator they are observing," says Baker.



FAREWELL, PROF. HALL

After three decades on the S&T faculty, **Richard Hall**, professor of business and information technology (BIT), officially retired in December. The university hosted a music-themed reception in his honor.

Although he's been on the BIT faculty since 2004, Hall spent over a decade in the psychological science department, where his research focused on learning strategies.

Hall joined S&T in 1988 as an assistant professor of psychology. In 1994, he was promoted to associate professor until 2002, when a passion for the relationship between humans and web-based technologies led him to move to information science and technology.

Hall served as associate dean for research in the former School of Management and Information Systems. Since 2002, he has served as co-director of the Laboratory for Information Technology Evaluation and since 2007, he has been director of the Center for Technology Enhanced Learning. He was promoted to professor in 2004.

We wish him all the best in retirement!



REJECTING SMART DEVICES

When a call for study participants went out in the Rolla area, nearly 50 people told Missouri S&T researchers that they purchased and then stopped using a smart device in their home.

“We’ve heard some examples where people have actually turned off their smart home hubs because they didn’t realize potential problems,” says Daniel B. Shank, an assistant professor of psychological science.

Shank teamed up with **David Wright** (right), associate professor of English and technical communication at Missouri S&T, to look at why people are ditching their smart devices.

“We have found that there is a certain amount of privacy that people are not willing to give up,” says Wright, who studies technology diffusion and communications networks on the English and technical communication faculty at Missouri S&T.

A smart device is an electronic gadget generally connected to other devices through wireless connections that a user can operate interactively such as the Google Home, Amazon Alexa, and automated locks and doors, lights, and thermostats.

Wright says they hear stories of people unplugging them because of bad experiences.

“For example, an Amazon Alexa in the kids’ room that starts laughing in the middle of the night and scares the kids, or the Roomba that attacks the cat,” says Wright. “The main theme with the stories is that people feel their privacy is being violated without their consent or control.”

Respondents said that they believe smart home devices are listening when they shouldn’t be. They reported that their discussions at home seem to turn into advertisements the next

day, which leads people to believe that device manufacturers are not transparent about their products.

Trust is a major issue for people using smart home devices, Wright says. Shank has collected stories of home devices sharing private medical data to others in their home or gathering data when the device was not active.

“We have found that there is a certain amount of privacy that people are not willing to give up.”

The researchers are using seed grant money from Missouri S&T’s new Center for Science, Technology and Society to continue their research.

“When you’ve gone that far to get the system up and running, it takes a fairly bad experience for someone to drop out and stop using it,” says Wright. “We believe there are a lot more and varied stories about this.”

The researchers are now following up with in-depth interviews to gain a fuller understanding of smart device rejection.

Psychology students ARE ON FYRE

The First Year Research Experience (FYRE) program offered through the College of Arts, Sciences, and Business gives new students a chance to work one-on-one with a faculty mentor on a specific research project.

FYRE students pose questions, check data and create knowledge. The program is designed to improve critical thinking, communication, and presentation and leadership skills.

Our department was involved in three projects.

Hannah Lampkin, who is now a senior in psychology, worked with **Jessica Cundiff** to develop a game to teach players about gender bias in the workplace. (See story about the game on page 7.)

Kacy Silvis, a freshman in psychology, worked with **Amber Henslee** to test the “hangover hypothesis” during St. Pat’s.

Lawrence Hierlmeier, now a junior in computer science and applied mathematics, worked with **Daniel Shank** on a project to determine how A.I. algorithms can change the attributes of responsibility.

Top right, from left: Amber Henslee, Kacy Silvis, Hannah Lampkin, Jessica Cundiff, Daniel Shank and Lawrence Hierlmeier.

Bottom: Kacy Silvis displays her research on behavior cognition during celebratory events.



M.S. IN INDUSTRIAL/ ORGANIZATIONAL PSYCHOLOGY OFFERED IN THE MIDDLE EAST

Students at Mazoon College in Oman, a country adjacent to Saudi Arabia and the United Arab Emirates (UAE) on the west and surrounded on the east by the Arabian Sea, will soon be able to earn Missouri S&T’s M.S. degree in industrial/organizational (I/O) psychology.

Susan Murray, chair and professor of psychological science, leads the cross-cultural program. With the help of **Clair Kueny**, an assistant professor of psychology, and **Greg Gelles**, professor emeritus of economics, S&T proposed the degree offering to the Omani Ministry of Higher Education.

Coursework for the degree will be offered through a combination of distance education and Oman-based classes once Mazoon earns accreditation from the Omani Academic Accreditation Organization.

Located in Seeb, Muscat, Mazoon College was founded as a women’s college in 1998. As an S&T affiliate, the school offers several degrees based on S&T’s curriculum and was one of the first schools in the Middle East to offer undergraduate psychology degrees.



From left: Dr. Khalfan Abdullah Al-Masruri, dean of Mazoon College; Kathryn Dolan, associate professor of English and technical communication at S&T; Susan Murray; and Dr. Jameela Khatoun, head of quality assurance and psychology faculty member, Mazoon College.

Today, Mazoon educates nearly 1,000 female and male students from numerous countries. About 350 of its students are psychology majors, with graduates working as school counselors, therapists or various other occupations.

THE GAME OF BIAS



Playing WAGES: Race to the Top with Jessica Cundiff (far right) are **Rudi Starek**, (left) a junior in technical communication, and **Tim Kruper**, a senior in psychology and research assistant on the project.

Teaching about hot-button topics like gender bias can be a challenge because those topics often threaten the way students view themselves and provoke defensiveness.

To help overcome the challenge, **Jessica Cundiff**, an assistant professor of psychological science, in collaboration with **Leah Warner**, and associate professor at Ramapo College of New Jersey, developed a game to teach students about gender bias in a way that is interactive, engaging and non-threatening.

“Drawing on experiential learning methods that engage students in a first-hand experience allows them to construct knowledge on their own through discovery and reflection, rather than merely being passive recipients of information,” Cundiff says.

The game is called WAGES: Race to the Top. WAGES is an acronym that stands for Workshop Activity for Gender Equity Simulation. Players are randomly divided into two teams, a green team (later revealed to represent women’s experiences) and a yellow team (later revealed to represent men’s experiences).

The game concept was originally developed by Stephanie Shields, a professor of psychology at Penn State University, Cundiff says. The original version targets faculty and administrators, but the new version Cundiff and Warner developed targets students.

“The object of the game is to climb the corporate ladder to be the first player with CEO status and a corner office,” Cundiff says. To advance, participants draw cards describing issues that contribute to gender inequity, like gender role expectations, salary, mentoring, workplace climate, and token status.

“A side-by-side comparison of the cards illustrates the seemingly minor biases the green team experiences compared with the yellow team’s experiences,” Cundiff explains. “For example, a green team card might read ‘A yellow team coworker gets credit for something you said

at a meeting’ while the yellow team’s card would read ‘You get credit for something you said at a meeting.’

“The discrepancies between the two teams’ experiences seem small and innocuous at first, but over the course of the game, these minor discrepancies grow to produce large disparities between the two teams,” Cundiff says. “In this way, the game simulates how small gender biases accumulate to negatively affect women in the workplace.”

At the end of the game, players participate in a structured group discussion that reveals how the game represents the experiences of women and men in the workplace.

The discussion also includes how gender bias intersects with racial bias and other forms of bias.

Each game card is based on published, peer-reviewed findings of gender bias, so instructors use psychological research to emphasize the five key learning objectives of the game:

- **Patterns, not single incidents, are the most visible indicators of gender inequity**
- **Bias is often fueled by unconscious stereotyping**
- **Seemingly minor disadvantages accumulate over time**
- **Bias may manifest differently at different work stages**
- **Bias may be experienced differently across diverse groups of women**

“Our ultimate goal is to make the game widely available for instructors to use in their classrooms,” Cundiff says. “We hope to offer a low-cost do-it-yourself option that instructors can print on their own printers, as well as an affordable high-quality professionally printed option.”



WELCOME OUR NEW FACULTY MEMBER

This past fall, **Ting Shen**, joined S&T as an assistant professor of psychological science. She comes to us from the University of Missouri-Columbia, where she was a postdoctoral fellow in the educational, school and counseling psychology department.

Shen earned a Ph.D. in measurement and quantitative methods from Michigan State University in 2018. Her expertise includes quantitative research methodology, psychometrics and application in education and statistical consultation.

She is particularly interested in conducting data-driven research to evaluate the impact of school and family resources and environment on children's overall development, including academic achievement and social-emotional skills.

FINLEY HONORED FOR VOLUNTEER SERVICE

Dixie Finley, Psyc'68, received the Robert V. Wolf Alumni Service Award from the Miner Alumni Association during Homecoming 2019. The award recognizes S&T alumni for dedicated service to the university and the alumni association.

AGING AND MEMORY

The aging population is steadily growing, and along with it comes a growth in Alzheimer's disease and similar maladies. That makes the need to understand age-related changes in cognition critical.

Amy Belfi (above right), assistant professor of psychological science, and **Ava Stroud** (left), a senior in psychology at S&T, are studying how music can affect the ability to recall vivid autobiographical memory, which tends to decline as people age.

"Music has been shown to be an effective cue for evoking vivid, specific and highly emotional autobiographical memories," Belfi says. "However, the mechanism underlying the effects of music on memory, as well as whether music confers a memory benefit superior to other sensory cues, is unknown."

Belfi and Stroud are investigating the relationship between music and autobiographical memory in healthy adults across their lifespan. They hope to develop a mechanistic understanding of how music affects autobiographical memory, throughout the aging process.

"Music is a ubiquitous part of the human experience," says Belfi. "Music influences, and can help us understand, diverse cognitive functions such as memory, emotion and decision-making."

SPEAKING OF FAVORITISM ...

Ingroup favoritism — the idea that people tend to prefer members of their own group over members of other groups — extends to linguistics, says **Jessica Cundiff**, an assistant professor of psychological science.

Cundiff collaborated with **Sarah Hercula**, a linguistics expert in English and technical communication at S&T, to examine whether native English speakers show biases against non-native English speakers.

The researchers solicited study participants from across campus, and asked the participants to listen to recordings of three different speakers — a native English speaker and two non-native English speakers. Participants rated each speaker on a variety of dimensions."

We found that participants rated the native English speaker as more competent and likeable, and were more willing to interact with them, compared to the non-native English speakers," Cundiff says. "These findings are consistent with research on ingroup favoritism, which is the tendency for people to prefer members of their own group over members of other groups.

"Our research shows that this ingroup favoritism extends to linguistic groups as well," she says.



Above left: Susan Murray.

Right, from left: Daniel Shank, Clair Kueny, Amber Henslee and Merilee Krueger.

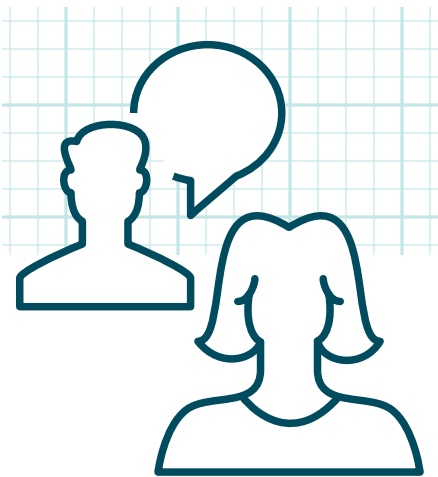
FACULTY accomplishments

- » **Amber Henslee** received the Faculty Service Learning Award. In her health psychology class, Psych 4590, students conduct service-learning projects for an organization then design a statistical analysis to assess the effectiveness of the projects.
- » **Clair Kueny** received the Faculty Teaching Award for excellence in teaching and teaching-related activities.

- » **Merilee Krueger** received the Outstanding Teaching Award. She was also promoted to teaching professor this fall.
- » **Susan Murray** was recognized during the S&T Women's Hall of Fame ceremony sponsored by Student Diversity Initiatives. The Women's Hall of Fame recognition has been awarded since 2005 to alumnae or faculty who are selected because of their success, influence, and

ability to inspire and impact students, the Missouri S&T community and beyond.

- » **Daniel Shank** received the Faculty Research Award for excellence in research and scholarship.



PROACTIVE BEHAVIOR CAN BE RISKY BUSINESS

Organizations often expect employees to show initiative through proactive behavior, and also work well with their co-workers to achieve goals. But proactive approaches may not always be welcome by other team members, says **Clair Kueny**, an assistant professor of psychological science who studies the effect of proactive behavior in the workplace.

"Taking initiative may impact whether others trust you as a team member," she says. "And a person's social skill and role on the team can influence that trust."

Kueny found that proactive colleagues with better social skills who were aware of how others perceived them, rated more positively and were considered more trustworthy than proactive team members they perceived as having poor social skills, regardless of their role.

"In other words, being perceived as pro-relationship or benevolent plays a critical role in how others react to proactive behavior and their subsequent trust," Kueny says. "To generate positive trust interactions at the individual level, social skill and role-type should be considered when encouraging proactive behavior."



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LET'S CELEBRATE
MISSOURI S&T'S STORY

150 YEARS

From our founding in 1870 as a pioneering technical school to our 21st-century standing as a national technological university, the Missouri S&T story spans a century and a half of remarkable change.

Get set to celebrate 150 years of Miner pride!

A year of special events kicks off with MinerFest 150 in October 2020 and concludes with the Alumni of Influence celebration in November 2021. In between, mark your calendar in green for our biggest best-ever festival — or “Bestival” — over St. Pat’s Weekend in March 2021.

Watch for the publication launch in October 2020 of a commemorative book by Curators’ Distinguished Teaching Professor Emeritus **Larry Gragg**. His history of the university spans 150 years of Miner milestones, memories and mischief.

150.MST.EDU