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Editor's Column: On the Cusp of Activism—and, Now, Empowered

./Steven Toaddy

Forgive my propensity to wax poetic. Not just here, but in general. Please.

But for here, specifically: It seems that circumstances both within and without SIOP have conspired to make it possible for everyone who wants to get involved in changing our society and/or our Society to, indeed, and perhaps finally, do so. From the leadership of, particularly, Eden and Georgia, to the expansion of the Portfolio Officers to include a new and (presently) rather tall one, to the timely and forward-thinking work of our Foundation and the donors that support it, to articles about opportunities to improve the world and/or the experience of newcomers to SIOP Annual, to (two!) data-driven calls to be more accepting of different forms of I-O instruction (this one and this one), to recent demonstrations and the murders and unrest that preceded them, to a (literally) teeny tiny little virus that seems to be causing (as an understatement) a bit of a stir, I cannot recall a time at which I felt more informed, motivated, and—and this is, I think, crucial—*actually able to do something about this hot mess that we call 2020*. Some of those things seem small, and others seem largely symbolic, and others seem difficult and scary, but they're all right there in the open for me to try out. I would that you feel similarly—and do something with it.

As always, I'm grateful to the many contributors who, depending on their personal circumstances, either meliorated their newfound isolation and boredom or pulled themselves away from their unexpectedly, suddenly overwhelming and chaotic lives to generate content for this issue of *TIP*. Along with other efforts of SIOP volunteers and Administrative Office personnel, you have available a great deal of information about what your colleagues and SIOP are doing in this time of separation, uncertainty, and exciting potential. In these (web) pages, you'll receive tips on how to peer review better; to search for a job; or to absolutely destroy as a practitioner, cross-cultural researcher, or clever methodologist. If you're hurting for a summary of and links to the content from the annual conference this past year, we've got that too (and see, again, this).

Another exciting development—starting this issue, the Administrative Office and a kind volunteer have collaborated to bring you the five focal articles as podcast episodes! There aren't as many commutes today as there were a year ago, I think, but there sure is plenty of screen time; so why not take a break (and a jog or a stroll or, heck, a relaxing bath) and tune in to some nice *TIP* content?

You (and I, I'm sure) may think of SIOP predominantly as the sessions at Annual, but this issue particularly demonstrates that there is so much more to SIOP—and so much more that each of us, as a member of SIOP and of society at large, can be. I look forward to seeing what you make of all of this.

Until then,

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President's Column: Working for You

Georgia Chao

I hope this column finds you safe and healthy. In my first column, I wrote about how we need to keep moving forward. The pandemic, economic recession, and racial tensions have been challenging for the nation and for SIOP, but we need to apply our science and practice to alleviate these crises. Moving forward, I hope SIOP can help us improve how people can work together.

Although 2020's in-person conferences were cancelled, SIOP has been very active. In July, the virtual conference presented almost 500 sessions to over 2,000 registrants. Big thanks go to **Scott Tonidandel** (Conference Chair) and **Elizabeth McCune** (Program Chair), as well as many, many others for making the virtual conference successful. In addition, an anti-harassment policy was developed and approved by the Executive Board. A special task force, directed by **Lilia Cortina**, defines harassment broadly and seeks to hold all persons involved in any SIOP activities to the highest standards of professional behavior. Our Financial Officer, **Evan Sinar**, and the Administrative Office have been hard at work minimizing SIOP's losses from the last fiscal year and planning different financial scenarios for the current fiscal year. Given the uncertainties with the pandemic and economy, the Executive Board and all committee chairs have been mindful of budgets as we move forward.

SIOP also continues to promote nonpartisan advocacy efforts. Under the leadership of **Alex Alonso** (Government Relations & Advocacy Team Committee Chair) and **Steve Kozlowski** (Research & Science Portfolio Officer), we continue to work with Lewis-Burke Associates to advance issues related to veterans transitioning to the workforce, diversity and inclusion, training, police reform, health issues, and federal funding for I-O research. We also explore advocacy efforts with APA. Our APA Council Representatives (**Tammy Allen**, **Sara Weiner**, **Gavin O'Shea**, and **Jeff McHenry**) have been strong advocates for our practicing psychologists and applied psychology.

A special shout-out to the SIOP Foundation! **Milt Hakel** was instrumental with the Foundation raising \$50,000 for the Anti-Racism Grant initiative. **Jeff Cucina**, **Sarah Walker**, and committee received 35 proposals and made five awards to better understand and combat racial bias. Congratulations and best wishes to all the winners!

SIOP is also launching a virtual workshop series, which kicked off in September (Inclusive Coaching: Bringing Out the Best in a Diverse Workforce). Details are posted at <https://www.siop.org/Events-Education/Virtual-Workshops>.

Despite our cancelled in-person meetings in 2020, SIOP is alive and well, busy working for you. SIOP is structured into nine portfolios with elected Portfolio Officers: (1) Communications—**Liberty Munson**, (2) Conferences & Programs—**Scott Tonidandel**, (3) Diversity & Inclusion—**Derek Avery**, (4) External Relations—**Tara Behrend**, (5) Instruction & Education—**Marcus Dickson**, (6) Membership Services—**Allan Church**, (7) Professional Practice—**Tracy Kantrowitz**, (8) Publications—**Mo Wang**, and (9) Research & Science—**Steve Kozlowski**. Under these nine portfolios are 42 committees and many subcommittees involving over 1,000 SIOP volunteers! That's over 10% of our membership involved in governance—a wonderful level of commitment for a volunteer organization! Committees and task forces have been busy in a wide variety of activities: partnering with international organizations, sharing our work with general psychology instructors, and brainstorming new ideas to better serve our members and and profession. Thus, we are moving forward, in multiple ways, to protect and promote our science for a smarter workplace.

I-O Psychology and the Response to COVID-19: A Call to Action

Jason G. Randall
University at Albany

Emily Solberg
SHL

In a matter of months, the COVID-19 pandemic has threatened the health and safety of the global community while also drastically altering the world of work. Mandatory quarantining and other safety precautions such as social distancing to protect individuals from the virus's spread have moved a significant portion of the workforce to a new location: home. This public health crisis has also triggered an economic crisis, with millions laid off of work while others, such as first responders and frontline workers, face increased work demands and risks despite limited resources.

What service can I-O psychology provide in a time such as this? Although in most cases we may not classify as "frontline workers," I-O psychologists have an important role to play in helping individuals and organizations respond to the global challenges of COVID-19. As part of a special track at the SIOP 2020 Virtual Conference, we asked experts across a broad array of domains how the insights and tools that I-O psychologists possess might prove useful in these unprecedented times. Drawing on theory and data, these scientist-practitioners provide specific calls to action for I-O psychologists and others to rise up to the challenge of emergency response.

Below, we summarize these calls to action from our 15 speakers and present them for the benefit of our fellow I-O psychologists to consider what you can do to help the individuals and organizations you work with in their response to COVID-19 changes. However, these calls move beyond I-O psychologists to individuals anywhere who may be struggling with increased work and/or home demands, the loss of work, or the innumerable social, psychological, and physical challenges this pandemic has produced. Whether you are a healthcare professional, a grocery clerk, a struggling business owner, or a parent suddenly wearing the hat of teleworker and tele-educator, we hope that you can see that I-O psychology has solutions for you.

Table 1 introduces the experts, representing a broad field of expertise from both academic and practitioner perspectives, who provided the calls to action representing 14 different topic areas. Following Table 1, we summarize the specific calls to action from each of the contributors. **Direct links to view each talk are provided if you would like to learn more on a specific topic.**

Speakers	Topic area	Talk title and link
Lance Andrews , Principal Solutions Architect Renee Barr , Director, Talent Solutions, SHL	Assessment and Selection	Selection in a COVID-19 World https://vimeo.com/428620904/f19bb9b502
Maya Garza , Leadership and Talent Management Expert, BetterUp	Coaching	Coaching in Times of Uncertainty and Chaos https://vimeo.com/428630229/ef5edc3b8f
Enrica Ruggs , Assistant Professor, Department of Management,	Diversity and Inclusion	Workplace Diversity and Inclusion in the Midst of COVID-19 https://vimeo.com/428620035/afa9d55f8c

Director of the Center for Workplace Diversity and Inclusion, University of Memphis		
Kurt Kraiger , Professor and Chair, Department of Management, University of Memphis	E-Learning/Training	E-Learning/Training and the Response to the COVID-19 Crisis: A Call to Action https://vimeo.com/428630506/67fc8e966a
Liu-Qin Yang , Associate Professor, Department of Psychology, Portland State University	Emotion and Motivation	Social Connections at Work, Emotion, and Motivation https://vimeo.com/428620552/e691a87fb0
Stuart Carr , Professor, School of Psychology, Massey University	Humanitarian I-O Psychology	I-O Words for COVID https://vimeo.com/428617675/0276333b9b
Ryne Sherman , Chief Science Officer, Hogan Assessments	Leadership	Leading Through Organizational Crisis https://vimeo.com/428626014/71679d9be4
Kate Bischoff tHRive Law & Consulting	Legal Issues	Hiring in a Time of COVID https://vimeo.com/428621222/1af4a179f3
Tammy Allen , Distinguished University Professor, Department of Psychology, University of South Florida	Occupational Health Psychology	I-O Psychology and the Response to the COVID-19 Crisis: A Call to Action https://vimeo.com/428617306/2862888acd
Elaine Pulakos , President PDRI	Organizational Agility	The Surprising Factors That Create Agility https://vimeo.com/428625711/640861199f
Steven Huang , Head of Diversity & Inclusion, CultureAmp	Organizational Culture	Emergency Response—Organizational Culture https://vimeo.com/428624596/07fcd18ce2
Kristin Allen , Managing Research Scientist, SHL	Remote Work	Virtual Work Competencies https://vimeo.com/428626416/c887720ed5
Wayne Camara , Horace Mann Research Chair, ACT	Testing and Assessment	I-O Psychology and the Response to the COVID-19 Crisis: A Call to Action: Testing and Assessment https://vimeo.com/428623879/68302dcb70
Bradford S. Bell , Professor of HR Studies, Director of the Center for Advanced Human Resource Studies, Cornell University	Virtual Teams	Leading Virtual Teams https://vimeo.com/428624217/4cfe383b62

Assessment and Selection—Lance Andrews & Renee Barr, SHL

- Shift from recruitment to selection mindset: Previously were in a mindset of attraction (not enough applicants for openings). Applicants per job opening are skyrocketing, so need to shift mindset to selecting from a large volume of applicants.
- Remote work and remote/virtual hiring tools are essential: May need to reconsider what characteristics we are hiring for with shift to more remote employees. May also need to shift hiring practices to be more remote—need to pivot quickly to remote candidate engagement, realistic job previews, interviews, and unproctored remote assessments.
- Consider what influences candidate reactions in times of high unemployment:
 - Communication—clear info about process and what people can expect.
 - Accessibility—mobile friendly is critical during COVID.

- Trust—sense of agency and control, two-way communication, and ethical and fair processes.

Coaching—Maya Garza, BetterUp

- Now, more than ever, people need a personalized approach to drive their well-being and performance.
- Well-being dipped during peak COVID periods, with significant disruption to productivity and engagement at work.
- Engagement and the overall employee experience improved for employees who were engaged in coaching, and it dropped for those who were not.
- During COVID, resilience skills can improve up to 125% with coaching.
- Coaching also helps build “brain memory” for critical thought processes and mechanisms that boost authenticity, optimism, and hope—all drivers of employee thriving during chaos and uncertainty.

Diversity and Inclusion—Enrica Ruggs, University of Memphis

- Prioritize diversity and inclusion. (Don’t cut D&I programs and resources.)
- Commit or re-affirm commitment to building an inclusive environment. (Build virtual inclusion; challenge bias; halt harassment and discrimination.)
- Openly communicate.
- Be flexible and empathetic.
- Be aware of blind spots. (Assess the full scope of the situation and decisions.)
- Build safety (psychological safety and safe “spaces” for grief and individual situations).

E-Learning and Training—Kurt Kraiger, University of Memphis

- Separate myth from science—and maybe experience.
- Offer clear guidance on “best practices”—or at least minimally viable products.
- Challenge organizations to make rational decisions on what needs to be taught and how—AKA do a needs assessment.
- Write practical papers.
- Provide guidance for L&D design.
- Encourage better decision making in organizations.

Emotion and Motivation—Liu-Qin Yang, Portland State University

- More research is needed on social isolation and relationship management at work, especially among workers who do more remote work relative to before COVID.
- More work is needed to study vulnerable populations, especially contingent workers and those with disabilities.
- More scientific advocacy is needed to inform organizational management about how to best manage isolation and worker relationships.
- Theory advancement: To adapt and extend existing theory while studying workplace isolation and relationships in the post-COVID work settings.
- Methodological advancement:
 - *Methods to best engage more dispersed workers post COVID.*

- *Methods to collect and analyze relationship data using technologies (e.g., recording of team meetings in zoom).*

Humanitarian I-O Psychology—Stuart Carr, Massey University

- COVID-19 has made the *unthinkable* thinkable, such as applauding frontline workers in the street.
- COVID-19 is a *disruptor*, with the potential to damage but also to build back better, in the world of work.
- The world of work we had in 2019 was *unsustainable*, with rampant precariousness and wage inequality.
- A *humanitarian* crisis, with record levels of employment but also working poverty and informality.
- We need a renewed focus on social *protection*—putting people before (precarious, unsustainable) jobs.
- Let us refocus on *sustainable livelihoods*, with living wages, interconnectedness, and prospects for future generations.
- Revamp job specification; for example, can it be done at a distance, is it frontline, safe and if not, can it be sustainably automated?
- Reinvent job evaluation by breaking away from labor-market sinkholes as the benchmark and choosing instead value to society and sustainability.
- Invert the ethos of selection from weeding out to including in, for example selecting more entrepreneurs for start-up support.
- Put people's well-being front and center, at tertiary (self-care), secondary (helping organizations that serve us all), and primary (at government levels, such as advising on Universal Basic Income for sustaining livelihoods in the post-COVID world of work) levels.

Leadership—Ryne Sherman, Hogan Assessments

- Help organizations select leaders who have the qualities to effectively lead through (inevitable) crises.
- Help organizations develop leaders who lack certain qualities for effectively leading through crises.
- Help organizations create crisis teams to round out potential leader flaws in crisis management.

Legal Issues—Kate Bischoff, tHRive Law & Consulting

- COVID-19 bends the law.
- Taking advantage of the bend could cause problems.
- Be careful NOT to make employment decisions based upon disabilities, pregnancy, and age—laws will return.

Occupational Health Psychology—Tammy Allen, University of South Florida

- COVID-19 has been a major stressor in the life of most Americans.
- We need a worker-centric approach to examining the impact of COVID-19. Two major categories associated with COVID are frontline/essential workers and stay-at-home (remote) workers.

- We need to recognize the threats that exist to these workers. Threats to these two types of workers vary along three dimensions: virus exposure, change of location, and social isolation. Frontline workers have greater virus exposure than do remote workers. Remote workers have changed their location of work, which requires adjustment while frontline workers remain connected to their same work location. Social isolation is a greater threat for remote workers than for frontline/essential workers.
- We need to place more attention on vulnerable, marginalized employees such as those in the gig economy and those in the meatpacking industry. These types of workers are rarely included in our research and practice.
- There is much to be learned from the experiences of workers. Ideally, we can take the lessons learned from the pandemic to promote worker health, contribute to sustainable work, and enable equality and equity for all. Employee productivity and well-being go hand in hand. **It's time to put the health, well-being, and safety of workers at the center of our mission and values as I-O psychologists.**

Organizational Agility—Elaine Pulakos, PDRI

- Agile organizations are resilient and can bounce back from unexpected change such as that introduced by COVID-19.
- Create an agile organization by
 - Building stability: Stability provides a solid base to enable agility by calming people and keeping them focused on performance and change.
 - Rightsizing teamwork: Teamwork has benefits, but can lead to complexity.
 - Engaging in relentless course corrections: Get individuals comfortable raising and solving problems together and not relying on leaders to take the lead.

Organizational Culture—Steven Huang, CultureAMP

- Ask your workforce whether they agree with these three statements:
 - I know what I need to do to keep safe and healthy during the COVID-19 pandemic.
 - I feel safe carrying out my role during the COVID-19 pandemic.
 - I am being treated fairly by my colleagues during the COVID-19 pandemic.
- Aim for 90% or higher for a smooth and safe return to work. Make sure to slice your data by location, team, gender, and race to identify any hotspots.

Remote Work—Kristin Allen, SHL

- This is a new kind of remote work—we can't assume that previous research applies.
 - Although remote work has been studied in recent years, working remotely during COVID-19 involves juggling family responsibilities, more frequent interruptions, and more stress than typical remote working, putting workers at risk for meeting performance expectations and burnout.
 - We as I-O psychologists need to learn as much as we can about the demands and skills required to be successful in the COVID-19 remote work environment as quickly as possible.
- Apply our science to publish insights that will help the global workforce adapt and maintain high performance in a remote environment while supporting managers with tips for sustaining a remote workforce.

- This is an unprecedented situation, and organizations are in a position of both risk and opportunity.
- Different employees work differently and need different kinds of support.
- Insights to help managers lead effectively and provide individualized support to their employees will be important. In addition to driving high performance, this approach will support the overall well-being of the global workforce.

Testing and Assessment—Wayne Camara, ACT

Recommendations for large-scale testing programs:

- Alternative testing models may impact score equivalence.
- Flag scores and provide guidance on how to interpret scores in light of regular administrations.
- Don't oversell results—identify claims you can support about score exchangeability.
- Changes in construct, content, response process, timing, device can all cause construct-irrelevant variance.
- Market research—consultation with test users to ensure they will accept scores and understand how they will treat scores.
- Another model for high-stakes testing is verification testing—accept score on an altered test and confirm theta with adaptive or shorter verification setting—ideal for cut scores.

Virtual Teams—Bradford S. Bell, Cornell University

- Over the past few decades, the adoption of virtual teams within organizations has steadily progressed, as have advancements in virtual-team research. As a result, we have learned a great deal about virtual teams and the factors that influence their effectiveness, which can assist organizations and leaders as they navigate the COVID crisis.
- Virtual teams can achieve levels of effectiveness and member satisfaction comparable to more traditional, colocated teams, but only if critical teamwork conditions are established. A key role of virtual-team leaders, therefore, is to help develop and maintain these conditions, but this can be more challenging when members are dispersed.
- Given the difficulties associated with executing many team performance management and development functions in virtual contexts, hierarchical leadership needs to be replaced with a greater emphasis on structural supports (e.g., reward systems) and shared leadership.
- Virtual-team leaders need to be more deliberate early in the team's lifecycle in formalizing work processes and strategies, but over time should shift from being directive to supportive so as to empower the team and allow it to self-manage.
- Virtual-team leaders also need to be more deliberate in orchestrating opportunities for social exchange so as to build relationships among team members that are important for trust, cohesion, and other essential elements of teamwork.

Conclusion

Although COVID-19 has changed the way we live and work, I-O psychologists have knowledge and tools that can be of use in this fight. It is our hope that business leaders, scientists, practitioners, students, and others will find something of value in the recommendations provided here by leaders in our field to answer these calls to action with a bold and forward-thinking response.

A Graduate Student's Guide to Getting Hired in a Digital World

Andrew Tenbrink, Mallory Smith, Georgia LaMarre, Laura Pineault, Tyleen Lopez,
and Molly Christophersen

The COVID-19 pandemic has created many challenges for graduate students. One major challenge has been the transition to working remotely, which highlights the importance of using virtual communication skills and strategies. In our [previous featured article](#), we outlined how graduate students can thrive in a digital world by becoming virtual meeting experts and using social media to develop professional networks and improve skills. Building on these insights, we want to continue the discussion surrounding how the pandemic has affected graduate student life. Not only has the pandemic disrupted graduate students' educational experiences, but it has also impacted the trajectory of our careers beyond the classroom. As I-O graduate students begin to search for jobs and internships, we are being met with a job market that is crippled by mass unemployment and hiring freezes that have been spurred by major economic struggles. This is a reality that none of us could have expected when enrolling in I-O graduate programs or even at the beginning of the year when [U.S. News ranked industrial psychologist as its 46th best job for 2020](#) with a job market score of 10 (out of a possible 10).

The impact of the pandemic will likely persist over the coming years, affecting graduate students seeking applied and academic positions. Many universities have implemented hiring freezes for the immediate future, creating obstacles for graduate students seeking [junior faculty positions and postdocs](#). Those seeking industry positions face U.S. unemployment levels greater than 10% and a [global economy that is projected to shrink 4.9% in 2020](#). With this uncertainty, we think it is important to help graduate students navigate current and future job searches. Our goal for this article is to discuss the implications of a tough job market and the transition to remote work on the job search process while also providing strategies and resources that can help graduate students be successful in securing a job that is right for them.

To organize our discussion, we will focus on the following three stages: (a) finding and applying for jobs, (b) the virtual interview, and (c) virtual onboarding. In each section, we provide helpful tips and resources that you can use to conquer the current job market.

Finding and Applying for Jobs

Despite a worrisome job market, graduate students may find encouragement in the fact that some aspects of the job search process remain somewhat unaffected by the COVID-19 pandemic. The modern job search typically involves spending time on the Internet perusing various online job search databases. Thankfully, this step can be done from the comfort of your own home. It is important to remember that searching for jobs is a process that can take a lot of dedicated time and perseverance. Especially when navigating a tough job market, it is important to develop a strategic approach to help you be successful.

Maximize Your Competitive Advantage

With fewer openings and more applicants, competition for jobs is likely to be fierce. As I-Os, we hope our training on best practice in selection is put into action, especially for the very systems used to hire us. Even in highly structured, standardized hiring systems, there can still be some degree of randomness in who ultimately gets hired. What can we do to gain advantage in a random and uncertain job market? Dr. Jay Van Bavel and colleagues offer [two principles that can help increase the odds for success in a tough job market](#): “maximize the signal” and “minimize the noise.” Applicants can “maximize the signal” by

taking the time to understand their audience and crafting materials that quickly attract attention. When there are a large number of applicants, the goal should be to find ways to stand out in the crowd. Keep this in mind when crafting cover letters, CVs, and résumés. Additionally, applicants can “minimize the noise” by increasing the number of jobs to which they apply. At the end of the day, getting a job can be a numbers game, and casting a wide net can increase your chances of getting an interview.

Further, the recent prevalence and acceptance of remote working arrangements, which some organizations are [considering for the long term](#), create many opportunities for job seekers. [Geographic proximity](#) may be less of a limiting factor because applicants can apply to remote jobs all over the country (or even the world) without the need to relocate. In fact, graduate students [may possess a competitive advantage](#) when it comes to remote work, as the skills required to work independently are also necessary for success in graduate school. Don’t hesitate to expand the geographic area of your job search as well as to highlight the skills that make you a great remote employee on your CV/résumé and cover letter.

Use Your Resources

It can be daunting searching for jobs, particularly when it’s not clear where to start. Luckily, there are many great online resources that can help to streamline the process and keep you from spending hours combing the Internet for the perfect job. Many job search sites allow you to filter by a variety of criteria (e.g., title, skills, company) and provide necessary information about jobs and organizations that can help you decide if a job is the right fit for you. These sites also provide tips and suggestions to help you achieve success in your search. Unfortunately, no database is completely comprehensive, so we recommend using multiple sites to help optimize your search. Here are some of our favorite resources for exploring jobs and internships:

- [I-O Job Network](#) & [AOM Career Center](#): These databases of job and internship postings allow you to search based on your own criteria and post your résumé for potential employers to access.
- [LinkedIn](#): This popular professional networking site provides a large database of job postings that you can search while also leveraging your social connections to look for open positions.
- [HigherEdJobs](#): This online database provides access to job postings for positions at academic institutions. Additionally, they provide news and resources that can help you navigate the job search process.

Rely on Your Network

One of the best resources for finding jobs is your professional network. Building relationships with people in your field allows you to learn about new jobs, showcase your skills, and present yourself to decision makers in organizations. Talking to someone whose job or employer is similar to those that you are targeting is an effective way to determine whether that position is a good fit for you. As many organizations have transitioned to fully remote work, the strategies for cultivating a strong professional network have changed. To provide practical guidance for our readership in this regard, we asked Dr. Michael A. Johnson, assistant professor at Louisiana State University’s Rucks Department of Management, how senior graduate students can best market themselves to prospective employers in a virtual world.

Johnson explains that “people should especially push into their job search and networking. I always tell my students that people are never as willing to help you out as right now. People intuitively get what it is like to try and find that first job as well as navigate the beginning parts of your career. Graduate students

should take advantage of that. We may be entering an extended period where the job market will be limited and the importance of having a good network is one way of overcoming that.”

Whether you already have an extensive list of professional contacts or think that your professional network needs some development, it is crucial to take the time to connect with people. Johnson recommends setting aside some time each week to connect with graduate students, professors, and industry contacts. This can be as simple as sending an email, connecting on social media, or even setting up a casual virtual call. Finally, he reminds graduate students that “networking makes us all uncomfortable, and I think that people get that. In most circumstances, reaching out and doing a bad job with it is better than not reaching out at all.”

The Virtual Interview

You put a ton of time into your job search, and it paid off with an interview at an organization at which you’d love to work. As the day of your interview approaches, you may wonder if you should prepare differently for a virtual interview than you would for an in-person interview. In this section, we’ve summarized insights from **Dr. Ryan Horn**, a virtual-interview researcher and recent grad who shared advice from his research and his personal experience with navigating the virtual job market.

Preparing for Your Interview

Horn explains that although preparation for the content of the interview shouldn’t change, there are steps that candidates can take to reduce the potential for distraction when using a video platform. For example, one of [Horn’s studies](#) found that the presence of a picture-in-picture window (the small window in your screen that shows how you appear to an interviewer) in a video interview increased cognitive load for interviewees. Taking this into consideration, candidates’ may want to minimize the picture-in-picture window during the interview and consider ahead of time how to reduce other distracting elements on their screen and in their home. Part of your interview preparation should include checking your audio, testing your lighting and picture, and minimizing as many environmental distractions as possible.

Recovering From a Technical Difficulty

Imagine this: Your virtual interview is going great when, suddenly, your audio cuts out. This is a nightmare situation for most candidates, but when it comes to recovering from glitches, Horn says the best thing to do is to maintain composure and not let frustrations with technology alter your delivery and content. Interviewers understand that glitches happen, but they will also be attentive to how you conduct yourself during an interruption. If you handle the interruption well, it will demonstrate problem-solving skills and composure to your interviewer. Conversely, Horn warns that handling the technical difficulty poorly could hurt the candidate’s performance. He explains, “You will not get a second interview if you curse at Zoom and toss your headphones across the room.”

To minimize the impact of technical problems, we suggest strategizing your response to any interruptions that may happen during your interview. Some suggestions include having an ethernet cable nearby in case your wireless Internet cuts out, planning to finish the interview by phone if video or audio isn’t working, or having an alternative video-conferencing option so you can suggest switching platforms. Although you can’t plan for everything, thinking through what you would do if a problem arises can help you remain composed.

Don't Forget to Follow Up

Just like you would after an in-person interview, it is best practice to follow up with your interviewer, thanking them for their time. Your email should be concise but memorable, and you should refer to topics or questions that came up during your interview. There are many online articles offering great advice about how to best follow up after an interview, including this [LinkedIn article](#) and this [blog from Harvard Business](#).

Virtual Onboarding

Congratulations, you got the job! We're sure you're excited to begin this new chapter in your professional journey, but we acknowledge that starting a new job can be scary—and your first-day jitters may be exacerbated by the perceived challenges of starting a job remotely. We've compiled the following tips to help you make the most of your first few weeks.

Connect With Your New Colleagues and Make Yourself Visible

In the office or around campus, it's easy to stop by a colleague's desk to ask a question or catch up while grabbing coffee. Although we may have taken interactions for granted before moving to remote work, these brief conversations were invaluable for fostering belonging and remaining visible to other members of the organization. In a qualitative study about virtual onboarding, [Hemphill and Begel \(2014\)](#) argue that fewer opportunities for informal communication with colleagues and reduced visibility are among the greatest challenges facing new members of virtual teams. As a remote worker, you may want to ["manufacture" watercooler conversations](#) to informally connect with your team. Reach out to ask someone on your team if they would be interested in having a short "get to know you" virtual meeting. If your workplace hosts informal virtual meetups such as coffee breaks or happy hours, attend these events during your first few weeks and introduce yourself to your new colleagues. These events can be used to break the ice so you feel comfortable reaching out in the future as well as to identify potential mentors ([Markman, 2020](#)).

Equally important to getting to know colleagues informally, setting up regular check-ins with your manager might help you maintain accountability. In a paper by [Shoenfelt et al. \(2012\)](#) about I-O psychology internship practices, they found that many interns were required to keep a daily or weekly diary where they described what they worked on each day. This practice has been recommended in some recent articles (e.g., [Art Markman's article for HBR](#)) about best practices for working from home. A daily diary can be used for your own records or can be shared with your supervisor to make your daily tasks more visible, maintaining accountability.

Ask Questions and Clarify Expectations

As a new hire in a remote position, you may need to put in more effort to determine your manager's and team's expectations of you. One way to do this is to develop a professional development plan with your manager during your first 2 weeks on the job. This proposal can outline details of your role, how successful performance will be evaluated, or a timeline for achieving professional milestones. Shoenfelt et al. (2012) explain that this is a common practice for I-O interns, as it helps clarify and formalize expectations for an often-ambiguous short-term position.

Even without creating a formal plan with your supervisor, asking questions about the organization's expectations of you can help you be successful during the first few weeks of a virtual job. In an [article for Bloomberg](#), Zena Everett—a career coach and former recruiter—suggests that new employees ask the following questions:

- If you were me, what would you focus your energy and attention on (each day)?
- How will I be measured during the first 3 months?
- What might derail me?

Set Boundaries

As a new employee, you might feel compelled to work extra hours and make yourself overly available to your new team—[habits that are easy to fall into](#) especially while working remotely. Although we acknowledge that working outside of your typical work hours may sometimes be necessary, constantly being available can lead to burnout and can interfere with other responsibilities, such as your role as a graduate student. In [an article for TopResume](#), Carson Kohler recommends developing a routine that is flexible to the needs of your employer while also setting clear personal boundaries.

Final Thoughts

The COVID-19 pandemic has rapidly changed the landscape of work, and this presents new challenges and opportunities for graduates navigating the job market. Fortunately, we as I-O psychologists are still in demand, arguably now more than ever, as employers look to us to [shape the post-pandemic workplace](#). Although we hope that the resources in this article help you feel motivated and supported in your job search, we also acknowledge that finding a job is an exhausting endeavor. We encourage you to take time to recharge and tap into your support systems when you're feeling overwhelmed with the job search process. Remember, you're not in this alone, and we wish you the best of luck as you take this next step in your professional journey!

Thank you to Michael Johnson and Ryan Horn for their time and contributions to this article.

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Where Do We Go From Here?
An Interview With Derek Avery, SIOP's Newly Appointed Diversity and Inclusion Portfolio Officer

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With all the uncertainty that has come with life during the pandemic, one fact that has received increasing attention is the toxic presence of systemic racism and oppression of members of underrepresented groups. There has never been a better time to focus on diversity and inclusion efforts within our profession and the world. In the last year, SIOP has demonstrated a commitment to D&I through the creation of the SIOP Foundation's Anti-Racism Grant Program, the formation of the brand new ad hoc Disability Inclusion and Accessibility Committee (DIAC), and the appointment of SIOP's first ever D&I Portfolio Officer, **Derek Avery**.

As members of DIAC's steering committee, we wanted to hear about Derek's vision for the D&I portfolio, and we thought you all would too. Thank you to Derek for agreeing to share his insights and vision through this Q&A. Before we get to the interview, we simply would not be doing our jobs as ambassadors for DIAC if we did not include a shameless plug of our recent activities in this article. We have been busy ramping up our work as a new committee over the past months. We were delighted by the many people who expressed an interest in joining DIAC and had a very fruitful virtual coffee hour during the conference in June to discuss ideas for making SIOP more accessible and inclusive. This year, we are working toward creating social media platforms to encourage collaboration and to publicize disability workplace research, creating a disability research award for conference submissions, developing accessibility guidelines for SIOP events, and planning events and sessions for next year's conference. We want to thank the many past and current members of WIN, LGBT, CEMA, and International Affairs who provided advice and insights that helped us get started.

But enough about us. Without further ado, please enjoy our interview with Dr. Derek Avery.

Q. How did you get involved in the D&I space?

A. My family has a history of social justice activism, so I became interested in continuing that legacy at an early age. My formal involvement in this space began as a 1st-year doctoral student working on an affirmative action project with **Dr. David Kravitz**.

Q. What are your D&I-related goals for SIOP?

A. I want to see us become much more intentional and strategic about diversity and inclusion. This starts with doing our housekeeping: getting a firmer sense of the current state of diversity and inclusion within our Society. From there, I'd like to see greater alignment along the shared interests of the committees under the D&I portfolio. Advocating for underrepresented people is never easy, but there is certainly greater strength in numbers. I also want to help the committees amplify their internally and externally facing efforts.

Q. What do you see as the key opportunities and challenges for DIAC in particular?

A. I think the first challenge is similar to that of other committees in the portfolio: understanding the breadth of your constituents. Just as we don't know the precise percentage of SIOP members who are Hispanic, we also don't know how many have disabilities or what those disabilities might be. This makes it difficult, if not impossible, to effectively advocate on their behalf and attempt to include them fully by providing necessary accommodations where appropriate.

Q. How can the committees in the diversity portfolio engage in their work with a view toward intersectionality? How do you plan to support interactions among these committees as they work toward shared goals?

A. In the past, much of the work by these committees has been independent, which makes sense given that they were formed independently to serve different agendas. With that said, however, it is clear that there are commonalities in the experiences of the members whose interests these committees represent. As I review each committee's goals with their leaders, I plan to identify the areas of convergence between their goals and tactics with those of other committees. I realize there is a balance to be maintained between (a) allowing the committees to serve as psychologically safe spaces of critical mass for in-group members and (b) uniting to form a broader coalition that amplifies the collective voices of multiple underrepresented groups within SIOP.

Q. Do you see any other diversity groups or issues that are unrepresented (or underrepresented) in the current committee structure? How can those issues be addressed?

A. I think this is a fluid concern. As we continue to grow and evolve, relative representation may change, and the salience of identities may shift as well. For instance, ethnicity was much more salient for most White Americans in the past than it is today. I think we have to realize that diversity dynamics are not static and must continually be reassessed.

Q. How have recent events, like Black Lives Matter and the COVID-19 pandemic, changed how we should be considering D&I initiatives?

A. They've changed everything and nothing simultaneously. What I mean is that they haven't changed the situation, but they have amplified awareness of the situation. Many people have claimed that their social justice inactivity was a function of not knowing the extent of the problems. The pandemic and other events have effectively blown the cover of anyone who would continue to use ignorance as an excuse for inaction. In short, I think these recent events have made it clearer to everyone why D&I initiatives are important if ideals of equal opportunity are to become more of a reality. Now, the key is for us to be strategic in coordinating and channeling all of this newfound attention, energy, and goodwill to help create lasting change.

We wish to thank Dr. Derek Avery for these insightful and energizing comments. Members of the DIAC Committee look forward to working with Derek and with the members of the other committees that fall within the D&I portfolio—namely WIN, LGBT, CEMA, and International Affairs—to serve the SIOP membership.

Opening Up: How Do I Conduct Peer Review With Open Science in Mind?

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The meteoric rise of the open science movement within social sciences has changed the way researchers conduct their research across a wide range of disciplines. A number of prominent journals have introduced new open-science-driven guidelines, which serve to enhance the reproducibility, replicability, and integrity of scientific publications.

Before any paper is accepted for publication, however, it must undergo peer review: a long-standing feature of scientific practice (Peters & Ceci, 1982) and widely believed to serve as quality control (Armstrong, 1997; Goldbeck-Wood, 1999; Horrobin, 1990). Scientific journals often consult subject matter experts to serve as reviewers for papers submitted for publication in their journals. Indeed, reviewers often act as “gatekeepers” for scientific publications. Although there is a considerable amount of guidance on how to conduct thorough and rigorous reviews, reviewers and editors are now faced with a new challenge: conducting peer reviews with open science in mind.

In this post, we will discuss the role of peer review in an open science era and how reviewers can actively contribute to the open science agenda. With this entry of “Opening Up,” we’ll highlight some interesting data regarding the peer review process, call attention to suggestions from leaders in the open science movement for improving peer review, and point out resources that you can utilize to become a stronger peer reviewer. We’ve also gathered and consolidated some recommendations and tools that have emerged since the open science movement took off. Hopefully, when you have finished reading this entry, you will have some new ideas to take with you as you review more scholarly work.

A Selective Review of Research on Peer Reviewing and the Peer Review Process

Peer review is expensive, prompting questions regarding cost effectiveness as well as discussion regarding alternative forms of peer review (Nosek & Bar-Anan, 2012). One estimate of the total annual value of volunteer peer review services in terms of time spent reviewing scholarly work was more than \$2.5 billion globally (Research Information Network, 2008). Furthermore, reviewers who spend considerable time providing high-quality reviews may place themselves at a disadvantage, as such time could be allocated toward advancing their own research agenda (see Macdonald & Kam, 2007; Tourish & Craig, 2018).

How well does peer review identify significant issues with a manuscript? There is plenty of evidence that even diligent reviewers miss key issues with a manuscript (e.g., misreported *p* values; see Cortina et al., 2017; Crede & Harms, 2019; Schroter et al., 2008; Wicherts et al., 2011). Among reviewers, inter-rater consistency is often low (Bornmann & Daniel, 2010; Marsh & Ball, 1989; Peters & Ceci, 1982; Petty et al., 1999), introducing a substantial amount of chance into the publication process (see Whitehurst, 1984). Of course low inter-rater reliability can be a feature rather than a bug of the peer review process. Given the complexity of the phenomena that we often study, a small number of experts seem unlikely to have all of the information necessary to evaluate every component in an article (Nosek & Bar-Anan, 2012). Associate editors may assign reviewers from multiple sides of an issue in order to get both perspectives or bring in reviewers with complementary expertise (e.g., methods experts, content experts).¹ So

although high inter-rater reliability may be nice, it is not always the goal. Informational asymmetry—authors knowing more about their work than reviewers (see Bergh & Oswald, 2020)—further complicates reviewing. This can be expected in a system where page lengths and word count requirements force authors to decide which features of a study should be highlighted (Aguinis et al., 2019). Ultimately, peer review may not perfectly guard the scientific record. Unless errors with a manuscript are corrected in some form such as via an addendum by the authors, a commentary on the original article, or (in the worst case) a retraction, the big issue is that they remain in the literature (Nosek & Bar-Anan, 2012).

Such imperfections recently motivated a former editor of *Social Psychological and Personality Science*, Simine Vazire, to argue the peer review process does not—indeed, cannot—serve the function for which it is intended (Vazire, 2020); she argues that there is simply too much for any set of reviewers to know in order to fairly evaluate a submitted manuscript. Reviewer time is a key constraint. She and others (e.g., Nosek & Bar-Anan, 2012) advocate an alternative ecosystem that leverages prepublication (via preprints) and postpublication peer review that can be broadly described as “open reviewing.” Open reviewing occurs as scholars post versions of their work to public repositories (e.g., the Open Science Framework, PsyArxiv) and request reviews or commentary. Unlike the traditional peer review process, open reviewing, which allows reviews to be identified, helps reviewers to gain a reputation for being good reviewers. Although such identification may strike some as a cause for backlash (see Zhang et al., 2020), early evidence suggests that it may have promising features. A randomized trial of blind versus open review found no difference in the rated review quality or the ultimate publication recommendations (van Rooyen et al., 1999). Open reviewing also overcomes an incentive problem in the peer review process alluded to earlier: namely that there are few incentives to doing high-quality reviews (Macdonald & Kam, 2007; Nosek & Bar-Anan, 2012; Tourish & Craig, 2018). Indeed, as noted by Tourish (2019), data analysis problems require diligent scrutiny by reviewers, and the opportunity cost associated with such diligence is high (see also Macdonald & Kam, 2007). In other words, reviewers are more likely to do “good enough” work: Identify a few easily identifiable issues and then proceed with a more superficial review (Köhler et al., 2020). Last, under an open-reviewing framework, other scholars may use published reviews as a potentially valuable resource, thereby further enhancing the scientific utility of the peer review process.

Reviewing a Manuscript Without Embodying Reviewer #2?

Whether the peer review process remains as it has traditionally been carried out or evolves into a process more aligned with open science, we believe there is merit to cultivating a robust reviewing skillset. Excellent reviewing helps authors highlight what makes their contribution valuable to the field at large (Köhler et al., 2020). Examples include encouraging authors to, if possible, consider the replicability of their work, or—if multiple studies are included—consider combining data into a mega-analysis or meta-analysis to more rigorously test a claim (see Lakens & Etz, 2017; McShane & Böckenholt, 2017; Schimmack, 2012). Such efforts help the broader scholarly community to identify and then leverage useful ideas. We wish to promote these constructive features to peer review. As any experienced scholar knows, it is not possible to conduct an unflawed study. Decisions must be made to trade off certain strengths for others (McGrath, 1981). Some decisions, such as sampling a diverse set of organizations and occupations, can facilitate generalizing a claim to specific populations or across populations (Pedhazur & Schmelkin, 2013). There are a host of measurement practices that can facilitate precision in control and measurements (see Clifton, 2020; Hancock & Mueller, 2011). Certain design decisions (e.g., using a cross-sectional as opposed to a longitudinal or temporal separation design) can facilitate theory testing or the ruling out of alternative explanations (Spector, 2019). Conducting a study in the lab or field can make a study more or less realistic. Many of these decisions stand in opposition to one another.

As we have highlighted with our selective review, there is ample evidence that the peer-reviewing efforts can be improved upon. A recent article titled “Dear Reviewer 2: Go F’ Yourself” captures a prevailing sentiment held by many scholars toward peer reviewers (Peterson, 2020). To quote directly from Peterson:

Anyone who has ever submitted a paper to a peer-reviewed outlet knows the reviewers can, occasionally, be unpleasant. While rejection always stings, the belief that a reviewer has either completely missed the point of the manuscript, been overtly hostile in his or her review, or simply held the author to an impossible standard is vexing. The source of this frustration has seemingly become personified in the identity of a single person—Reviewer 2. He (and it is always assumed to be a he) is embodiment of all that we hate about other scholars. Reviewer 2 is dismissive of other people’s work, lazy, belligerent, and smug. (p. 1)

One source of such unpleasantness may come from the simple fact that reviewers rarely receive training for conducting quality peer review or even developmental feedback (see Köhler et al., 2020).

Fortunately, SIOP, in partnership with the Consortium for the Advancement of Research Methods and Analysis (CARMA), has offered a set of online modules to facilitate reviewer training (<http://car-marmep.org/siop-carma-reviewer-series/>). The modules center on a proposed competency framework for reviewing (see Köhler et al., 2020). At the narrowest level, these competencies include reviewing with (a) integrity (e.g., acknowledging the limits of our expertise), (b) open mindedness (e.g., doing outside research to better position ourselves for reviewing), (c) constructiveness (e.g., giving actionable advice), (d) thoroughness (e.g., reviewing all sections of a paper), (e) appropriate tone (e.g., being tactful), (f) clear writing (e.g., numbering specific comments), (g) appropriately leveraged expertise (e.g., assessing a paper’s contribution to the field), and (h) appropriate representation (e.g., representing the journal for which you are serving as a gatekeeper). At a higher level, these competencies reflect foundational knowledge, skill, and professionalism. CARMA’s training modules help reviewers recognize counterproductive behaviors, such as encouraging authors to engage in questionable research practices (e.g., dropping hypotheses or hypothesizing after the results are known, asking authors to add hypotheses, or remove unsupported hypotheses without a strong rationale). They can help reviewers see how a well-tested null result can be useful or how inconsistency in findings can happen for systematic (moderator) or random (statistical power) reasons that can stimulate future research or indicate that the reliability of a finding may be more constrained than is recognized (see also Nosek & Errington, 2020). Reviewers will learn how to focus their efforts on helping authorship teams recognize those aspects of their study that would contribute meaningfully to the field and avoid pressuring authors to write a paper that they do not want to write.

We strongly encourage anyone seeking to improve their peer review skillset to begin with the free online training provided by CARMA. Additionally, in putting any skills acquired from the CARMA reviewer training into practice, we encourage reviewers to routinely ask for feedback on the quality of their reviews or how they might improve their work. Reviewers are occasionally scored on the quality of their work at journals, which helps editors to promote quality within their journals. Asking for these scores and for developmental feedback can be fruitful for improving one’s reviewing skillset.

To add to the collective work of Köhler et al. (2020), CARMA, and SIOP, we highlight some easy-to-adopt checklists that should help reviewers to increase the quality of their reviewing efforts. For instance, Eby et al. (2020) provide a short methodological checklist that can be helpful for reviewers to ensure that submitted works are rigorous, replicable, and are transparent/open. Another checklist is provided by

Davis et al. (2018), who offer a broader and more comprehensive checklist that offers advice for promoting robustness and transparency when reviewing psychology manuscripts reporting quantitative empirical research. Their checklist is notable in that it contains advice that is unique to open science publication practices, such as reviewing registered reports or soliciting results-blind reviews. Such advice can be broadly applicable—there is value in reviewing manuscripts *as if* they are registered reports/results-blind submissions; that is, (a) the literature review and methods are reviewed first, followed by (b) the results and then the discussion, and (c) not allowing the findings to too strongly sway one’s opinion (particularly if the methods are robust). Such a strategy may help a reviewer to place more emphasis on the methods rather than results of a study, which is an overarching theme motivating the open science movement. Additionally, Aguinis et al. (2019) offer a series of checklists pertaining to best practices in data collection and preparation. These lists can help reviewers focus on issues with regard to the type of research design, control variables, sampling procedures, missing-data management, outlier management, the use of corrections for statistical and methodological artifacts, and data transformations. Last, we would like to call attention to the American Psychological Association’s Journal Article Reporting Standards (JARS), which also has checklists online for both quantitative and qualitative research (<https://apastyle.apa.org/jars>). Incorporating any of these checklists into the reviewing process can help scholars to improve the quality of their peer-reviewing efforts.

In addition to these checklists, we would like to highlight a few other resources that have proven helpful for common technical aspects of reviewing scholarly work in our field (see Table 1).² First is StatCheck (see Nuijten et al., 2016). This is a useful tool for quickly scanning a manuscript and identifying misalignments between reported p -values and degrees of freedom for relatively simple statistical tests (e.g., t -tests; see Nuijten et al., 2016). Next is the Granularity-Related Inconsistency of Means (GRIM) test. This is a simple and useful procedure for examining whether the means of Likert-type scales, which are commonly in use in our research, are consistent with the sample size and number of items that comprise the scale (see Brown & Heathers, 2017). A similar assessment can occur with standard deviations via the GRIMMER (Granularity-Related Inconsistency of Means Mapped to Error Repeats) test. For a more in-depth assessment (e.g., reconstructing samples based on reported statistics), the Sample Parameter Reconstruction via Iterative TEchniques (SPRITE; see Heathers et al., 2018) can be used to build plausible data sets using basic summary information about a sample (e.g., the mean, the standard deviation, sample size, and the lower and upper bounds of the range of item values). SPRITE complements GRIM and GRIMMER for detecting inaccuracies in published values. When studies involve categorical data, the DEscriptive Blnary Test (DEBIT; see Heathers & Brown, 2019) can be useful. Although these tests are broadly applicable, given that much work in our field involves latent variable modeling with large samples, other approaches (e.g., ensuring that degrees of freedom align with those implied by a proposed model) are often more useful (see Cortina et al., 2017).

Table 1
A Set of Rather Basic Tools for Evaluating Statistical Claims

Tool	Description	Supporting evidence	References
StatCheck (http://statcheck.io/)	An R package with an accompanying shiny app that flags results containing inconsistent p values. <i>Pros</i> Simple and easy to use. <i>Cons</i> Limited to relatively simple statistics. May	In a sample of over 250K articles published from 1985–2013, over half of the articles were flagged as having at least one p -value that was inconsistent with its test	Nuijten et al. (2016), Nuijten (2018)

	unfairly flag p values that have been adjusted for multiple tests (but this is fairly uncommon, see Nuijten, 2018).	statistics degrees of freedom.	
GRIM (https://osf.io/3fcbcr)	A simple mathematical technique that can verify statistical means in research reports for Likert-type data. <i>Pros</i> Simple and easy to use. <i>Cons</i> Useful for a relatively smaller subset of samples (e.g., $n < 100$).	Of 71 articles examined, 36 (50.7%) contained at least one error.	Brown & Heathers (2017)
GRIMMER	Same as GRIM but for verifying standard deviations. <i>Cons</i> Not as easy or straightforward to implement.	–	Anaya (2016)
SPRITE (https://steamtraen.shinyapps.io/rsprite/)	Allows an assessment of the kinds of data distributions that are possible for ordinal data with given mean and standard deviation. <i>Pros</i> Simple and easy to use. <i>Cons</i> Can become overwhelming (and may be unnecessary when distributional assumptions are evident in the field).	–	Heathers et al. (2018)
DeBIT	A simple test of whether the means and standard deviations for binary variables are reported consistently.	Though no systematic investigation has been published, DeBIT was used by Pickett (2020) to identify inconsistencies in articles that were eventually retracted.	Heathers & Brown (2019)
Discrepancies in reported degrees of freedom for measurement and structural models (https://gmui-opsych.shinyapps.io/de-greesoffreedom/)	Tests whether a model with k manifest variables and m latent correlated variables has the appropriate degrees of freedom, which should be $k \times (k+1)/2 - 2k - (m \times (m-1)/2)$. <i>Pros</i> Simple and easy to implement. <i>Cons</i> To carefully evaluate the results of using SEM (i.e., RMSEA, CFI, TLI), other formulas are needed (see Crede & Harms, 2019).	Discrepancies in reported degrees of freedom have appeared with concerning frequency in top tier management and applied psychology journals (see Crede & Harms, 2019; Cortina et al., 2017). A similar examination of top-tier journals (i.e., <i>JOM</i> , <i>JOB</i> , <i>PPsych</i>) found that 90% of studies contained at least one discrepancy (Crede & Harms, 2019).	Crede & Harms, 2019; Cortina et al. (2017); Rigdon (1994)

With regard to the checklists and tools we've highlighted here, we'd like to be clear that they should never be applied too rigidly nor do we wish to imply that identifying more issues necessarily invalidates a claim (see also Aguinis et al., 2019). We are not advocating for reviewers to view their job as a policing effort. Rather, our focus is on developing a more transparent and open peer review process for all parties. The tactics we've identified are broad, and although we believe that more items addressed by authors make for better research, we do not believe that the absence of any particular item or set of items has veto power against a claim put forward in a manuscript. Rather, there may be alternative—indeed, in many cases there are—explanations that impinge on the phenomena in question. We should aim to have such validity threats reported honestly and transparently (Aguinis et al., 2020); they may even be framed as rival hypotheses for a future study (see Spector, 2019). Action editors will have to weigh in and decide whether to encourage particular debates or not. As reviewers, we can highlight the merits of publishing papers that do have certain validity threats so long as they are reported honestly and transparently.

Concluding Thoughts

One author of this manuscript (Chris) recalls one reviewer quoting Winston Churchill's description of democracy to describe the peer review process: It is like "the worst form of Government except for all those other forms that have been tried from time to time." Fringe and/or unusual ideas might be rejected, but they often find their way into the scholarly community. There are several instances of Nobel-Prize-winning ideas failing an initial peer review process at a journal (e.g., Peter Higgs' seminal work on the Higgs model, Hans Krebs's work on the Krebs Cycle). Despite such imperfections and regardless of whether the process changes, we as scholars can still take it upon ourselves to improve the quality of our work as reviewers. To that end, we hope that the literature we've highlighted prompts you to adopt a few simple yet effective tactics or seek out those tips we've cited in our manuscript. We hope that this work helps you to improve your reviewing toolkit, thereby helping you to help others improve the quality of their contributions to the field.

Next Time on "Opening Up"...

We're actually looking for more ideas from you. There are several that we are considering. For instance, Mike Morrison and I are considering examining the I-O psych Twitterverse to see what open science topics are making their way into our online discussions. We are also considering an article on advice that scholars within our field can offer up to others regarding adopting open science practices. Perhaps you are a teacher who is incorporating open science, broadly construed, into your teaching; or maybe you are a practitioner who has found ways to put open science principles into practice. We'd like to hear from you. Please share your thoughts with Chris Castille (christopher.castille@nicholls.edu).

Notes

¹ Thanks go out to **George Banks** who in a friendly review pointed this out to us.

² It is worth pointing out that journals such as the *Leadership Quarterly* and the *Journal of Management* also have methods checklists.

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The What, Why, How, Who, and Where of Inclusion: Highlights and the Way Forward From the SIOP 2020 Theme Track

**2020 Theme Track Committee: Aarti Shyamsunder, Bernardo M. Ferdman,
Emily Solberg, Katina Sawyer, Stu Carr, and Veronica Gilrane**

SIOP 2020 was a pioneering year for SIOP in many ways, not the least of which was the way the conference quickly pivoted to a virtual format in the midst of the coronavirus pandemic. The Theme Track Committee had worked on the theme of [inclusion](#), chosen by **SIOP President Eden King** (Rice University), and planned a day-long program of sessions structured around key questions of What, Why, How, Who, and Where with respect to inclusion at work. We converted the sessions to the virtual format and accompanied them with live virtual discussions to extend and enhance the learning on this important theme. We also interspersed clips throughout many of the sessions from interviews we conducted with internal and external DEI (diversity, equity, and inclusion) practitioners and organization executives.

In this article, we share some key insights on inclusion from the Theme Track, organized around the same topics as the sessions. We first describe highlights from the sessions and then share key insights from the live discussions held during the SIOP Virtual Conference. The discussion during the forum held at the end of the conference was especially rich and brought up important insights, especially regarding the role of SIOP in promoting inclusion (particularly racial equity) in the community of work and I-O psychologists, as well as our responsibility to apply an inclusive lens in our own work—whether research, practice, speaking, consulting, or a mix.

WHAT (Inclusion's Past, Present, and Future)

In this session, chaired by Katina Sawyer (The George Washington University), four experts in the topic of inclusion discussed the past, present, and future of its definition and how our definitions shape our understanding of how to drive inclusion at work. Bernardo Ferdman (Ferdman Consulting), Veronica Gilrane (Google, Inc.), **Thomas Sasso** (University of Guelph), and **Lynn Shore** (Colorado State University) discussed how inclusion has been conceptualized in the past, how we define and apply this concept at work in the present, and where definitions of inclusion in research and practice might go from here. This session was a great primer for inclusion but also provided thought-provoking insights for those who are already familiar with the concept. The session also included perspectives on inclusion from Arthur Evans (CEO, American Psychological Association), Steven Reinemund (Retired Chairman and CEO, PepsiCo, & former Dean, Wake Forest University School of Business), Effenus Henderson (Institute for Sustainable Diversity & Inclusion and former CDO, Weyerhaeuser Corp.), Érida Margarita Bautista (Director of Inclusion & Diversity, Haas School of Business, University of California, Berkeley), Lexi Hernandez (Director, Diversity & Inclusion, Raytheon Missile Systems), Mary-Frances Winters (President & CEO, The Winters Group), Nadia Younes (Global Head of Employee Experience, Diversity, and Wellbeing, Zürich Insurance), and Nene Molefi (CEO, Mandate Molefi Human Resources Consultancy, South Africa). Interested in viewing this session? The link to watch the session is here: <https://vimeo.com/428472699/53a3b9bf01>

Key Insights for Us at SIOP:

- To challenge institutional-level discrimination, we need to focus on definitions that push scholars and practitioners to address **structural and systemic issues**. For too long, SIOP and work/I-O psychology have been focused on enhancing compliance to the system—but it is time to check our own blind spots and shift our focus to bring about sustained change. There is a growing desire (indeed, a need!) for work and I-O psychology to be more vocal and to

contribute to societal issues as a discipline and profession. A definition that encompasses the systems that promote inclusion in organizations is needed.

- As we consider [structural and systemic issues](#), we need to consider how broad or focused our approach to inclusion is and how this relates to the changes we are trying to make. In the context of the Black Lives Matter movement and [broader attention to systemic racism](#), it has become clearer that a focus on inclusion can be used to **promote racial justice and equity** along with inclusion of other dimensions of diversity, but it can also be used to avoid difficult discussions about racial dynamics in organizations. This can be seen, for example, in organizations that focus on increasing “diversity of thought” and yet simultaneously ignore entrenched processes that disadvantage and hold back Black people and other people of color. Or they may focus on addressing gender inclusion without paying attention to intersections with race and other dimensions of diversity, thus, in effect, advancing White cis-gender women to the exclusion of women from other groups.
- Simultaneously, along with this macro-level approach, it was emphasized that inclusion may mean different things for different people and groups, particularly at the individual or micro level. Thus, expanding our definitions of inclusion itself, to go beyond “not discriminating” and “counting diversity ratios,” is a good first step. Inclusion work needs to be **customized to context and person**.
- **Intersectionality** (i.e., intersections of multiple identities, such as [race](#) and gender) is another theme on which more research and evidence-based practical recommendations are needed. While some work and I-O psychologists may already incorporate some of those ideas in our work (e.g., through a focus on trust, psychological safety, expanding how we measure and define demographic categories), we need to be more intentional about adopting an intersectional lens in our research and practice on inclusion.

WHY (Does SIOP Need to Change and Embrace Inclusion in a Bigger Way?)

The session, chaired by Veronica Gilrane (Google Inc., People Analytics Manager) and Aarti Shyamsunder (Psymantics Consulting, Proprietor/Independent Consultant), included perspectives from academia (**Sabrina Volpone**, University of Colorado Boulder, Leeds School of Business, Director, Diversity and Identity Management Lab) and industry (Aarti Shyamsunder, Veronica Gilrane, and **Brian Welle**, Google, Inc., Director of People Analytics) to discuss different cases for inclusion. Volpone presented the legal perspective, discussing the history of inclusion in organizations beginning with the 1950s and 1960s with legislation sparked by systemic exclusion; then affirmative actions in the 1960s, 1970s, and 1980s; then the recognition that diversity without inclusion is inefficient today and in the legal landscape of today. Gilrane discussed the ethical perspective on inclusion. The argument focuses on growing social justice norms and values among employees in the organization and the relationship between the ethicality of the organization and its perceived authenticity. Welle discussed views on inclusion in the practice, and then Shyamsunder discussed and critiqued the business case for inclusion, which has been a traditional argument for inclusion but also has its limitations. The goal of the session was for participants to come away with the understanding that there are multiple ways to make the case for inclusion at work. Interested in viewing this session? The link to watch the session is here: <https://vimeo.com/428478553/0cd10d39c5>

Key Insights for Us at SIOP:

- Looking inward, it is clear that we need a greater focus on inclusion because **SIOP itself is far from being sufficiently diverse** or representative of the population at large. If SIOP truly seeks to be a global organization, we need to make more efforts to reflect the global face of work and organizational psychology. Even within North America (currently the majority of

SIOP members are from the U.S.), SIOP membership shows the classic pyramid distribution when it comes to racial diversity—people of color are more highly represented among student members, but the ratios start to skew as we start to look at higher membership levels. For example, SIOP Fellows are [mostly men](#), mostly from academia, and mostly White.

- It is also high time that we look critically at theory and accepted practices based on **scholarly research** that itself is centered on majority groups—making it potentially biased, sexist, racist, and colonial.
- Research on and practice of **diversity, equity, and inclusion are themselves not diverse**—an unfair burden of this work falls on the shoulders of members of the very groups that are fighting for more inclusion, and this needs to change. Work on DEI should be imperative across SIOP and a fundamental competency in the discipline and its practice.

HOW (Can SIOP Enhance Inclusion for Its Members and for the Recipients of Its Services?)

This session, chaired by Bernardo Ferdman and Stu Carr, focused on how organizations and their leaders can foster inclusion in groups and organizations. After an introduction by Ferdman framing the concept and inviting the audience to reflect on their own experiences of inclusion and the conditions that helped to bring those about, Katina Sawyer spoke about the interpersonal behaviors that promote inclusion, as well as the need for courage to disrupt behaviors that work against inclusion. Dnika Travis (Vice President of research at Catalyst, Inc.) focused on the inclusive leadership behaviors that serve to foster cultures of inclusion, and **Binna Kandola** (PearnKandola) held the mirror up to our own discipline, challenging us to look at psychology and ourselves, to see our complicity in perpetuating systemic racism, and to consider what we need to do to truly create inclusion and equity at the organizational and systems levels. The session also included powerful perspectives and insights from various executives and D&I practitioners on how best to foster inclusion; in addition to all those included in the “What” session, this one also included insights from Daisy Auger-Dominguez (Chief People Officer, VICE Media). Interested in viewing this session? The link to watch the session is here: <https://vimeo.com/428477936/3530d02470>

Key Insights for Us at SIOP:

- Work and I-O psychologists must help organizations and their leaders who are looking for quick fixes to realize that **inclusion requires intentional and sustained effort**. This sometimes involves uncomfortable conversations, difficult decisions, and critically questioning one’s own privilege and position in social hierarchies. For example, if organizations continue to hire, develop, and promote employees in the ways they have become used to, while making public statements about their commitment to diversity, it is unlikely that they will see actual change in their workforces or in fostering truly inclusive cultures. Even in academia, faculty and researchers must raise and address uncomfortable issues, intentionally take on diverse perspectives, have courageous conversations, call out inequities, and be prepared to listen and be held accountable for results.
- The long-standing aspiration for the field of work and I-O psychology to follow a **scientist–practitioner model** requires more intentional focus—especially for work on inclusion. Research on DEI needs to center on the lived experiences of those who have been marginalized for too long and take into account the insights and perspectives of DEI practitioners.
- SIOP needs to make our science and practice **accessible and applicable to everyone**—especially from a cultural and socioeconomic perspective. To that end, the pandemic has actually brought new possibilities (such as the virtual or hybrid model for future conferences) that could simultaneously achieve many ends: accessibility and inclusion for those who would not otherwise have attended the conference, reduced carbon footprint and financial burden, and enhanced access for groups that would have been sidelined or hesitated to participate

fully (e.g., people from different countries, students on a budget, people with disabilities, introverts, or those who prefer virtual/tech-enabled interactions).

WHOSE (Diversity Are We Overlooking?)

Four leading practitioners, advocates, and thinkers made three dynamic presentations on this topic. The first, by **Walter Reichman** (OrgVitality), painted a global tapestry of diversities that have been systemically excluded, but also shared stories of inclusion that many of us will not have known and will find inspiring. The second, by **Mahima Saxena** (Illinois Institute of Technology), took a global supply chain perspective on including the 2/3 majority of the world's workforce, who just happen to work in the informal sector. Making that sector and its talents more visible - in this case by showing us some of the actual products that skilled artisans make - palpably connects our lives and livelihoods and supports sustainability for all. Our third and final presentation, by **John Scott** and **Keith Caver** (APTMetrics, CT) applied a fresh D&I lens to future leader(ship). Through that lens, timeworn adages like "the best predictor of future behavior is past behavior" overlook swaths of future talent and leadership potential. Interested in viewing this session? The link to watch the session is here: <https://vimeo.com/428477426/b2db4df5d5>

Key Insights for Us at SIOP:

- There has been a resounding realization that I-O psychology has historically focused on white-collar workers in the corporate world—but the majority of the world's **work is done by others** (i.e., those outside the organized corporate world of work). [Shifting focus](#) to the unorganized workforce, blue-collar or gray-collar workers, forced labor, the incarcerated population, migrant workers, and the so-called "low-skilled" work sector (which often ironically calls for very specialized sets of skills that are in danger of being erased by technology and exploitative labor economics) must be a priority for work and I-O psychologists as we expand our notions of inclusion and, indeed, of work itself.
- The Black Lives Matter movement has found echoes around the world and brought issues of institutional discrimination to the forefront. As Eden King mentioned during the online discussion held during the SIOP Virtual Conference, it is time to end the "400-year **pandemic of racism** in our country." This could include I-O and work psychologists partnering with different disciplines. (The SIOP session organized by the Blacks in I-O group about police relations is a great example of this.) Our research on DEI, conflict resolution, culture change, and even core I-O topics such as selection and training can be brought to bear on these issues by reaching beyond the I-O world to the spheres of influence that matter.
- As the world seeks to recover from the pandemic, our notions about work are changing in permanent ways. Our field has an opportunity and a responsibility to inform these **pandemic-induced changes**—from how layoffs and hiring freezes are handled, to virtual work and its impact on those who don't have equal access to the required infrastructure, to how we treat essential workers, to leading a vulnerable and insecure workforce inclusively. This is especially important for those on the margins, for whom the impact of the pandemic has been disproportionately and unfairly high. The approach to this healing requires uncomfortable conversations through an intersectional lens, leading with human rights values—in which inclusion is key.

WHERE (Can We Go From Here?)

This session focused on creating a future vision of inclusion using a format in which our presenters used visuals and images alone to inspire the audience with their 3- to 5-minute vision of the future

for inclusion. The session started out with a short message from SIOP President Eden King—who described why she chose inclusion for this year’s theme and why it is becoming increasingly important in our work within SIOP as well as outside. Then, a highly creative animated presentation by Mike Morrison (graduate student at Michigan State University) focused on citizen science—and how our field and our scholarship itself can be more inclusive. Janice Gassam (BWG Business Solutions, LLC) then shared the urgent need to look beyond shortsighted solutions such as unconscious bias training, into more systemic solutions. Lisa Kepinski and Tinna Nielsen (Inclusion Nudges) shared one such systemic solution—embedding inclusion by design into our work, through what they call inclusion nudges. Lily Zheng, an independent DEI consultant, then presented her very topical and relevant idea of corporate social justice—the responsibility that organizations have to look beyond the profit motive and even CSR toward the community and society as a whole. Lauren Daly from Catalyst closed the session with her vision of how the future of work is about inclusion. Interested in viewing this session? The link to watch the session is here: <https://vimeo.com/428481701/4604282637>

Key Insights for Us at SIOP:

- As must be obvious by now, an emerging theme from the Theme Track sessions is that SIOP and the field of work and I-O psychology in general need to adopt more of a **systems and social justice perspective** to truly address inequities at work. This requires a shift in what organizational leaders are doing as well as in what we are investigating and how we present our results. Specifically, it can no longer be the sole responsibility of members of marginalized or excluded groups to fix the systems; leaders, especially those from dominant groups (e.g., White cisgender men), must make active changes from the inside out and exercise their influence in new ways.
- A new emphasis on studying, understanding, and eventually influencing the **lived experience of employees at work** is important. DEI efforts must therefore move beyond the current emphasis of the business case and financial bottom-line impact of diversity and inclusion to the experience of psychological safety and belonging and to the implications of cultures of respect and authenticity, with a heightened focus on inclusion in the experience of work.
- Finally, we must recognize and accelerate the efforts SIOP has already [initiated](#)—from the newly announced [Anti-Racism Grant](#) to announcing **Derek Avery** (Rice University) as SIOP’s first Diversity and Inclusion Officer. From getting work and I-O psychology into more introductory psychology textbooks, to finding new ways to partner with organizations and those from other disciplines and to translating our research in inclusive and accessible ways, we must **leverage the great resources SIOP** already has to ensure that a focus on inclusion becomes integral to the world of work for all of us moving forward.

Overall, the Theme Track sessions provoked rich dialogue and garnered new insights regarding what SIOP and our field as a whole must do to enhance inclusion in organizations. Although this is no easy task, we are encouraged by the conversations that took place during our sessions, and we hope that the SIOP members continue these discussions with their research collaborators, colleagues, and clients. When it comes to inclusion, the time for silence is over. We hope that our Theme Track sparked new ideas and solutions for addressing inclusion in our lives, at work, and in society at large.

**SIOP UN Team *TIP* Column August 2020:
Systemic Inequality and the United Nations: COVID-19 and Racial Inequality**

Ishbel McWha-Hermann, Drew Mallory, Maria Whipple, and Mark Poteet

For many, organizations like the United Nations (UN) are distant, their activities ambiguous, and their results unclear. What is, for example, the UN “global development agenda”? Yet the activities and goals of the UN are much closer to the daily lives of I-O psychologists than you may think, especially in these times of global crisis. For 9 years, through its special consultative status with ECOSOC, SIOP has worked with the UN on issues related to work, worker’s rights, and economic and social justice. The SIOP UN Team strives to raise awareness of I-O research and practice in the global arena, and to enhance the impact of this work on the UN and its activities. In this issue’s column from the UN Team, we address two of the most salient issues currently facing society—COVID-19 and racial inequality—with the goal of highlighting some of the ways in which SIOP members can tap into the UN’s initiatives and support its important mission.

The Sustainable Development Goals and Systemic Inequality

The Sustainable Development Goals, or SDGs, are the UN’s ambitious roadmap for alleviating poverty and inequality around the world by 2030. Covering a wide range of social topics, the 17 goals are underpinned by a desire to improve the lives of all people, recognizing that injustices that perpetuate poverty and inequality over generations are often embedded in the fabric of society.

With our focus on work, I-O psychologists often emphasize the contributions we can make to SDG8 (decent work and economic growth). But we have clear contributions to make to many other SDGs, such as SDG1 (no poverty), SDG5 (gender equality), SDG10 (reduced inequalities), and SDG17 (partnerships for the goals) as well. These SDGs are clearly underpinned by issues of systemic inequality and how to address them.

I-O research and practice can speak directly to two clear examples of systemic inequality that have become particularly salient in present times. The first is the sudden arrival of the global COVID-19 pandemic; the second is the longstanding racial inequality that has been brought into sharp focus by recent events.

COVID-19 Pandemic

At first glance, the virus seemed to indiscriminately touch us all. It afflicted (almost) all nations of the world, rich and poor, and infected people from all backgrounds and strata within society. Of course, we now know that the impact of coronavirus falls disproportionately on those who are older, and those with disabilities and chronic health conditions, as well as those from ethnic minority backgrounds. Apart from potential genetic and biological differences, studies have linked increased COVID-19 rates among ethnic minorities to overcrowding and material deprivation (Raisi-Estabragh, et al., 2020). Across socioeconomic groups, those living in poverty are disproportionately impacted.

Not only is COVID-19 disproportionately overrepresented among those living in poverty, but it is also predicted that COVID-19 will move a substantial number of people at risk of poverty over the brink. Up to 400 million people may be pushed into extreme poverty (defined as less than US\$1.90 per day; Sumner et al., 2020). In lower income countries, this shift is likely to have profoundly dire effects. In many of these countries, the joint effects of weaker health systems, poorer air quality, and a large portion of the population engaged in work within the informal economy are likely to even further exacerbate the negative impact of COVID-19. Solutions that work in higher income countries may

not translate into these contexts, either. For instance, in response to office closures around the world, a large portion of many workforces has shifted to homeworking. Yet research shows those in lower income economies are simply less able to do so. Although in the US, 37% of jobs are considered able to be performed entirely at home if necessary; this drops below 25% in many lower income countries, and as low as 5% in countries like Madagascar and Mozambique (Dingel & Neiman, 2020). Overall, those already more likely to be living in poverty, and thus to disproportionately experience the negative health impact of the virus, are also most likely to be overcome by the virus's devastating effects on the economy.

The initial response from the UN to the COVID-19 pandemic was to rapidly mobilize a global humanitarian assistance effort (UN, 2020). As the pandemic progressed, a more comprehensive response has been assembled, which goes beyond the immediate health emergency to address the economic, humanitarian, security, and human rights crises unfolding as a result of the intersection of the pandemic and pre-existing social fault lines. Although the response has medical components, it also reaches far beyond hospital rooms and doctors' offices. The UN reaction to COVID-19 recognizes that addressing the systemic inequalities undergirding the pandemic cannot be disarticulated from addressing the disease itself. Along with other experts, I-O psychologists can contribute to articulating **and addressing the role that factors such as gender, family and ethnic background, race, and disability play on life outcomes**, and how structures within society perpetuate inequality for these groups. From a practice standpoint, I-O psychologists can and are using their expertise to **provide organizations and employees with assistance in addressing issues of inequality and injustice**. By explicitly introducing these issues in their research and publications, I-O scholars are broadening the perspectives of fellow academics by highlighting the impact of I-O topics on vulnerable populations and sustainability. Through working to repurpose and disseminate findings to a broader audience beyond traditional research journal outlets, **multiple committees within SIOP are sponsoring or producing white papers that can be used to provide guidance** for how I-O psychology can address issues of systematic injustice and marginalization that undergird the destructive influences of crises like COVID-19. For example, the International Affairs Committee recently sponsored a white paper on the role of organizational training in addressing what may seem to be a far-distant issue: sex trafficking (Mills et al., 2020).

Racial Inequality: Black Lives Matter

2020 will also be remembered for the systemic racism and police brutality that reached a flashpoint in the United States following the police killing of George Floyd and many others before him, including Trayvon Martin, Sandra Bland, Eric Garner, Freddie Gray, Tamir Rice, Ahmaud Arbery, and Breonna Taylor (Holmes, 2020; Sobo et al., 2020). The deaths of these individuals thrust entrenched, intergenerational racial disparities and the disproportionate vulnerability experienced by Americans of African descent into sharp relief, and further catalyzed the Black Lives Matter (BLM) social movement. Quickly, tense debates arose between BLM supporters and those espousing that "All Lives Matter," a seemingly innocuous call that masks the issue and subverts its calls for remediating racial biases, nonviolent protest against police brutality, and racial injustices across the board (Gallagher et al., 2018) and around the world (Gikandi, 2020; Martirosyan, 2020; Valencia, 2020).

The United Nations has long campaigned against racial discrimination, including numerous long-standing international agreements, such as the *1969 International Convention on the Elimination of all Forms of Racial Discrimination (ICERD)*, as well as an *International Day for the Elimination of Racial Discrimination*, observed annually on March 21. In 2012 a United Nations Network on racial discrimination and the protection of minorities was also established. Addressing racial inequality is also embedded within the SDGs, for example, ensuring access to a just and fair system through SDG16, reducing economic inequalities through SDG10, and promoting healthy lives and well-being through SDG3. More recently, BLM has prompted a renewed commitment to combat systemic racism from

numerous UN agencies and the launching of [renewed efforts to address systemic racism](#), spearheaded by Michelle Bachelet, the UN's High Commissioner for Human Rights.

Nongovernmental organizations and corporations have also been spurred to action aimed at directly addressing systemic racism. For instance, since the tragic death of George Floyd in May, World Economic Forum partners have donated billions of dollars to social justice organizations. Moreover, major corporations such as PayPal, LEGO, NIKE, and many others have all pushed through workplace initiatives that directly address inequality and promote social justice (Markovitz & Sault, 2020). Although these actions aim to protect lives and address inequality, they have also been criticized for failing to sufficiently acknowledge underlying systemic impediments to equality (e.g., Creswell & Draper, 2020). It is the job of I-O psychologists and other experts to not only ensure the fair design, application, and monitoring of corporate policies but also to look beyond such policies to interrogate the heart of equality, diversity, and inclusion initiatives. Even more broadly, I-O psychologists have the analytical, research, and measurement capabilities needed to help companies evaluate and understand how their policies, programs, and practices may be impacting factors that contribute to systemic inequality—for example, the effectiveness of workplace training on preventing racial profiling.

There are additional actions that I-O psychologists have taken, and can continue to take, to address injustice and systemic racism, and thus contribute to the UN's SDGs. Of course, **research and writing on workplace issues that contribute to, and are impacted by, injustice and racism** continue to be primary tools for I-O psychologists to use. By recent example, **Alexander Alonso** provided several practical ways in which employees, human resources professionals, and organizations can have and manage conversations about racial injustice in the workplace (Alonso, 2020). Also, **Derek Avery** and **Enrica Ruggs** recently provided readers of *MIT Sloan Management Review* with several strategies for helping to combat workplace discrimination (Avery & Ruggs, 2020). From a systemic perspective, I-O psychologists can impact justice and racial issues by **helping organizations to define their vision, values, expectations, and competency models in ways that reflect and incorporate behaviors and attitudes that support racial justice and diversity, inclusion, and equality**. From there, using traditional I-O practices such as training and selection, I-O psychologists can **work with organizations to design programs that reinforce and hold employees and the company accountable for demonstrating these behaviors and attitudes**. Reflecting this, recent issues of the *Industrial and Organizational Psychology* journal delved into the role and impact of training on such issues as sexual harassment, racial discrimination, and workplace civility, with several concrete tips and guidance provided.

How Else Can SIOP Members Get Involved?

Issues of systemic inequality and developing ways to address them are clear foundations of the SDGs, which aim to improve quality of life for all people, regardless of their country of origin, ethnic or tribal status, gender, or any other characteristic. The SDGs recognize that global inequalities reflect the distribution of wealth, and that distribution of wealth is impacted by unequal access to (and relevance of) structures in society. The SDGs provide a framework for using structural issues as a starting point to draw out systemic challenges to equality. As I-O psychologists, we can use this framework as a springboard to connect those systemic challenges to individual and organizational outcomes (and vice versa), helping to develop research, interventions, and other activities to address them. At present, regardless of the environment, level, or goals an I-O psychologist finds themselves in, there are ways to take immediate SDG-inspired action that stand to affect the lives of those affected by issues like those we have discussed.

At the level of policy, given the expertise and perspective that I-O psychologists have, they are in prime position to author and **present position papers and policy briefs that tackle racism and injustice** within the world of work. The SIOP UN team, for example, provided a policy brief and input into

the UN's Global Sustainable Development Report (Gloss et al., 2016). Additionally, in 2015, **Ruth Kanfer, Lisa Finkelstein, and Mo Wang** presented at a [congressional briefing](#) on how organizations and policymakers can manage issues related to the aging workforce. Contacting and working through SIOP's [Government Relations Advocacy Team \(GREAT\)](#) is another avenue for SIOP members to **contribute to advocacy efforts**.

At the level of higher education and organizations, in the last few years, several I-O programs in the United States, including George Mason University and California State University, Fresno, have led their universities to **register with the United Nations Global Compact**. The [Global Compact](#) is a voluntary commitment toward responsible business practices based on principles of human rights, labor, environment, and anticorruption. Program signatories pledge to uphold these values in their pedagogy and research, ensuring that the newest generation of I-O psychologists are well schooled on how I-O psychology can contribute to the greater good (see [SIOP's tips for I-O programs](#)). I-O practitioners can likewise encourage their organization to formally commit to sustainability and the UN goals through joining the Global Compact.

Involvement outside of these institutional contexts is equally important, starting by simply exploring the goals and their specific targets. There is a wealth of easily digestible information available online that can help to explain the SDGs and what you, your organization, and your communities can do to contribute. Over the next year, stay tuned to SIOP's YouTube channel for our own upcoming video series introducing how the SIOP UN Committee is relying on the SDGs in our research, education, consulting, and practice. Share your thoughts with the team there, or reach out to us at SIOPUN@siop.org.

Conclusion

The UN has been combating inequality for decades—and so has I-O psychology. As the world stands at the nexus of issues like COVID-19 and Black Lives Matter, it also stands on the brink of an incredible opportunity for change. In this moment, governments, corporations, and individuals have been forced to acknowledge the realities of social injustices in ways both intimate and immediate. Through our contributions to the United Nations, as practitioners, scholars, organizations, and a committee, I-O psychologists are poised to contribute evidence for how systemic inequality can be addressed in the organizations we work, design, and research. By using the SDGs as a framework to link our work with systemic inequality, we can position our research to respond and contribute to global issues and assist the UN to develop evidence-informed interventions. To learn more about SIOP's work with the UN and how you can get involved, visit the [SIOP UN Team website](#).

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The Bridge: Connecting Science and Practice



Kimberly Adams, LeadPath Solutions, LLC, Stephanie Zajac, UT MD Anderson Cancer Center, and Tara Myers, American Nurses Credentialing Center

“The Bridge: Connecting Science and Practice” is a *TIP* column that seeks to help facilitate additional learning and knowledge transfer to encourage sound, evidence-based practice. It can provide academics with an opportunity to discuss the potential and/or realized practical implications of their research as well as learn about cutting-edge practice issues or questions that could inform new research programs or studies. For practitioners, it provides opportunities to learn about the latest research findings that could prompt new techniques, solutions, or services that would benefit the external client community. It also provides practitioners with an opportunity to highlight key practice issues, challenges, trends, and so forth that may benefit from additional research. In this issue, **David Futrell** and colleagues provide an overview of the development, validation, and implementation of a prehire assessment that won the team the 2019–2020 Human Resources Management (HRM) Impact Award.

High-Velocity Selection: Predicting Performance and Retention at Walmart

David Futrell and Josh Allen



Walmart is honored to be recognized as one of the winners of the 2019–2020 Human Resource Management (HRM) Impact Award given by the Society for Industrial and Organizational Psychology (SIOP) and SHRM (Society for Human Resource Management), along with their foundations. Walmart was recognized for its work on developing, validating, and implementing an assessment for hourly associates working in Walmart stores and Sam’s Clubs called the Retail Associate Assessment (RAA).

Beginning in 1962 with a single discount store in Rogers, Arkansas, Walmart has opened thousands of stores in the US and internationally. Through continuous, customer-focused innovation, we have also created a seamless experience that allows our customers to shop online anywhere, anytime. Every Day Low Price (EDLP) is the cornerstone of our strategy, and our price focus has never been stronger. We currently operate over 11,300 stores under 58 banners in 27 countries with e-commerce websites in 10 countries. We employ approximately 2.2 million associates around the world—1.4 million in the US alone.

A job at Walmart is an opportunity to build a career. About 79% of our store management team members were hired as hourly associates. Last year, we promoted more than 215,000 of these associates to jobs with more responsibility and higher pay.

The Challenge

The selection system used to hire entry-level associates at Walmart is likely the highest volume system in the world. In a typical year, we receive millions of applicants, hiring hundreds of thousands of new associates. We receive more applications (10k+ is not unusual) in a single day than many companies process in an entire year. Each of our 7,000+ Walmart stores and Sam's Clubs is required to use our selection tools and processes to screen and select their new associates. The selection and assessment team collaborates with HR operations associates in each business unit to ensure that the hiring teams in the stores and clubs understand the system and manage their selection processes in a consistent manner. Our primary challenge is meeting the often competing needs and desires of a variety of stakeholders while ensuring that the assessment and selection processes are being properly managed across thousands of stores.

Because of the high applicant volume, it's essential that we provide an efficient method for identifying the best candidates with minimal time and energy expended by both the applicants and hiring teams in the stores. To accomplish this, we rely on pre-employment assessments. This assessment process, however, must balance many competing requirements and demands. The assessment must be

- Predictive of both job performance and turnover
- As brief as possible
- Optimized for mobile devices
- Candidate friendly
- Legally defensible
- Easily adapted to changing business requirements
- Effective at predicting outcomes across a broad range of jobs
- Easy to use for both applicants and the hiring teams in the stores

Two of our biggest challenges are the changing nature of the job and the frequent need to demonstrate impact. Validation research conducted 12 months ago may not be recent enough to convince some key stakeholders (e.g., business and HR leaders) of the value of assessments. Jobs sometimes change substantially between the time assessments are developed and when they're actually implemented. Both the jobs and the work context (e.g., working hierarchically vs. working in teams) evolves continuously. This requires us to predict a moving target while still meeting the requirements described above. Unfortunately, maintaining a relevant assessment is not simply a matter of adding new content. Each second of the applicant's time must be considered, justified, and defended. With our applicant volume, the addition of a single 5-second biodata item adds up to almost four FTE's worth of time spent by applicants over the course of a year. Some recent additions of content required over 20 years of applicant testing time for us to gather the necessary validation data.

Our Solution

To meet these requirements and constraints, we sought a prehire assessment that would be developed based on a rigorous job analysis and supported by a large concurrent validation study. Walmart selected

Modern Hire, the creators of the Virtual Job Tryout® (VJT) pre-employment simulation, to develop and validate a multimethod, pre-employment assessment. Assessments using multimethod approaches, such as those integrating measures of biodata, situational judgment, work samples, and work style, are among the most valid tools for predicting workplace performance (Bettencourt et al., 2001; Hough & Ones, 2002; Hunter & Hunter, 1984; Mael, 1991; Salgado et al., 2002; Schmidt & Hunter, 1998; Weekley & Ployhart, 2005).

As a team of industrial-organizational psychologists, our top priority in creating the Retail Associate Assessment (RAA) was that it be firmly grounded in science. Our team worked with the Modern Hire team throughout the design and validation process and made every effort to follow the principles of rigorous and objective test validation established by the *Uniform Guidelines on Employee Selection Procedures* (1978) and the *Principles for the Validation and Use of Personnel Selection Procedures* (2018). Our team also actively works to contribute new findings to the field (e.g., Futrell, 2018) and continuously looks for new research that may have implications for the RAA (e.g., Sajjadiana et al., 2019).

A concurrent validation study was conducted to determine the validity and fairness of the assessment. This study used a representative sample of over 1,000 incumbents that varied by age, gender, ethnicity, business (Walmart vs. Sam's Club), job focus (customer service vs. productivity), job group, and location (*Uniform Guidelines*, 1978). Subsequent enhancements to the tool have been made and validated using data from actual job applicants.

Measuring performance for the retail associate proved challenging because consistent, formal performance appraisal data were not readily available. In addition to the problems inherent with the ratings in most performance management systems (DeNisi & Murphy, 2017), these types of retail jobs often have high turnover. Using typical annual performance ratings would limit the validation study to only incumbents who were retained for at least 1 year. This could have introduced a substantial amount of bias. Instead, we created a custom performance evaluation form. The content for this evaluation form was derived from Walmart's universal competency model and the findings from a comprehensive job analysis. Supervisors evaluated the performance of associates across 28 items covering seven competencies. In addition to the competency measures, we collected single-item ratings on eight additional dimensions, including attendance, cleanliness and safety, identifying customers' needs, and making appropriate sales recommendations. These performance dimensions were found to be critical behaviors during the job analysis and served to broaden the performance evaluation domain. The validation study results revealed strong uncorrected validities across a variety of performance dimensions.

Measured Outcomes and Feedback

One of the largest business problems facing retail organizations today is turnover. A primary requirement from our stakeholders is that the assessment predict and ultimately improve employee retention. Accordingly, our current scoring algorithm is evenly balanced between performance and retention prediction.

Development and validation of this retention predictor was conducted separately from the initial validation study, which focused on predicting job performance. The retention predictor study was conducted by administering a set of items (primarily biodata) to applicants. These items were not scored in the selection algorithm during the study. The study utilized 200,000 applicants who were subsequently hired. After several months, we had adequate data to conduct an empirical keying study for these items. Scoring keys were created and cross-validated, and the resulting algorithm showed a large difference in

retention between the top and bottom assessment bands against a hold out sample. A conservative return-on-investment analysis showed savings in the hundreds of millions annually. This estimate only includes eliminating replacement costs from not hiring the lowest scoring candidates. If we included estimates of lost productivity and training costs, the real impact might exceed \$1 billion annually. To achieve such strong prediction of turnover, we have gone beyond the scholarly literature to identify constructs such as novel methods for identifying applicant *faking* (Futrell, 2018), which is a strong predictor of subsequent turnover.

At Walmart, similar to many other organizations, our applicants are also our customers. Accordingly, our selection experience must be positive, whether the candidate is offered a position or not. To measure that experience, the RAA tracks candidate feedback using research-only items administered following assessment completion. Feedback from millions of candidates reveals that because of the assessment, they

- have a better understanding of the role,
- would recommend applying to others, and
- did not experience significant technology issues.

Agreement with these items was very high, ranging 98–100%.

Completion rates from the assessment are quite strong, averaging over 95%, which is extraordinarily high for an entry-level assessment (Hardy et al., 2017). These data suggest the application process is a positive experience for candidates and provides them with greater understanding of the role.

We believe the best way to track internal feedback is to examine the extent to which the end users are actually *using* the results to make hiring decisions. If the hiring managers did not believe the RAA added value, we would expect to see roughly random hiring across the RAA bands. Our analysis of the hiring patterns clearly show that significantly more hires come from the top band than from the lower bands. Our surveys of hiring managers support this finding; they indicate that the assessment score is one of the most important factors when deciding who to interview or ultimately hire.

Conclusion

The assessment process was designed from the outset to minimize or eliminate any group differences. We continuously track the results for any evidence of adverse impact. With sample sizes in the hundreds of thousands, these results are stable and provide strong evidence that the assessment is fair for all applicant groups with little risk of any substantial adverse impact.

In many ways, launching the RAA was just the beginning of the work. Since implementation, we have conducted multiple predictive validations and other analytic work. Since the launch of the RAA, we have

- Built an enhanced retention predictor.
- Reweighted the combined performance retention predictor.
- Added in teamwork content to reflect the changing nature of the job.
- Shortened the assessment; average completion time is now under 15 minutes.
- Renormed the assessment.

Walmart is a very data-driven environment with strong competition for internal resources. This selection system has been held to the highest standards and required to show impact and results across many stakeholders and time periods. Implementing what is almost certainly the highest volume selection system in the world has been a massive undertaking, requiring years of planning, persistence, and effort.

Given the high-stakes nature of this endeavor, we are proud of the results and the enormous financial impact we have achieved. With so many stakeholders and their competing priorities, it has been a balancing act to achieve the diverse goals of the RAA.

Of course, more remains to be done. As with most research, every answer leads to more questions and ideas. We plan to continue developing new items, algorithms, and methodology (including machine-learning techniques) to continually improve prediction while maintaining fairness and minimizing applicant time.

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Progress on Two Initiatives

Milt HakeI

This past April, Sue Ashford, Brianna Caza, and Brittany Lambert won the inaugural SIOP Visionary Grant. Then on August 24, five projects won small grants from SIOP's Anti-Racism Grant Fund. Here is news about the progress of both initiatives.

Visionary Circle

The Visionary Circle is a crowd-sourced and donor-directed fund to improve the world of work dramatically by supporting significant I-O psychology research and practice through projects that will have a lasting impact in the workplace. Ashford, Caza, and Lambert won the grant for a proposal to identify the particular challenges faced by gig workers and test evidence-based interventions to bolster resilience among those workers. See the [May 19 SIOP Newsbriefs](#) story. The project got underway on July 1. Here is Sue Ashford's initial report:

We have spent the first 6 weeks of the grant getting things organized. This task has included figuring out the rather complex dynamics of budgeting across several universities so that the place with the correct resources (for example research assistance) also has the budget to cover them. We brought a fourth member on to our team, Elizabeth Trinh, an entering doctoral student at Michigan. We also have developed our protocol for the qualitative interviews we are planning and have come up with a sampling plan for conducting these interviews.

We have set a timeline: interviews to be conducted in September and October, experience sampling methodology (ESM) study to be implemented in late January and February of next year. We have set this timeline both to give us time to conduct and evaluate our interviews and also to avoid the holidays while doing any part of our ESM study. Frankly, our biggest concern for conducting this research this year is the Covid 19 crisis and its effects. We are comparing people working independently and people working in organizations during a year in which people, while still working *for* an organization, are likely not working *in* the organization. Allowing more time to pass increases our chances for change in this reality.

Finally, as part of our preparation for designing the intervention for the ESM study, we have decided to write a review paper on this methodology. There is a burgeoning set of research using it but not much advice about it. To this end, we collected over 600 papers referencing interventions, narrowed our sample to 120, coded them for their various characteristics, and are now beginning to examine these more closely to extract potential lessons and advice for the field.

An additional observation from Sue:

Why is our proposal visionary? We portrayed the project in terms of needing to expand SIOP's vision to consider multiple types of workers. Sometimes we get caught up in understanding how organizations can best use their human resources and forget that we also have a responsibility to help people have fulfilling, productive and sustainable work lives, whether they are working inside a company or outside on their own. There's value in studying that, whether it makes a company better at using its human resources or not. There's value in studying what contributes to people's well-being—enough income to sustain themselves and some psychological well-being to keep going in their

work lives. This project puts that question at the fore. There is no organization, we are just studying what these people need to have a good work life.

It is fascinating to watch this project as it evolves, especially due to the wild card dealt by the COVID pandemic. Stay tuned.

Anti-Racism Grants

The Anti-Racism Grant Fund is a very recent addition to the SIOP Foundation's initiatives. In the July issue of TIP, I sketched the need for it. We then raised a grant pool of \$50,000, issued a Call for Project Proposals that went online on July 1, received 35 proposals by July 27, and the ARG Subcommittee of SIOP's Awards Committee made two rounds of ratings followed by a consensus discussion to identify the top proposals.

The five small grant winning projects are

Performative Gesture or Genuinely Supportive: The Impact of Workplace Responses to the Racial Injustice Movement on Employees

Lauren Collier-Spruel & Dr. Ann Marie Ryan

Organizational Anti-Racism Initiatives: Advancing Scholarship and Guiding Practice on Effectiveness

Dr. Enrica Ruggs, Dr. Alison Vania Hall (Birch), Dr. Derek R. Avery, Dr. Benjamin E. Baran, & Christopher W. Everett

Algorithmic Racial Bias in Automated Video Interviews

Louis Hickman, Dr. Louis Tay, Dr. Sang Eun Woo, & Sidney D'Mello

Underestimating and Underreacting? Identifying and Addressing Empathy Gaps in Perceptions of Racial Microaggressions

Lindsay Y. Dhanani & Matthew L. LaPalme

Interpersonal Mistreatment, Perceived Discrimination, and Minority Identity Management: An Attribution Theory Perspective

Dr. Maria Kraimer, Dr. Lawrence Houston III, Jerry Liu, & Dr. Scott Seibert

Abstracts for each of these projects appear in the August 26 issue of SIOP Newsbriefs.

Workplace racism is multifaceted and has persisted far too long. Each of these projects takes solid and needed steps toward understanding and improving the prospects of equal employment opportunity for all.

Moving I-O Ahead

The SIOP Foundation's mission is to connect donors with I-O professionals to create smarter workplaces. Let us get on with it. In particular, the Visionary Circle is seeking contributions of \$1,000 and larger to fund the second \$100,000 Visionary Grant in 2022—contribute at <https://www.siop.org/Foundation/Visionary-Circle/Make-a-Pledge>. A second round of Anti-Racism Grants will be held after we raise another pool of \$50,000 for small grants—contribute at <https://www.siop.org/Foundation/Donate-Now> by

selecting FDN Anti-Racism Grant from the drop-down list of funds after logging into your SIOP web account.

The world of work needs I-O style evidence-based praxis as never before. Contact any of us.

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Max. Classroom Capacity: An Interview With Dr. Janet Kottke

Loren J. Naidoo
California State University, Northridge

Dear readers, I am delighted to welcome **Dr. Janet Kottke**, the 2020 winner of SIOP's Distinguished Teaching Contributions Award, to Max. Classroom Capacity to discuss her exceptional teaching career. Dr. Kottke is a professor of I-O psychology at California State University San Bernardino (CSUSB) and founder of that school's MS program in I-O psychology. Dr. Kottke has been at the forefront of research on and the practice of undergraduate- and graduate-level I-O psychology education. Her collaborative research with directors of MS programs around the country has produced publications and conference presentations that have advanced teaching practice. Some of this work has appeared in *Teaching of Psychology*, *Psychology Learning & Teaching*, *Active Learning in Higher Education*, *College Student Journal*, and *Industrial and Organizational Psychology: Perspectives on Science and Practice*. The most recent work, with **Ken Shultz** and **Mike Aamodt**, is a chapter in *Mastering Industrial-Organizational Psychology: Training Issues for Master's Level I-O Psychologists*, edited by **Betsy Shoenfelt**, a volume in SIOP's Professional Practice Series (2020).



Loren Naidoo: Thanks so much for taking the time to talk with me! Congratulations on receiving SIOP's Distinguished Teaching Award! You are perhaps best known for your teaching in CSUSB's MS program in I-O psychology, a program that you founded and have directed. Perhaps we can start by talking about how that program came about. What was the impetus for founding the program? What made you decide to found an MS program in I-O psychology in what might seem like an unlikely place given how I-O psychology is less well established on the West coast compared to most other regions of the country?

Jan Kottke: Thanks, Loren, for taking the time to conduct the interview when you are no doubt very busy, getting ready for fall classes.

I am delighted to talk about our master's program in I-O psychology. Our program and I-O are my favorite topics! The I-O program at CSUSB came about in much the same way that I-O psychology came about: People needed jobs after they earned their doctorates in psychology and, fortunately, employers began to understand the considerable value in applying psychology to work. For myself, I had done an internship at Baltimore Gas & Electric and though that experience was invaluable, I had concluded that working an 8-to-5 job wasn't for me. When I did a national search for a job, CSUSB was advertising for someone to start a master's program in I-O. I had been a TA for a career development course taught by **Bob Guion** at Bowling Green and, because he was involved in many consulting projects elsewhere, I did a fair amount of TAing. In that career development course, one topic emphasized was "stretch" assignments: challenging but doable work assignments. Building a program from scratch thus looked like a good career option. To be frank, I was somewhat ignorant of just how few programs were on the West Coast. The psychology department was very small then—just 15 faculty—and had two existing master's programs, one in counseling and the other in general experimental. The new I-O program would become a concentration in the GE program, though, ironically, it was a counseling faculty member, Dave Lutz, who proposed to the department that it establish an I-O graduate program. Dave thought that a program in I-O could do well in southern California. He was right. (Thanks again, Dave!)

LN: Wow, I didn't realize that you were hired to start the MS program—that's quite a stretch assignment for your first full-time faculty position! Did you have a particular teaching approach or philosophy that informed your early decisions about what the program would look like?

JK: My primary guiding focus at the beginning was to identify what the students needed to apply psychological principles to work settings—and what would fit into the existing curriculum, which meant that the program began with just two I-O content courses! These were, if memory serves, Motivation and Morale (the Oish side) and Industrial Psychology with a heavy focus on selection and performance appraisal. Initially, I viewed the program as predominantly applied with the I-O courses overlaid upon the backbone of the general experimental research and statistics courses. As we began to expand our I-O course offerings—and heard from our alumni—I concluded that the scientist–practitioner model was a superior approach for training and for students to conceptualize the field. The technology that we apply to our work has consistently changed—consider the use of big data in recruitment, for example—but the fundamental thinking about how to solve problems and innovate in the workplace is still very relevant. If one can answer questions scientifically, one can keep up with and manage the changes in technology, environment, and composition of the workforce. Because our students typically take jobs upon graduation, I like to think of I-O master's education as on the frontline of the often-debated scientist–practitioner divide. We need to balance the needs of organizations who want our graduates to plug in and contribute right away, with our understanding that science may not support the latest organizational fad (or there may not yet be any science to support that fad). A scientist–practitioner focus serves those who choose to work immediately upon (or often before) graduation but also those who elect to pursue doctoral education.

LN: When you reflect on all of your work in undergraduate- and graduate-level I-O education, what specific practices, innovations, or policies are you most proud of having instituted?

JK: This is a really thought-provoking question; thank you for posing it. From the very beginning, my goal was for students to conduct applied projects in as many courses as was feasible, at both the graduate and undergraduate level: doing job analyses, developing recruiting strategies, interpreting satisfaction data, constructing interview protocols, and conducting organizational diagnoses to name the most obvious. I felt that it was important for students to connect the theory, research, and application. Besides giving students practical experience for a résumé item, it promotes learning (i.e., the ancient proverb, “I do and I understand”). One of my other guiding principles of teaching—degree of student autonomy—has evolved. When I started, I felt that the instructor was completely responsible for structuring everything. And to be sure, we need to provide guidance and offer our knowledge and experience. But especially at the master's level, students are quite capable of doing the background reading and are eager (and motivated) to apply the knowledge. When we work on a class project now, we discuss the desired outcome, and I provide students the tools to work toward achieving that goal. As an example, a key course in our program is an applied practicum in which we typically do pro bono consulting. The students form a short-term consulting team who nominate a project manager, develop an organizational structure, and work with a client. The instructor serves as a partner in the firm, offering guidance and support. Students in this class have done remarkable projects and have had impacts beyond a single organization. For example, one year, through interviews and surveys of physicians, nurses, mothers, and breastfeeding advocates, the class team was able to clarify why two counties with similar demographics had strikingly dissimilar breastfeeding rates. They made their recommendations to the county governing body (client) for how to increase rates. I won't go into detail here, but breastfeeding has long-term effects (e.g., lowered rates of childhood obesity, fewer allergies as an adult), so any increase in these rates

has major societal benefits. There are many other projects we have done that I could name, but my bottom line here is that even if the only outcome is that the students learned by doing, that is a major win. I'd like to mention one other thing that isn't directly related to the classroom, but I believe has had an impact on the quality of our program. When I first arrived, I was the director of the program for nearly a decade. As we hired more faculty, I proposed we rotate every 2 years the directorship of the program (and we also created some specific functions for all members of the faculty, such as a recruiting coordinator and a student club supervisor). This may seem like a small thing (and an obvious division of duties), but I think with everyone having a responsibility helped to unify the faculty around the needs of the program. Further, having all of the program faculty rotate through the leadership role gives everyone a good sense of the totality of the program, its curriculum, its complexities, faculty strengths, and student needs. I guess you could call this an academic version of "term limits!" I am very proud of our students and of our faculty who form the partnership that has led to and continues to lead to such good outcomes.

LN: Changing directions a bit here, it looks like a lot of I-O programs are considering major structural and/or curricular changes due to COVID-19. I'd love to hear your thoughts on teaching during the pandemic. I have so many questions! Let's start with the short term—the CSU system was early in deciding to deliver almost all instruction virtually for the fall, and many other (though not all) universities have made similar decisions. What adjustments do you think instructors need to make to be effective teaching in a virtual context?

JK: Good question, and honestly, a hard one to answer. Whereas I am grateful that technology has given us tools to continue in the face of a worldwide pandemic, this has been tough on students and instructors alike. I view learning as a partnership of student and instructor; we work together to construct knowledge and to develop professional skills, among others. How can we do that virtually?

Answering that question depends somewhat on how we define "effective." If by effective we mean that content is delivered and students stay on track to complete assignments (and the course), structuring the course to be consumable in weekly "bites" is important. Being responsive to student questions, understanding, and making adjustments to accommodate unexpected hiccups are critical. But that is only part of the equation. We are social creatures, and some of the most important learning takes place from working with others. Some of this social contact is possible with online discussion boards or breakout rooms in Zoom. Further, we know that engagement is important in the face-to-face environment and, so too, in the virtual world. To engage requires considerable effort in the virtual context but can be done. This spring, I supervised an intern who conducted interviews and performed tasks virtually. Through weekly voice conversations and shared electronic documents, we were able to create a meaningful, engaging experience. (BTW, I found [SIOP's resource page](#) posted earlier this year to have a lot of helpful tips.)

LN: Yes, I think that is the question—can we (as a profession) engage students as effectively in a virtual environment as in a face-to-face environment? I think we are at a very interesting inflection point where we may make tremendous strides in developing tech-based education solutions that cement the future of education in the virtual space, or it may become increasingly clear that the fundamentally social nature of education cannot adequately be reproduced with the technology currently available. How do you see the future of education from where we stand now?

JK: To address that first question about engagement, I feel at a disadvantage when I rely exclusively on the virtual for working with students. There is a synergy from the students interacting in the same space

and me with them. It is far easier to read nonverbal cues and give immediate feedback in the FTF environment. This synergy can be captured to some degree in the synchronous format, but I feel some process loss.

The future? My sense is that the future of education is going to continue to build on technological platforms, with many variants of hybrid models. These distinctions may depend on the mix of knowledge and skills to be learned. There will continue to be some face to face—for example, it is hard to imagine a phlebotomist learning how to draw blood with only an orange and YouTube videos or a budding surgeon learning surgical techniques exclusively through virtual simulations—but increasingly students in all majors will be enrolled in purely online courses as well as combinations of face to face, simulations, and so on. With regard to the example of the phlebotomist, it is possible that technology will lead to less need to draw blood to make medical decisions (i.e., alternative physiological readings), which would reduce the need for phlebotomists in the first place. To my mind, these issues all speak to the importance of I-Os continuing to monitor the trends in the workplace. We have already seen how many organizations have replaced people with machines. Simply dialing customer service brings that point home. No doubt automation will continue to expand into education as well. As I-O psychologists, I think that one of our aims should include not only understanding how these changes affect people's attachment to their work—with resulting productivity issues—but consider how I-Os could take the lead in emphasizing to organizations that some of their best payoffs are just as likely to come from listening to their employees. Focusing on automation to the exclusion of hearing what employees on the frontlines working with customers, clients, patients, or students have to say seems shortsighted. I worry that employees are returning largely to the role of tending machines—much as we saw in the industrial revolution with Taylorism. Whether I-O takes a lead in promoting employee well-being will have an impact on our educational models.

LN: I think that's a great point, and the burgeoning focus on occupational health issues in our field is an encouraging sign. But to further delve into that idea, the massive changes to the nature of work that are happening right now also makes me wonder whether we I-O psychology educators need to rethink our curricula and reimagine our roles or our goals when it comes to preparing students for the working world of the future. How do you see the field of I-O psychology and our roles as I-O educators changing (or not)?

JK: The largest change I have personally seen over my career has clearly been the effect of technology. It has changed nearly every aspect of my professional life, including teaching. (Does anyone remember chalk? Overheads?) How people learn hasn't really changed, however—we need to process information deeply to be able to apply it—so the fundamentals of teaching will probably evolve somewhat as we may learn more about the learning process but not that much. To the more “nuts and bolts” question of changing curricula, and I am thinking of this from the perspective of someone working with master's-level students, we may be walking a fine line. We want our students prepared for the jobs they will take in a year or 2, meaning we monitor what employers are looking for, and the students gain applied experience that mirrors those jobs. We also want to be sure that students are prepared for their long-term careers, which means to me that we continue to teach students the basic critical-thinking skills that ensue from understanding the scientific method and its results.

LN: Jan, thanks again for a very interesting and thought-provoking conversation—it's been a real pleasure!

Readers, as always, your comments, questions, and feedback are welcome: Loren.Naidoo@CSUN.edu. Stay safe and healthy!

A Peek Into the Online World: Evaluating the Current State of Online I-O Graduate Programs

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Author Notes: Survey development, data collection, and reporting were conducted as part of the Online Graduate Training Subcommittee of SIOP's Education and Training Standing Committee. The article authors comprised the "evaluation" taskforce of this subcommittee. See also, our subcommittees' ["challenges" taskforce report](#).

Acknowledgement: We would like to thank **Michael Chetta**, Rebecca Grossman, **Sy Islam**, **Richard Mendelson**, Diana Sanchez, and **Jean Whinghter** for their contributions to the Online Program Subcommittee of SIOP's E&T Committee.

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Introduction

Online graduate programs are rapidly increasing, even more so with the onset of the COVID-19 global pandemic. Institutions that were fully in person are now developing and deploying online curricula, whereas prospective students are facing decisions about which type of education to pursue. Because online learning is still a relatively modern approach, there is some trepidation surrounding these programs. Further, it has been difficult to interpret what it means to get a degree from a program that is offered fully online or through a hybrid program of both online and in-person requirements. Although some research has shown that outcomes of online instructions are relatively equivalent to in person (Chirikov et al., 2020), the unknown aspects of online degree programs as a whole (e.g., professional development, employability) may be contributing to the uncertainty and negative perceptions these programs receive regarding their quality and rigor.

The purpose of this effort is to help shed light on what is known about current online programs. Using a three-pronged approach, we first used the SIOP graduate program database to identify online programs, then did independent searching to supplement and gather program information, and last, collected survey responses from faculty, alumni, and students to further learn about program details and personal experiences. In this article, we provide both descriptive information on the degree programs, along with some evaluative information (drawing from previous *TIP* articles to make comparisons between these and traditional I-O programs, where possible) to help inform the I-O community about current online programs available, as well as the current state of I-O education being provided online.

To simplify, we use the broad term "online programs" to refer to programs that are both fully online and hybrid (i.e., mix of online and in person). All programs considered are at the graduate level and are in or closely related to the field of industrial-organizational psychology.

Methods

As noted, we used a three-pronged approach to information gathering. First, we used the *Graduate Training Programs in I-O Psychology and Related Fields* section of the SIOP website to identify current online graduate programs. To be included in this database, programs must have previously filled out an online form through SIOP. By searching for programs categorized as “online only” or “both” online and classroom based, and supplementing with Google searches, we identified 54 programs in total. We then visited the website of each program to further confirm the minimum number of credits required, degree level, minimum time to completion, degree title, and whether the program was online, hybrid, or both (i.e., provided fully and partially online options). Second, we drew from information provided to the chair of the Online Program Subcommittee of SIOP’s broader Education & Training Committee that was generated through the same database. Based on data provided by programs who had filled out the form, a spreadsheet was created containing information about admissions criteria for both online- and classroom-based programs. Third, we developed a survey.¹ Specifically, the Online Program Subcommittee generated survey items to gather information pertaining to programs’ admissions criteria, curriculum, faculty, culture, and student and alumni experiences. These items were designed to address the two primary goals of the subcommittee, which are to understand and evaluate the current state of online I-O graduate programs, and to identify the primary challenges associated with these programs as well as how SIOP might be able to help. To generate items, we drew from existing resources related to I-O curriculum (SIOP, 2016), previous *TIP* articles focused on program evaluation (Acikgoz et al., 2018; Vordanovich et al., 2018), and the committee members’ experiences as faculty in both in-person and online graduate programs.

Upon obtaining approval from SIOP’s Institutional Research Committee, the survey was distributed through SIOP to members affiliated with online programs (1,516 members). After the survey remained on the SIOP calendar for a 2-week period and one reminder email was distributed, 154 responses were obtained, for a response rate of approximately 10%. To supplement, committee members distributed the survey invitation via social media, and the subcommittee chair emailed directors of programs identified in Step 1 with an invitation to participate and further share the survey invitation. Following this outreach, 192 total responses were obtained. However, after removing responses that were largely incomplete, 143 participants remained.

Participants were filtered into one of three surveys based on their relation to an online program: faculty or program director, student, or alumni. The final sample included 19 faculty members or program directors, 79 students, and 47 alumni who indicated that on average, 90% of their program was online. Of those who provided demographic information (approximately 90%), the majority identified as female (67%) and White/Caucasian (74%; 14% Black/African American; 6% Hispanic/Latino; 12% other). Twenty-five percent were between 25–34 years old, 29% between 35–44 years, 28% between 45–54 years, 11% between 55–64 years, and 6% were in another age group. Regarding highest degree earned, 22% selected PhD, 51% master’s, and 19% bachelor’s. Last, the majority were employed full time (87%; 6% part time; 6% unemployed).

Results

Results are presented in Tables 1–4, as follows.

Table 1 provides program information found through the SIOP website and independent searching. We provide program names, minimum number of required credits, degree level, minimum length of the program, degree title, online format, and a link to the current program website. (Click on the table to access an online Excel version for sorting and searching.)

Table 2 presents information pertaining to programs' admissions standards and practices, mechanisms for applied experiences, content areas covered in classes, faculty involvement in research and practice, and teaching strategies. Admissions information was generated through the SIOP graduate program database (as described above), whereas the remainder came from the faculty survey. Because only two participants represented doctoral programs, and to aid comparisons to previous *TIP* articles, we included only responses representing master's programs.

Table 3 presents student responses about their program culture, program resources, satisfaction, and social connectedness within the program. Distinctions were made between master's and PhD programs.

Last, Table 4 presents responses from the alumni survey grouped into themes pertaining to opportunities and professional development, job prospects and engagement, and satisfaction. Again, distinctions were made between alumni representing master's and PhD programs.

Table 1
Online Program Descriptives

Institution	Min. credits	Degree level	Min. length ¹	Title of degree	Format
1. Adler University*	36	MA	12 months	I-O Psychology	Online
2. Albizu University	48	MS	24 months	I-O Psychology	Online
3. Alliant International University	50	MA	24 months	Organizational Psychology	Online
4. Austin Peay State University*	34	MS	24 months	I-O Psychology	Online
5. Aventis School of Management	4 modules	GD	8 weekends	Organizational Psychology	Online
6. Baker College	36	MS	24 months	I-O Psychology	Online
7. Bellevue University*	36	MS	--	I-O Psychology	Online
8. California Southern University	42	MS	24 months	Psychology (I-O Concentration)	Online
9. Capella University*	55	MS	12 months	Psychology (I-O Specialization)	Online
10. Capella University*	104	PhD	--	Psychology (I-O Specialization)	Online
11. Chicago School of Professional Psychology*	40	MA	24 months	I-O Psychology	Online
12. Chicago School of Professional Psychology*	--	PhD	60 months	Business Psychology (I-O Track)	Online
13. Colorado State University*	38	Master's	24 months	I-O Psychology	Online
14. Eastern Kentucky University*	36	Master's	--	I-O Psychology	Online
15. Fielding Graduate University*	40	MA	--	Organizational Development & Change	Hybrid
16. Fielding Graduate University*	84	PhD	--	Organizational Development & Change	Hybrid
17. Franklin University	36	MS	14 months	Business Psychology	Both
18. George Mason University*	30	MPS	24 months	Applied I-O Psychology	Online
19. Golden Gate University	42	MA	24 months	I-O Psychology	Both
20. Grand Canyon University	36	MS	--	Psychology (I-O Emphasis)	Online
21. Grand Canyon University*	60	PhD	--	Psychology (I-O Emphasis)	Online
22. Johnson & Wales University	36	MS	24 months	Organizational Psychology	Online
23. Kansas State University*	38	MS	30 months	Psychology (I-O Emphasis)	Hybrid
24. Keiser University*	81	PhD	--	I-O Psychology	Online
25. Liberty University	36	MA	18 months	Applied Psychology - I-O Psychology	Online
26. Marian University of Wisconsin*	36	MS	16 months	I-O Psychology	Online
27. Missouri University of Science and Technology*	40	MS	--	I-O Psychology	Online
28. National Louis University	36	MS	20 months	I-O Psychology	Online
29. New York Uni. Polytechnic School of Engineering	36	MA	--	I-O Psychology	Online
30. Northcentral University	30	MS	20 months	I-O Psychology	Online
31. Northcentral University	60	PhD	48 months	Psychology (I-O Specialization)	Online
32. Northwestern University	--	MS	12 months	Learning & Organizational Change	Hybrid
33. Penn State World Campus	33	MPS	--	Psychology of Leadership	Online

34. Purdue University Global*	60	MS	18 months	Psychology (I-O Concentration)	Online
35. Saint Joseph's University Online	36	MS	24 months	Org. Development & Leadership	Both
36. Saint Peter's University*	36	MS/MA	15 months	I-O Psychology	Online
37. Saybrook University	36	MA	18 months	Leadership & Management	Online
38. Saybrook University	65	PhD	48 months	Managing Organizational Systems	Online
39. Southern New Hampshire University*	36	MS	15 months	Psychology (I-O Concentration)	Online
40. Thomas Edison State University	48	MA	--	Liberal Studies (I-O Area of Study)	Online
41. Touro University Worldwide*	36	MA	--	I-O Psychology	Online
42. Touro University Worldwide	66	PsyD	--	Human & Org. Psy.	Online
43. University of Georgia*	33	MEd	24 months	Learning, Leadership & Org. Dev.	Hybrid
44. University of Hartford*	36	MS	48 months	Organizational Psychology	Online
45. University of the Incarnate Word	30	MA	12 months	Administration (I-O Concentration)	Both
46. University of London - Birkbeck*	8 modules	MS	12 months	Organizational Psychology	Online
47. University of Maryland*	30	MPS	15 months	I-O Psychology	Hybrid
48. University of New Haven	--	MA	24 months	I-O Psychology	Online
49. University of Phoenix*	51	MS	24 months	Psychology (I-O Concentration)	Online
50. University of Southern California	34	MS	16 months	App. Psych. (Org. Psy. Concentration)	Online
51. Walden University*	48	MS	--	I-O Psychology	Hybrid
52. Walden University*	100	PhD	--	I-O Psychology	Hybrid
53. West Chester University	39	MS	24 months	Psychology (I-O concentration)	Hybrid
54. William James College	30	MA	11 months	Organizational Psychology	Both

*Indicates schools where representatives responded to our survey. GD = Graduate Diploma. MA = Master's of Arts. MS = Master's of Science. MPS = Master's of Professional Studies. MEd = Master's of Education. PhD = Doctor of Philosophy. PsyD = Doctor of Psychology.

¹ Assumes full-time status.

Table 2

Program Admissions, Curriculum, and Faculty

Admissions criteria*	Online/hybrid	In-person only
1. Minimum score for GRE verbal required	30%	55%
2. Minimum score for GRE quant required	30%	55%
3. Minimum score for GRE total required	13%	28%
4. Overall GPA required	61%	79%
5. Overall GPA minimum required	2.96	3.02
6. Previous research needed	31%	57%
7. Personal statement needed	88%	76%
8. Previous work needed	43%	64%
9. Personal interview needed	30%	42%
10. 3 letters of recommendation needed	29%	63%
11. Acceptance rate	70%	47%
12. Average enrollment	46	11
Applied dimension	Mean	SD
13. Does your online program include a formalized, applied internship component within the curriculum? (0 = no; 1 = yes)	0.31	0.48
14. How many hours are required to successfully complete the internship? If variable, provide an average.	202.60	54.92
15. Typically, what percent of students perform an internship?	93.40	14.76
16. Does your program allow for students to enroll in a practicum? (0 = no; 1 = yes)	0.60	0.51
17. Does your program have a designated unit (e.g., consulting clinic, center) to acquire consulting contracts and/or grants? (0 = no; 1 = yes)	0.00	0.00
18. How many courses in your program, including an internship, if applicable, involve students conducting applied projects (e.g., job analysis, training programs, organizational development) outside of the classroom?	4.47	3.11
19. How many courses in your program require formal presentations (group or individual) designed for applied audiences?	4.36	3.59
Curriculum dimension	Mean	SD
20. How many total credit hours are required for your online I-O degree? Please indicate in semester hours (1.5 quarter hours = 1 semester hours).	37.14	5.64
21. Given the number of hours in your program, what percent of students graduate in	88.55	8.23

the expected timeframe (e.g., “on time”)?

22. How many I-O-related hours (classes covering I-O topics, including research methods and statistics) are required for your online degree? Please indicate in semester hours (1.5 quarter hours = 1 semester hours).	32.62	8.55
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To what extent are the following topics covered in your online program? 1 = not covered at all; 2 = covered by a chapter or two in 1 or 2 classes; 3 = covered by an entire class or across 3 or more classes

23. Training and development	2.93	0.27
24. Organizational development	2.86	0.36
25. Personnel recruitment/selection	2.79	0.43
26. Performance appraisal	2.79	0.43
27. Job analysis	2.71	0.61
28. Work attitudes	2.64	0.50
29. Work groups/teams	2.64	0.50
30. Leadership/management	2.57	0.51
31. Work motivation	2.50	0.52
32. Workforce diversity	2.50	0.52
33. Consulting/business skills	2.43	0.76
34. Individual differences in the workplace	2.36	0.50
35. Organizational theory	2.21	0.58
36. Employment law	2.14	0.66
37. Job evaluation/compensation	2.00	0.68
38. Work stress	1.93	0.62
39. Judgement/decision making	1.79	0.58
40. Human factors	1.79	0.58
41. Work/family	1.57	0.65
42. Workforce aging	1.50	0.52

Faculty information/experience

	<i>Mean</i>	<i>SD</i>
43. In one academic year, approximately how many students typically enter your online program?	23.69	15.67
44. How many I-O faculty teach in your online program? (Three-quarter appointments count as .75; half-time .5; one-third as .3; Please do not count adjunct instructors.)	2.36	1.28
45. How many are full time?	1.94	1.06
46. How many are part time (three-quarter, half-time, or one-third appointments)?	1.31	1.11
47. How many adjunct instructors teach in your online I-O program?	2.44	2.19
48. How many I-O faculty in your online program have a degree in I-O psychology?	2.44	1.90
49. What number of I-O faculty in your online program have worked on a consulting	2.40	1.55

project (e.g., applied work with an organization or other entity) in the past 5 years?		
50. How many I-O faculty in your online program have supervised I-O students on external consulting projects?	1.47	1.19
51. How many total articles have been published by your I-O faculty in your online program in refereed journals in the past 5 years, including "in press" articles?	14.07	25.47

Teaching strategies	Mean	SD
To what extent do faculty in your program typically use the following approaches in their online teaching? 1 = not at all; 5 = to a very great extent		
52. Discussion boards	4.43	0.85
53. Written materials	4.29	0.83
54. Emails	4.07	0.83
55. PowerPoints	3.71	1.07
56. Video lectures	3.71	1.38
57. Video meetings	3.43	1.40
58. Collaborative websites or software	3.43	1.50
59. Phone calls	2.93	0.92
60. In person	2.14	1.29
61. Text messaging	1.93	1.33
62. Instant messaging	1.79	0.80

Note. N = 17 faculty/program directors from master's online or hybrid programs.

*SIOP data (24 online/hybrid master's programs, 67 in-person only master's programs)

Table 3

Student Experience

Program culture	Master's		PhD	
	Mean	SD	Mean	SD
Please indicate the extent to which you agree or disagree with the following statements... (1 = not at all; 5 = to a very great extent)				
1. I am able to achieve a balance between my work in the program and life outside the program.	4.38	0.86	4.37	1.10
2. Students in the program are supportive of each other.	4.17	0.89	4.10	0.92
3. I have meaningful relationships with program faculty.	3.14	1.30	3.50	1.41
4. The faculty in my program care about me as a person.	3.48	1.24	3.93	1.26
5. Faculty are engaged in the program and its students.	3.90	1.14	4.00	1.26
6. Faculty in my program are motivated to provide the best environment for students' professional development.	3.86	0.92	4.03	1.10

7. I have been treated fairly by the faculty in my program.	4.66	0.55	4.37	1.03
8. I am proud to be a student in this program.	4.31	0.81	4.23	1.17
9. Faculty take graduate student ideas seriously.	4.07	1.10	4.20	1.10
10. Students are invested in the success of other students.	3.66	1.04	3.70	1.21
11. Faculty have reasonable expectations of students.	4.24	0.91	4.27	0.98
12. I am given timely and constructive feedback.	4.24	0.99	4.20	1.03
13. There is unhealthy competition within the program. (<i>Reversed</i>)	1.45	0.83	1.97	1.40
14. This program is accepting of people of various backgrounds and perspectives.	4.62	0.68	4.60	0.72

Program resources	Mean	SD	Mean	SD
<i>My program offers me access to... (1 = not at all; 5 = to a very great extent)</i>				
15. Career development services	3.45	0.99	3.03	1.33
16. On-campus study spaces	3.28	1.25	3.13	1.50
17. Dedicated spaces for graduate students	3.00	1.16	3.00	1.44
18. Counseling services	3.45	1.15	2.79	1.35
19. Statistical software	3.71	1.30	3.80	1.42
20. Adequate library resources	4.59	0.63	4.20	1.03
21. Mentoring	3.14	1.33	3.24	1.41
22. Conferences	3.21	1.32	2.80	1.45
23. Certifications and training (outside of classes)	2.45	1.30	2.03	0.96
24. Funded assistantship	2.59	1.38	2.03	1.27
25. Scholarships	2.90	1.37	2.37	1.47
26. Funding for professional development activities (conferences, training, etc.)	2.28	1.22	1.67	1.06
27. Program alumni	3.10	1.26	2.57	1.36

Student satisfaction	Mean	SD	Mean	SD
<i>Please indicate the extent to which you are satisfied with the following aspects of your program... (1 = not at all; 5 = to a very great extent)</i>				
28. Faculty support and accessibility	4.14	0.76	4.14	1.03
29. Quality of instruction	4.14	0.93	4.34	0.94
30. Balance between applied and academic emphases	4.14	0.71	4.10	1.01
31. Quality of research in the program	3.93	0.81	4.07	1.22
32. Connection with I-O, HR, and related communities	3.39	1.26	2.83	1.34
33. Variety of course offerings	3.82	1.09	3.97	1.27
34. Class size	4.39	0.69	4.55	0.83

35. Culture of the program	4.11	0.92	4.31	0.85
36. Availability of educational resources	4.43	0.69	4.28	1.03
37. Internship and other professional opportunities	2.89	1.20	2.34	1.23
38. Alumni engagement	2.82	0.98	2.71	1.12
39. Engagement with the program during application process	3.54	1.04	3.45	1.43
40. Student diversity	4.00	0.90	4.38	0.78
41. Faculty diversity	4.00	0.94	3.69	1.17
42. Student relationships	3.36	1.10	3.62	1.21
43. Financial support	3.21	1.20	3.24	1.38
44. Website and social media presence	3.50	0.84	3.69	1.17
45. How well the program is preparing you for your career	4.00	0.90	3.62	1.29

Social connectedness	Mean	SD	Mean	SD
<i>To what extent... (1 = not at all; 5 = to a very great extent)</i>				
48. Do you interact with your professors, beyond the formal coursework, in a mentoring capacity?	2.00	1.16	2.61	1.26
49. Do you interact with your professors, beyond the formal coursework, in a research capacity?	1.69	1.04	2.23	1.23
50. Are your professors available for help with coursework?	3.69	1.07	3.97	1.22
51. Are your professors available for facilitating research experience?	2.55	1.48	3.23	1.50
52. Are your professors available for mentoring?	2.52	1.30	3.33	1.58
53. Do you feel connected to other students in your program?	2.45	0.95	3.10	1.19
54. Do you interact with other students in your program, beyond formal coursework?	1.86	0.92	2.23	1.33
55. Do you provide or have access to informal peer mentoring?	2.45	1.33	2.48	1.39
56. Does your program facilitate your professional development?	3.24	1.38	3.17	1.44
57. Does your program help you develop your professional network?	2.52	1.40	2.63	1.38
58. Does your program prepare you to enter the workforce?	3.17	1.07	2.97	1.43

Note. *N* = 74 students (31 master's program students; 43 PhD program students). Responses from 5 students were removed because they did not report their degree level.

Table 4

Alumni Experience

Opportunities and professional development	Master's		PhD	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
<i>To what extent... (1 = not at all; 5 = to a very great extent)</i>				
1. ...Did your program facilitate your professional development?	3.78	1.04	3.79	1.13
2. ...Did your program help you develop your professional network?	2.73	1.20	2.84	1.30
3. ...Did your program prepare you to enter the workforce?	3.57	1.08	3.17	1.50
4. How many times did you attend SIOP while you were in the program?	1.58	0.81	1.70	1.17
5. How many conference presentations did you co-author while in the program?	1.08	0.27	2.05	3.14
6. How many publications did you co-author while in the program?	1.08	0.27	1.75	2.24
7. How many applied projects were you involved in while in the program?	5.56	6.44	11.50	23.76
8. Did you have an internship during your time in the program? (0 = no; 1 = yes)	0.05	0.22	0.11	0.32
<i>Job prospects and engagement with field</i>				
<i>To what extent... (1 = not at all; 5 = to a very great extent)</i>				
9. How long (in months) did it take you to obtain employment following graduation?	5.04	8.02	2.39	2.55
10. What was your starting salary?	\$58,596	\$34,537	\$93,410	\$47,278
11. ...Was your first job following graduation related to I-O?	3.12	1.42	3.32	1.29
12. ...Would your first job following graduation be considered <i>applied</i> (vs. academic)?	91.26	16.62	70.67	35.85
13. ...Are you involved in SIOP?	1.83	0.82	1.84	0.69
14. ...Are you involved in publishing research?	1.33	0.56	1.79	0.63
<i>Alumni satisfaction</i>				
<i>1 = strongly disagree; 5 = strongly agree</i>				
15. I like to stay updated about current events in the program.	4.26	0.92	4.00	1.15
16. I like to participate in available alumni events/opportunities.	3.30	1.18	3.26	1.15
17. I would like to donate money to the program.	2.65	1.30	2.32	1.38
18. The program is keeping me updated about current	3.09	1.16	3.42	1.26

events/developments.

19. I have been provided with the necessary skills to succeed in my current career.	3.96	1.11	4.22	0.88
20. I like to keep in touch with faculty.	3.39	1.47	3.47	1.12
21. I feel the program has prepared me well for my career.	4.09	0.85	3.94	1.16
22. I feel the program has helped me develop my soft skills.	4.00	0.95	3.53	1.07
23. I would encourage others to apply to this program.	4.39	0.72	3.95	1.18
24. I am proud to be an alumnus of this program.	4.48	0.79	4.05	1.13

Note. *N* = 47 alumni (27 master's program alumni; 20 PhD program alumni).

Discussion

In this section, we offer commentary on the current state of online programs based on our findings. When possible, we make comparisons between online and in-person programs by drawing from either the database generated through the SIOP website or from previous *TIP* articles focused on program evaluation. Specifically, we used several of the same survey items used by Vodanovich and colleagues (2018), who surveyed I-O program coordinators, and Acikgoz and colleagues (2018), who surveyed students and alumni. Notably, these prior articles focused on master's programs only, thus anytime we make comparisons, we do so for only master's programs, including for data from the SIOP database. Further, these articles did not distinguish between online and in-person programs in their data. However, we compared their lists of programs to our list of online programs and found that only about 10% of programs from our list appeared in their articles, and several of those have both online and in-person programs. Thus, we believe that, in addition to the present work, referencing the contents of these articles is useful for making rough comparisons between online and in-person programs. Although we summarize notable results and highlight some conclusions that can be drawn, we encourage readers to review the tables for more detailed information.

In Table 1 we identified 54 programs (44 master's, 9 doctoral, 1 graduate diploma) offered by 46 separate institutions. Twenty-seven of these were represented by our sample (participants could indicate the program with which they were affiliated, if they chose). Although our response rate was low, we are encouraged that our results represent approximately half of current online programs (and considering that many respondents did not identify their program, more programs may be represented than of which we are aware). Most degrees were titled I-O Psychology (22), whereas 12 were psychology degrees with a concentration or specialization in I-O, 6 in Organizational Psychology, and 3 included an I-O concentration with a related degree (e.g., Business Psychology). The remaining 10 were in peripheral fields (e.g., Leadership & Management). Regarding format, 40 programs were online (33 master's, 7 doctoral), 9 were hybrid (7 master's, 2 doctoral), and 5 offered both formats (all master's).

We generally found that websites were transparent about their degree requirements and core curriculum with some exceptions. By reviewing offered coursework, we observed some broad trends. Fittingly, direct I-O degrees tended to offer more I-O specific courses, and, similarly, psychology degrees with I-O concentrations offered more I-O-related courses than programs in peripheral fields. Broad degrees in related fields

tended to offer few courses related to I-O (around 4 classes). Some curricula appeared more strongly aligned with SIOP standards, with some specifically stating they use the SIOP training guidelines (SIOP, 2016) to align their courses with training standards (e.g., Eastern Kentucky University, Southern New Hampshire University). This was in contrast to other programs that deviate from coursework norms and standards outlined by SIOP. For example, one program has a course dedicated to the Myers-Briggs Type Indicator, which falls outside of typical I-O training programs.

In Table 2, we presented information about programs' admissions, curricula, and faculty. Starting with admissions criteria, we included direct comparisons between online and in-person programs. In general, online programs tend to have less stringent admissions criteria, as fewer programs have requirements regarding minimum GRE scores, GPA, previous research experience, and so on, with the exception of personal statements—online programs were more likely to require those. Online programs required a slightly lower GPA (2.96_{online} vs. 3.02_{in-person}), had higher acceptance rates (70%_{online} vs. 47%_{in-person}), and higher annual enrollments (46_{online} vs. 11_{in-person}), though the statistical significance of these differences was not assessed.

Items 13–18 suggest that online programs are providing ample opportunities for applied experiences—the majority of students (93%) are performing internships, and over half of the programs reported having a practicum component. Students are also getting exposure to applied content to some extent in their courses. Notably, no programs report having a designated unit for consulting or grant projects. To make comparisons to the applied score provided by Vodanovich et al. (2018), we followed their methodology and converted items in this dimension to a 0 to 1 scale, then averaged (see their article for more detail on the scoring methodology). Overall, the *applied* dimension for these online programs ($M = .40$, $SD = .28$) was substantially lower than that reported by Vodanovich et al. (2018) of largely in-person programs ($M = .59$, $SD = .20$).

To evaluate curricula, we asked faculty to report on the extent to which various topics previously identified by SIOP's E&T Committee as competencies for inclusion in I-O programs (SIOP, 2016) are covered in their programs. As can be seen in Table 2, each of the topics were covered to at least some extent in the online programs included in our data. On a scale of 1–3 capturing the extent to which each topic is covered, average scores ranged from 1.50 to 2.90, with *workforce aging* receiving the least coverage and *training and development* receiving the most coverage. Although we don't have data to make comparisons to in-person programs at this degree of granularity, it is encouraging to see that these online programs are covering most primary I-O topics to at least a moderate extent, with none completely absent. We again followed the methodology of Vodanovich et al. (2018) so that comparisons could be made. Our overall *curriculum* dimension ($M = .66$, $SD = .14$) was slightly lower for these online programs than what they reported for largely in-person programs ($M = .71$, $SD = .15$).

Faculty-focused questions (items 43, 44; 49–51) showed that online programs tend to have limited numbers of full-time faculty available and rely more heavily on adjunct instructors. Encouragingly, these faculty appear to be fairly active in research and consulting. Items were again converted and combined using Vodanovich and colleagues' (2018) approach. Results showed our total ($M = .44$, $SD = .35$) for the *faculty information/experience* dimension was slightly lower for online programs than what has been previously reported for largely in-person programs ($M = .52$, $SD = .17$).

Finally, questions about teaching strategies (items 52–62) revealed that faculty in online programs are primarily relying on discussion boards, written materials, and emails, with synchronous forms of individualized communication (e.g., instant messaging) being much less common. Although discussion boards have been touted as a valuable tool for keeping students engaged (Waterhouse, 2005; Wiese et al., n.d.), heavy use of asynchronous approaches may be cause for concern (Laato & Murtonen, 2020). For example, asynchronous discussions have been described as lacking in communication opportunities and potential to be psychologically motivating (Hrastinksi, 2008). Nonetheless, moderate reports of video lectures and meetings indicate that students are getting at least some direct interactions with their professors in these programs.

In Table 3, we presented information pertaining to students' experiences, distinguishing between master's and doctoral programs. For three dimensions (viz. program culture, program resources, student satisfaction), we used the same items used by Acikgoz and colleagues (2018) in their article ranking master's I-O programs to facilitate comparisons. For program culture (items 1–14), students generally had positive reactions to their programs, reporting the highest ratings for being treated fairly, for unhealthy competition (reverse scored), and for the acceptance of students with diverse backgrounds. Scores were generally similar between the master's and doctoral programs. Program culture scores were generally lower (master's $M = 3.87$, $SD = 0.21$) for online programs than were those reported by Acikgoz and colleagues of largely in-person programs ($M = 4.32$, $SD = 0.29$).

For questions pertaining to program resources (items 15–27), most students felt that their program offers them access to the resources they need, with master's scores generally being higher than doctoral. The most notable ratings were the relatively low scores provided on availability of certifications and training outside of program courses, and for providing funding for professional development. The highest ratings were for access to library resources. The overall *resources* score (master's $M = 3.16$, $SD = 0.20$) for online programs was lower than that reported by Acikgoz and colleagues (2018; $M = 3.98$, $SD = 0.33$) for largely in-person programs.

Student satisfaction (items 28–45) was relatively high, with the lowest satisfaction reported for internships, professional opportunities, and alumni engagement. The highest reported satisfaction was for class size. Overall satisfaction for online programs (master's $M = 3.77$, $SD = 0.18$) was lower than that reported by Acikgoz and colleagues (2018) of largely in-person programs ($M = 4.21$, $SD = 0.32$).

For social connectedness, students generally provided the lowest scores on these items. These questions focused on feelings of connection with faculty and other students and how connection is promoted by the program. The lowest ratings were for research connections with faculty beyond coursework and for interactions with students outside of class. The highest ratings were for help from professors on class coursework. Generally, scores were higher from doctoral ($M = 2.90$, $SD = 0.13$) versus master's students ($M = 2.56$, $SD = 0.20$). These generally lower ratings show there is an opportunity for online programs to support and promote connectedness between students and with faculty. This may be particularly important because interpersonal skills, which can be developed through social connections, have been identified as major contributors to employability and career success in the field of I-O (Hogan et al., 2013).

Last, in Table 4 we reported the results of our alumni survey. Regarding opportunities and professional development, alumni reported limited, but at least some, involvement in conference presentation and publications, with alumni from PhD programs showing slightly higher averages than those from master's programs. Encouragingly, it appears that alumni from both levels attended SIOP at least once while in the program, and both reported involvement in numerous applied projects (with PhD alumni reporting approximately double the amount compared to master's alumni). In stark contrast to the faculty survey, which indicated that over 90% of students perform internships, very few of our respondents said they had an internship while in the program. This discrepancy could indicate online programs are rapidly changing in that area, as alumni were reporting on past experiences and faculty were reporting on current practices. Another possibility is that alumni who did not get internship experience were particularly motivated to respond to this survey.

Alumni from both levels indicated that their programs facilitated their professional development and prepared them to enter the workplace to moderate degrees, but programs appeared to be less effective in terms of helping them develop their professional networks. Nonetheless, alumni reported they were able to obtain employment following graduation fairly quickly, particularly PhD alumni, and obtained starting salaries roughly commensurate with the overall (i.e., across all types of graduates) salary survey (SIOP, 2020). Online programs appear to be better suited for launching alumni into applied- versus academic-focused positions, which is consistent with past research showing strong preferences for candidates from traditional, compared to online, programs for academic positions (e.g., Adams & Defleur, 2005). Further, alumni appear to maintain little involvement with SIOP or publishing research post graduation.

Finally, several items were used to assess alumni satisfaction (items 15–24). Notably, overall satisfaction ($M = 3.61$, $SD = .82$) for online programs was lower than that reported by Acikgoz and colleagues (2018) of largely in-person programs ($M = 4.10$, $SD = .31$). However, high means on individual items indicate that alumni are proud of their programs and would encourage others to apply to them.

Conclusions

Online graduate programs in I-O were increasing even before the pandemic, and now that all are dipping their toes into the online world to some extent, the time is ripe to take stock of current programs. We presented information pertaining to various aspects of current online programs, revealing many areas where they appear to be excelling (e.g., covering I-O curriculum, access to certain resources) yet others where they may be lagging behind traditional programs, and there is room for improvement (e.g., admissions standards, satisfaction). Notably, there is a lot of variance surrounding these programs, and we also acknowledge our small sample size and apparent lack of representation from many programs, limiting the extent to which we can make broad generalizations. Nonetheless, we believe we have provided a valuable resource and starting point for those interested in learning more. We hope this initial peek into the world of online programs is useful to those in the SIOP community (e.g., prospective students, employers) seeking to understand what it currently means to obtain an I-O degree from an online or hybrid program. We welcome any feedback from readers to inform the ongoing efforts of the Online Program Subcommittee.

Note

¹ If you have already read “Challenges of Educating and Training I-O Graduate Students Online (Not Another COVID Story)” in this issue, you’ll find the next three paragraphs quite familiar. Feel free to pick up again in the Results section. — Ed.

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**Challenges of Educating and Training I-O Graduate Students Online
(Not Another COVID Story)**

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Author Note: Survey development, data collection, and reporting were conducted as part of the Online Graduate Training Subcommittee of SIOP's Education and Training Standing Committee. The article authors comprised the "challenges" taskforce of this subcommittee. See also, our subcommittee's "evaluation" taskforce report, [*A Peek Into the Online World: Evaluating the Current State of Online I-O Graduate Programs*](#) (Grossman and Sanchez).

We would like to thank **Michael Chetta**, Rebecca Grossman, **Sy Islam**, **Richard Mendelson**, **Diana Sanchez**, and **Jean Whinghter** for their contributions to the Online Program Subcommittee of SIOP's E&T Committee. Correspondence concerning this article should be addressed to Adriane M.F. Sanders, Department of Psychological Science & Counseling, Austin Peay State University, P.O. Box 4537, Clarksville, TN 37044, United States. Email: sandersAM@apsu.edu

At the SIOP 2018 Annual Conference Program Directors Meeting, attendees were informally surveyed about additional ways in which SIOP could provide support for various program needs. Out of this, considerable interest emerged for creating an *online* I-O graduate training group. The attendees acknowledged there had been considerable growth in fully online and hybrid I-O programs, and such programs may have unique needs that SIOP could facilitate. With Rebecca Grossman (Hofstra University) leading the charge, volunteers for this inaugural Online Graduate Programs Subcommittee of SIOP's Education and Training Standing Committee began meeting in August 2018.

From these initial meetings, we determined that the immediate goals of this subcommittee were to (a) understand and evaluate the current state of online I-O graduate programs; and (b) identify the primary challenges faced by students, alumni, and faculty of these programs, as well as how SIOP might be able to offer support. To this end, "evaluation" and "challenges" taskforces were formed, and a survey was developed (naturally!) to collect this information.

Method¹

The Online Program Subcommittee generated survey items to gather information pertaining to programs' admissions criteria, curriculum, faculty, culture, and student and alumni experiences, in order to address the aforementioned primary goals of the subcommittee. To generate items, we drew from existing resources related to I-O curriculum (SIOP, 2016), previous *TIP* articles focused on program evaluation (Acikgoz et al., 2018; Vodanovich et al., 2018) and the committee members' experiences as faculty in both in-person and online graduate programs.

Upon obtaining approval from SIOP's Institutional Research Committee, the survey was distributed through SIOP to members affiliated with online or hybrid graduate programs (1,516 members). After the survey remained on the SIOP calendar for a 2-week period and one reminder email was distributed, 154 responses were obtained, for a response rate of approximately 10%. To supplement, committee members distributed the survey invitation via social media, and the subcommittee chair emailed directors of programs identified in Step 1 with an invitation to participate and further share the survey invitation. Following this outreach, 192 responses were obtained. However, after removing responses that were largely incomplete, 143 participants remained.

Those who volunteered to participate were filtered into one of three surveys based on their relation to an online program: faculty, student, or alumni. The final sample included 19 faculty members, 77 students, and 47 alumni who indicated that on average, 90% of their program was online. Of those who provided demographic information (approximately 90%), the majority identified as female (67%) and White/Caucasian (74%; 14% Black/African American; 6% Hispanic/Latinx; 12% other). Twenty-five percent were between 25–34 years old, 29% between 35–44 years, 28% between 45–54 years, 11% between 55–64 years, and 6% between 64–74 years. Regarding their highest degree earned, 22% selected doctorate, 51% master's, and 19% bachelor's. Last, the majority of the sample was employed full time (87%; 6% part time; 6% unemployed). In this initial article, we will focus on the challenges perceived by faculty and/or program administrators of online programs.

Results

Table 1 presents an overview of the extent to which faculty respondents perceived challenges to their online programs. Most often cited were issues of student assistantships and funding and research opportunities for students. These were followed closely by misconceptions and criticisms surrounding online programs and challenges to the student experience (e.g., sense of belonging, involvement, networking).

Table 1
Faculty Perceived Top Three Challenges to Their Online Program

Challenge:	Faculty rating as a "top 3 challenge":
Student assistantships/funding	50.0%
Student research (e.g., opportunities, conferences)	50.0%
Misconceptions/criticisms about online programs	35.7%
Student experience (e.g., sense of belonging, involvement, networking)	35.7%
Internship/practicum	28.6%
Admissions	21.4%
Resources for students (e.g., individualized time for each student, mentoring, travel funds)	21.4%
Faculty (e.g., number of, location of)	21.4%
Course delivery	7.1%

Comprehensive exams (e.g., time spent developing questions, proctoring, grading, administering, retakes, etc.)	7.1%
Thesis (e.g., time spent mentoring, drafting, workload credit, number of thesis students, etc.)	0%

Regarding challenges to specific areas of program management, a little over half of the participants indicated facing challenges surrounding program admissions. In addition to intensity of the process, which was noted multiple times, respondents elaborated that the need to assess capability and motivation for an online program, difficulty in onboarding students, and a lack of faculty input in admissions decisions led to these challenges. When asked how SIOP may help with admissions challenges, participants suggested that providing clear guidelines and standards (e.g., recommendations for graduate-level class sizes in online programs; guidelines on when admissions decisions should be made by programs and applicants, even for open-enrollment programs) would be helpful. In general, it seems the more information SIOP can provide to students regarding program requirements, costs, and other common factors to highlight differences across programs, the better.

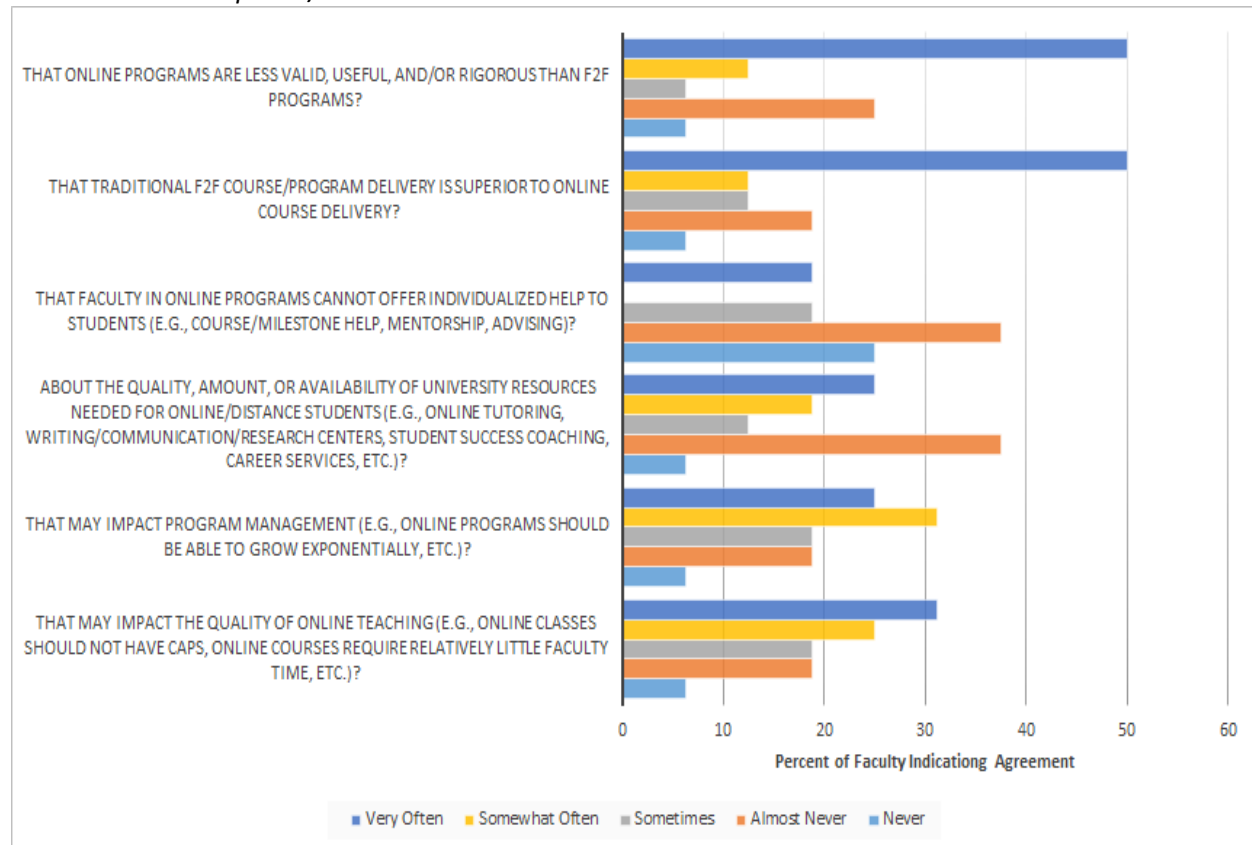
Only one respondent indicated comprehensive exams as a top challenge (e.g., time spent developing questions, proctoring, grading, administering, retakes, etc.); however, this is likely because most respondents (79%) indicated that their program does not offer a comprehensive exam. Of those that do, 75% indicated they would be interested in a standardized exam or test bank provided by SIOP.

Of respondents indicating course durations shorter than a typical semester (e.g., 6–12 week courses), most identified covering material at a desired depth as a challenge. Less than 20% of respondents had experienced pressure to adopt an accelerated term; however, one respondent noted that “this is the trend” and may be an area in which SIOP could offer best practices for online programs. Regarding time to completion for online programs, faculty indicated that part-time students often pose a challenge as they may be more likely to drop out of the program and take longer to complete the program. However, we offer that the *opportunity* for students to attend graduate training part time is a unique strength of online programs that should be embraced and protected, within the parameters of individual university guidelines.

Respondents were also asked to indicate the extent to which they perceive differences between online and face-to-face programs across several domains. Two themes that emerged suggest that (a) there is a misperception that online programs require less work—online faculty would argue that these programs require a great deal of work, perhaps even a heavier workload in terms of planning, organization, managing courses, and one-on-one interactions with students—and (b) the student populations served by online programs, in general, appear to be comprised largely of nontraditional students who are full-time working professionals (yet another reason why part-time enrollment should be preserved). Table 2 presents the extent to which faculty and/or program administrators experienced misconceptions or criticism from peers, prospective students, university administrators, or others regarding different aspects of online program management. A few themes emerged regarding these misperceptions. First, respondents stated that it is often difficult to get faculty who are used to traditional (face-to-face) delivery to understand or “get on board” with the utility, rigor, and necessity of online pedagogy. Several respondents noted the challenges involved in gaining credibility for their online programs and graduates of these programs due to such misconceptions; online programs must “constantly...be exemplary in every way to maintain credibility,” and students receiving degrees from online universities and/or programs “may be perceived less favorably” and “may face more challenges in finding employment opportunities.” It was

also noted that many SIOP peers propagate and help perpetuate these stereotypes and a general “less-than-ness” of online I-O graduate programs.

Table 2
Common Misconceptions/Criticisms Received From Others



“As a faculty and/or administrator of your program, to what extent have you experienced misconceptions or criticism from peers, prospective students, administrators, others...”

Respondents were also asked to identify any unique challenges that online programs may pose to students. Themes that emerged focused on the *reduced* capacity or opportunity for experiences that are readily available in face-to-face programs, including a sense of community, interaction with peers, and engagement. Participants noted that it can also be easier for students to lose motivation when faculty do not see them in person frequently. Though physical presence in a traditional class does not guarantee student engagement, observable social norms of peers in the class would at least make it more difficult to fully disengage. Such social prompts are more difficult to replicate in an online modality, particularly in asynchronous formats.

Reduced research and professional development opportunities were also part of the emergent themes. Participants noted that teaching research and professional skills can be more difficult in the online format, further commenting that professional mentorship and advising may occur more easily, organically, and serendipitously in face-to-face programs. Online students may need to be more proactive in asking for assistance, as the faculty are not always aware of their particular situations. This may also create extra work for faculty and program administrators to make sure students get the individual attention and

mentoring they need. The technological savvy required of an online program was also referenced. Students who are not savvy can overcome this but may fall behind or need additional guidance.

Finally, although we primarily focused on challenges, participants were also asked to discuss unique benefits associated with online graduate programs. The ability to complete their education while working and/or gaining experience in the field, flexibility to complete coursework around job and family schedules, and the elimination of geographical constraints on obtaining a degree in the field were all noted benefits. Additionally, students are able to bring these real-life and current job experiences to the classroom, thereby enriching discussions and group projects to the benefit of all students.

In general, online programs can afford the flexibility needed while maintaining rigor for many talented students who may otherwise be unable to earn an advanced degree in the field. This may increase the diversity of students' experiences, backgrounds, and interests in online programs. One participant stated that online programs present the benefit of allowing "working professionals who want to elevate their knowledge to achieve their educational and career aspirations...an avenue to do so."

Discussion

As evidenced in these survey responses, there are challenges to faculty, program administrators, and students that are unique to an online delivery of I-O training. Some of the identified challenges require individual program faculty and advocates to add to the already laborious work of online program development and delivery, to include ongoing development of creative solutions to these unique problems. However, as stated in the preamble to this research (and the formation of this subcommittee), we wanted to not only identify challenges as perceived by various stakeholders, but also seek frontline suggestions for how SIOP could help. The predominant themes emerging from faculty and program administrators can be broadly categorized as micro- and macrolevel challenges, and we believe SIOP can provide increased support at both of these levels.

Microlevel Challenges

The student experience (i.e., sense of belonging, peer interaction, and engagement), opportunities for cocurricular research experience, and individualized professional mentorship are all microlevel challenges that emerged from this investigation that pose great potential for immediate positive outcomes. We posit that these issues may benefit from the same strategy, which is threefold. Program faculty and administrators must be (a) creative, (b) vigilant, and (c) strategically congruent.

Creativity. The opportunities for interaction and engagement come part and parcel with a face-to-face program. Though opportunities for research and professional mentorship are not inherent to a specific modality, they are certainly easier to provide and engage students when there is opportunity for students to walk by a lab space, walk by a faculty office, or have impromptu conversations at the campus coffee shop. Though not all students will take (or be able/empowered to take) advantage of these opportunities, they exist or are easier to administer as a function of the modality itself. Online programs do not have this convenience; rather, it is another factor of online pedagogy and program development that must be carefully and deliberately considered and developed with creativity.

Vigilance. All successful programs must monitor student–faculty ratios, in terms of class and cohort size. However, it is exponentially more important in an online program. As many faculty (and hopefully university administrators) are currently discovering, taking even a modest 20-seat, face-to-face graduate

class online can quickly become overwhelming, and sacrifices will be made (not including the fact that simply posting a face-to-face class into a learning management system does not make it online learning; more on this below). Just as class size dictates the course format, discussions, assignments, grading, feedback, timeline, interaction, and more, overall program size dictates the amount of faculty–student interaction (sometimes even peer–peer interaction), opportunities for cocurricular involvement, and individualized advisement and professional mentorship. Online program administrators must be gatekeepers in this respect and must often do so in the face of incredible university pressure to grow.

Strategic congruence. We must exploit our IOP knowledge. We have identified these microlevel challenges, which would not have emerged if not considered valuable. If we value these components, we must prioritize them by building them into our programs’ strategic plans, so that program-level outcomes, down to individual course and cocurricular learning outcomes and competencies align with these values.

How SIOP can help at the microlevel:

- Provide more cross-program graduate community and mentorship opportunities/activities both at and beyond the annual conference. Include graduate programs of all modalities so as not to increase feelings of disparity.
- Provide means for faculty to crowdsource creative solutions. One example of this is the recent ongoing meetings of international IOP program directors referenced below.
- Create an Education and Training Subcommittee to research and develop best practices for online programs, such as class and program size, student–faculty ratios, comprehensive exam items and procedures, and means for fostering the student experience. Although we acknowledge that SIOP is not an accrediting body, programs in other fields requiring accreditation tend to possess strength, rationale, and funding behind their programs at the university level. This often offers a level of protection from exponential growth and untenable expectations of online programs.

Macrolevel and Systemic Challenges

At the macrolevel, challenges that emerged from the data included misperceptions surrounding online versus remote learning, access to education based on privilege, issues of diversity, and stigmas surrounding online learning, including the stereotype that this type of education is “less than.” Though such systemic challenges are harder to address, doing so is our ethical responsibility as I-O psychologists, practitioners, and educators.

Currently, there is a heightened focus on online education and training due to the ongoing COVID-19 pandemic. Traditional colleges and universities are moving their programs, and even their organizational management, to online delivery for the first time. With this mass transition, the terms “online learning” and “remote learning” have been mistakenly used interchangeably. To the newcomer in online delivery, this may seem like a trivial distinction; however, for those educators and administrators who have worked tirelessly to promote online learning as a sustainable, rigorous, and valuable method of instruction and learning, making the distinction is crucial (Manfuso, 2020). Remote learning involves quick, ad hoc, low-fidelity mitigation strategies (Gardner, 2020). Online learning and pedagogy is well-considered, durable, and backed by decades of learning science and best practices.

Hodges et al. (2020) believe that online learning carries a stigma of being lower quality than face-to-face learning, despite extensive research showing online education to be robust and effective. Evidence of this stigma was supported by the survey responses collected here. There is a growing fear that the hurried moves online by so many colleges and universities due to COVID-19 could perpetuate the

stereotype of online learning as a weaker option (another issue of conflating online and remote learning terminologies). Furthermore, the spring 2020 triage of in-progress classes to an online modality may be misused as evidence of the oft-held, erroneous belief that online classes are easier, quicker, and more cost effective to prepare and administer, and can be done with little regard to class size. However, as noted, the triage that took place out of necessity to salvage student learning outcomes in an unprecedented time was not online pedagogy, not best practices, and not what existing rigorous, quality online programs and faculty do in their classrooms. The ongoing pressures that online program faculty face due to these misconceptions were repeatedly noted in our survey. Whereas these quick COVID-prompted moves to remote learning may lead administrators to inaccurate conclusions about *online* pedagogy, it seems that faculty shifting courses online for the first time may have a new, more realistic perception of what true (and successful) online learning and teaching requires. It remains to be seen if this forced adoption will yield a greater appreciation for those who are proficient at teaching in this modality or if those triage experiences will further cement the pervasive distrust, disdain, and/or dismissive view of all online pedagogy. There is a tremendous amount of time and effort that goes into developing high-quality online courses. Successful online pedagogy and course design reflects best practices and research of content and instructional design experts and covers the overall learning approach, instructional media to be used, and sequencing of learning, activities, and assessments to be used in the course (Butcher & Wilson-Strydom, 2013).

The proliferation of online I-O graduate programs predates the current pandemic and will outlast it. Likewise, students will continue to seek out the most affordable means of getting an education that enables them to continue working (often full time) and attending to other responsibilities. Gone are the days when most graduate students were fully funded, were only tasked with attending graduate school, and had few other responsibilities to juggle. Rigorous online IOP programs have the advantage of meeting students where they are in life (metaphorically and physically) and providing quality training previously only accessible to students of means and privilege. Though many of these challenges may be faced by online programs in any discipline, would-be students of more niche programs like IOP and/or who live in less populated areas do not have the luxury of suitable programs at multiple universities in their geographic location, much less the various forms of privilege required to relocate solely to attend graduate school.

How SIOP can help at the macrolevel:

Addressing the diversity dilemma within the field of I-O starts with diversifying the pipeline—students. Since 2004, SIOP has been working to make IOP an attractive career opportunity for minority students (Kersting, 2004). This work has continued with the Committee on Ethnic and Minority Affairs (CEMA) initiating a student mentoring program, open to I-O graduate students from racial and ethnic groups currently underrepresented in our field. CEMA works to support students preparing for academic or applied jobs and lay the foundation for continued engagement with SIOP over the course of their careers (Jones, 2017). Additionally, an international ad hoc group of IOP program directors began meeting in 2019 and presented the SIOP 2020 session, “Promoting Diversity in I-O Graduate Programs: Walking the Talk.” Utilizing a diversity, equity, and inclusion (DEI) framework, this group strives to develop and promote DEI within the field and SIOP by focusing on practices and strategies for master’s and doctoral program recruiting, admissions, training, and placement.

Without SIOP’s help, issues of DEI, access, and privilege, coupled with the stereotype that online programs are lower quality/rigor, will lead to increased disparities within the field. When prompted for additional thoughts about challenges, one faculty respondent aptly put it:

I worry in general about the extent to which online and hybrid programs become home to ethnic minorities, lower SES, and other nontraditional-path students who can't afford to do a brick-and-mortar route (a stipend does not feed a family). This trend, alongside the general tendency of many to look down on these programs, is dangerous to our entire field and creates a caste system where suddenly our diverse I-Os are seen as “less than” because of where they got their degrees. This has the potential to be a crisis if not dealt with systemically.

The goal of this subcommittee and investigation was to identify challenges shared by multiple stakeholders of online IOP programs and ways in which SIOP could help. In doing so, we hope to have adequately represented and voiced the experiences of these programs' faculty and administrators. It is true that not all online IOP graduate programs are rigorous or high quality, but neither are all face-to-face programs. We hope that an additional benefit of this subcommittee is raising awareness that rigorous and high-quality online IOP programs exist.

Notes

¹ If you have already read “A Peek Into the Online World: Evaluating the Current State of Online I-O Graduate Programs” in this issue, you'll find the next three paragraphs quite familiar. Feel free to pick up again in the Results section. — Ed.

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**Taking Our Ambassador Membership Program Virtual:
The 2021 Ambassador Subcommittee Seeks Your Help This Fall**

Jenna-Lyn Roman and Stefanie Mockler
Ambassador Program Subcommittee
SIOP Membership Committee



SIOP's Ambassador Program seeks to support new conference attendees by providing an opportunity to receive mentorship from a more experienced SIOP member. For the 2020 Annual Conference, we achieved several ambitious goals, including having nearly 600 conference registrants sign up to participate. This is a record number!

Then, COVID-19 hit the world hard, conference programming changed rapidly, and the Ambassador Program Subcommittee had to pivot along with it. Although we weren't able to deliver on a virtual program for 2020, under the leadership of two new subcommittee chairs (viz. Stefanie Mockler and **Catherine Savage**) and with an energized and engaged team, we have a vision to make future Ambassador Programs virtually accessible and better than ever! Our world is changing, and we understand the need to change along with it.

To execute our vision, we need your help. Specifically, we are looking for volunteers to help us pilot a "hybrid" Ambassador Program that will include both virtual and, if possible, in-person components. With your support, we can test our ideas and gather feedback to help us take this program *to the next level* in 2021 and years to come. We believe that at least some elements of virtual programming are here to stay, and we want to ensure the ambassador experience can pivot quickly no matter what the future looks like.

In the next sections, we describe a brief history of the Ambassador Program, map out our future vision, and offer more details for how you can help us strengthen and improve the program.

Where We've Been: The History of the Ambassador Program

The SIOP Annual Conference is, without a doubt, an overwhelming experience, particularly for those who are new to the event and aren't quite sure where to start or how to make the most of the experience. Since 2010, the SIOP Ambassador Program has sought to make the newcomer experience less overwhelming by matching our newest attendees with previous conference goers who were willing to share what they've learned and serve as a mentor throughout the conference. Serving as an ambassador is a **relatively small time commitment** that can have a **tremendous impact** on first-time SIOP attendees, including providing a positive introduction to the SIOP community.

Where We're Headed: Exploring and Designing Ambassador Program Options for SIOP 2021

The vision for SIOP 2021 is to develop and provide a hybrid program consisting of in-person sessions, virtual live sessions, and virtual asynchronous sessions (i.e., prerecorded materials to help set newcomers and ambassadors up for success). Although we aren't certain what the upcoming conference will look and feel like, we know it will be different than what we experienced in the past. The Ambassador Program Subcommittee is committed to learning how we can best accommodate newcomers and ambassadors who attend the conference, both in person and virtually. As noted, to do that, we need your help.

To pave the path for the SIOP 2021 Ambassador Program, we will need SIOP members to test out our matching system and provide us with feedback regarding how best to design a hybrid experience.

We will reach out to the 600 members who committed to the 2020 Ambassador Program, *and* we would greatly welcome other SIOP members who would like to assist as well.

Our Call to Action: Your Role and Our Needs

If you're willing to help, please visit our [web page](#) to volunteer.

We will ask you to **devote 1–2 hours this fall** (i.e., October 2020).

This will consist of

- taking a brief survey,
- reaching out to another SIOP member that you have been matched with, and
- interacting in an online platform.

By volunteering you would get the opportunity to connect with and possibly make a difference for another SIOP member. In addition, you could assist our team in making sure the offerings of the Ambassador Program will continue to be high quality, impactful, and viable as we move toward a hybrid conference in 2021.

Any SIOP members who desire to participate as an ambassador or newcomer for the 2021 SIOP Annual Conference are encouraged to do so when the registration process opens. We encourage everyone from graduate students who are more advanced in their programs to recent graduates in academic or applied jobs to more veteran SIOP members to consider making a first-time SIOP conference attendee feel welcome, especially in these uncertain times. As we look forward to the 2021 conference, our committee is determined to help even more members make connections through the Ambassador Program.

We thank everyone who is willing in advance for volunteering to help shape the Ambassador Program for the 2021 Annual Conference and beyond!

For more information about the Ambassador Program, contact us at ambassador@siop.org or visit our [web page](#).

SIOP Award Winners: Meet Jonas Lang, Winner of the SIOP Jeanneret Award for Excellence in the Study of Individual or Group Assessment (Along With Paul D. Bliese & Alex de Voogt)

Liberty J. Munson



As part of our ongoing series to provide visibility into what it takes to earn a SIOP award or grant, we highlight a diverse class of award winners in each edition of *TIP*. We hope that this insight encourages you to consider applying for a SIOP award or grant because you are probably doing something amazing that can and should be recognized by your peers in I-O psychology!

This quarter, we are highlighting the winner of the SIOP Jeanneret Award for Excellence in the Study of Individual or Group Assessment: Jonas Lang, who won this award along with Paul D. Bliese and Alex de Voogt.



Share a little a bit about who you are and what you do.

I am a member of the Department of Human Resource Management and Organizational Psychology at Ghent University in Belgium (close to Brussels) and the Business School of the University of Exeter (UK). I am originally from Aachen, Germany, which is a city in the triborder area between Germany, Belgium, and the Netherlands. I received my psychology degree from the University of Mannheim in 2004 and my PhD from RWTH Aachen University in 2007 (both in Germany). I worked at Maastricht University (Netherlands) before I came to Ghent.

My research mostly focuses on the application of multilevel methods and the measurement and use of individual differences in organizational settings. I have been an associate editor for *Organizational Research Methods* the past 2 years, and I am a member of Lillian Eby's incoming team at the *Journal of Applied Psychology* as an associate editor.

Describe the research/work that you did that resulted in this award. What led to your idea?

The starting point was the observation that many researchers are interested in studying the emergence of climates, or "how do climates form in groups or organizations?" This question seems quite central to organizational research and especially industrial and organizational (I-O) psychology. Researchers had studied these ideas using a variety of approaches like qualitative methods, event analyses, or network analyses. However, these approaches require special types of datasets or research skills and cannot readily be applied to questionnaire data or behavioral data. The arguably most common quantitative method used in our field—multilevel methods—had not been adapted or used to study emergence at the time we conducted this research. The multilevel methods that researchers were using were only suited to study how climates that had already formed affected individuals in organizations or to check whether groups at particular points in time had shared ideas, so there was a clear gap in the literature and a need to allow researchers to study emergence in their longitudinal datasets.

What do you think was key to you winning this award?

The support of my coauthors—Paul D. Bliese (University of South Carolina) and Alex de Voogt (Drew University)—who won the award with me. I think it was a true team effort. The paper also went through

several iterations because some of these ideas seemed unfamiliar to reviewers, especially when we first started to talk about it at conferences, so I think it was key that we hung in there.

What did you learn that was surprising to you? Did you have an “aha” moment? What was it?

I was quite surprised by the fact that changes in the intraclass correlation type 1 do not really provide much information about how teams change in consensus over time. The ICC1 is a quite common measure of “sharedness” and is reported in most articles. Intuitively, most people assume that the ICC1 can straightforwardly be estimated at each point in time. When we originally started with this research, we already had a sense that the ICC1 would be an imperfect measure for longitudinal datasets. However, what was surprising was the fact that there are circumstances that quite regularly occur in organizational research in which the ICC1 can be misleading. Trends in the ICC1 may even run counter to the true underlying trend in consensus emergence.

What do you see as the lasting/unique contribution of this work to our discipline? How can it be used to drive changes in organizations, the employee experience, and so on?

It is always hard to determine what element of a paper—if anything—will have a lasting impact. I think one important take-away message is that the emergence of a common climate and sense of meaning in an organization/group/team is at least as interesting and important to study as the impact that an organizational/group/team climate has on individuals. Another important take-away message is that emergence processes are a dynamic, complex phenomenon that we do not yet fully understand and have rarely studied. The goal of the article is to provide researchers with a tool to study this phenomenon. I think both messages directly translate to driving changes in organizations. In practice, we talk about change processes, and I think many practitioners have a good sense of how these processes work. There is a reason for that; for instance, Kurt Lewin’s classic work on unfreezing-change-refreezing is very popular (even though there is some debate whether he ever came up with this model in this form). However, statistically there is not an evidence-based equivalent to these types of processes in organizations and units. I think an important goal could be to develop this knowledge base by conducting more research in this area.

Who would you say was the biggest advocate of your research/work that resulted in the award? How did that person become aware of your work?

Probably my coauthor Paul (Bliese). When I do have an idea, I frequently ask him to do a solid reality/usefulness/no-nonsense check, and this time he thought there was something in there, so we proceeded with the work.

To what extent would you say this work/research was interdisciplinary?

Our research question certainly goes beyond I-O and is certainly theoretically relevant for other areas like social psychology, sociology, management, or clinical psychology (e.g., group therapy). Another interdisciplinary element was the fact that a group of archeologists agreed to take part in a data collection for one of the coauthors of the paper—Alex de Voogt—who has, himself, a background in archeology and anthropology. We used these data in the article, and there was huge interest from the archeology community about our research questions as they quite regularly face situations in which teams of people who do not know each other well before a mission all of a sudden need to work together closely.

What was the “turning point” moment where you started thinking about the problem/work through the other disciplines’ lenses?

We realized that the problem may be more general than I-O psychology when we came across the link to Muzafer Sherif’s work. Sherif conducted studies of group norms in the 1930s, and many psychologists may remember his work from their social psychology introduction courses. We reanalyzed the data he published in his book chapters using the methods described in the article. This analysis is included in a recent book chapter that we published (Lang, J. W. B., & Bliese, P. D. [2018]. A temporal perspective on emergence: Using three-level mixed-effects models to track consensus emergence in groups. In S. E. Humphrey & J. M. LeBreton [Eds.], *The handbook for multilevel theory, measurement, and analysis* [pp. 519–540]. Washington, DC: APA.)

What, if any, were the challenges you faced doing this work across disciplines (e.g., different jargon)?

A general challenge in this area and across disciplines may be that terms are frequently mostly verbal descriptions, and it is not always clear how the theoretical ideas can be translated into actual research designs and statistical analyses. So, it is unclear to what degree terms converge across fields. We believe that the methodological approach we described in the paper provides some needed clarity in this area. We have also recently followed up with a more general paper on group processes in a journal for the broader psychology audience (Lang, J. W. B., Bliese, P. D., & Adler, A. B. [in press]. Opening the black box: A multilevel framework for studying group processes. *Advances in Methods and Practices in Psychological Science*. <https://doi.org/10.1177/2515245918823722>). We believe that the work can also be useful for research in many areas beyond I-O like fundamental work on group processes or in applications of psychology to jury decision making in criminal and civil cases.

What’s a fun fact about yourself (something that people may not know)?

In my free time, I play a lot of badminton—preferably doubles. I love traveling to the US because I really like blueberry pancakes for breakfast, and we do not really have them in Europe.

What piece of advice would you give to someone new to I-O psychology? (If you knew then what you know now...)

When I was an undergraduate student back at the University of Mannheim, one of our professors told us to “Learn research methods and measurement. When you want to become a clinical psychologist, there are a lot of things that the physicians can do better than you so the competition will be stiff. When you want to become an industrial and organizational psychologist, there is a lot that the business administration people can do better than you. They can present themselves and do a lot of internships [Germany at the time]. Two things you can do and where you can beat them are research methods and measurement so learn them and you will see that you are very valuable on the labor market.” At the time, I thought it was just some empty sales pitch so that people would come to lectures. I admit that it took me some time to realize that he was right. Of course, this was all before big data, analytics, and so on. So, when you ask, my advice would be to learn as much as possible about research methods and measurement. These skills are clearly the most important competencies for an I-O psychologist. From learning multilevel methods, you also learn multilevel theory and thinking, and this is something that one can easily use to actually help organizations. I would also recommend that people learn R (or possibly Python).

Another piece of advice I learned mostly by observing other successful researchers is to always be open. I think in research it is always very hard to have very strict rules on how to do things. You should develop concepts, rules, and guidelines on how to do things but then should also be open to being proved wrong. I always come across new work/articles and then need to admit, "I never thought about doing this and this this way."

About the author:

Liberty Munson is currently the principal psychometrician of the Microsoft Technical Certification and Employability programs in the Worldwide Learning organization. She is responsible for ensuring the validity and reliability of Microsoft's certification and professional programs. Her passion is for finding innovative solutions to business challenges that balance the science of assessment design and development with the realities of budget, time, and schedule constraints. Most recently, she has been presenting on the future of testing and how technology can change the way we assess skills.

Liberty loves to bake, hike, backpack, and camp with her husband, Scott, and miniature schnauzer, Apex. If she's not at work, you'll find her enjoying the great outdoors, or she's in her kitchen tweaking some recipe just to see what happens.

Her advice to someone new to I-O psychology?

- Statistics, statistics, statistics—knowing data analytic techniques will open A LOT of doors in this field and beyond!

SIOF Award Winners:

Meet the Winners of the SIOF International Research and Collaboration Small Grant on Job Insecurity

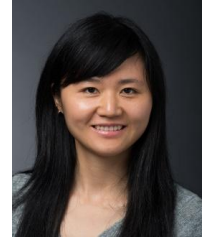
Liberty J. Munson



As part of our ongoing series to provide visibility into what it takes to earn a SIOF award or grant, we highlight a diverse class of award winners in each edition of *TIP*. We hope that this insight encourages you to consider applying for a SIOF award or grant because you are probably doing something amazing that can and should be recognized by your peers in I-O psychology!

This quarter, we are highlighting the winners of the SIOF International Research and Collaboration Small Grant as told by **Lixin Jiang**, University of Auckland, New Zealand. Her coauthors where:

- **Maïke Debus**, Friedrich-Alexander University Erlangen-Nürnberg (FAU)
- Xiaowen Hu, Queensland University of Technology, Australia
- Sergio Lopez-Bohle, Universidad de Santiago de Chile, Chile
- **Laura Petitta**, Sapienza University of Rome, Italy
- **Lara Roll**, North-West University, South Africa
- Marius Stander, North-West University, South Africa
- Haijiang Wang, Huazhong University of Science and Technology, China
- **Xiaohong Xu**, Old Dominion University, USA



Share a little a bit about who you are and what you do.

I am Lixin Jiang, senior lecturer at School of Psychology at University of Auckland. I am an organizational psychologist specializing in occupational health psychology. My overarching research goal is to use resources at the socioeconomic, organizational, and individual levels to promote health and well-being of people at work, as well as prevent and attenuate the negative consequences of workplace stressors. Upon receiving my PhD from Washington State University in 2013, I have published 50 peer-reviewed journal articles, including in top-tier journals such as *Journal of Management*, *Journal of Applied Psychology*, *Journal of Occupational Health Psychology*, and *Work & Stress*. As a principal investigator, I have attracted competitive research grants worth over \$450,000. I am currently an associate editor for *Stress and Health* and serve as an editorial board member for *Journal of Organizational Behavior* and *Occupational Health Science*.

Describe the research/work that you did that resulted in this award. What led to your idea?

Since my PhD, my research has been focusing on job insecurity, a topic that is particularly relevant in contemporary workplaces and today's global pandemic. The proposed research will examine whether employees' display of different types and levels of proactive behaviors (e.g., seeking a mentor, networking, voice behaviors, taking charge) as a result of job insecurity depend on their cultural orientations across nine countries. My idea came from the international prevalence of job insecurity and the growing importance of proactive behaviors.

What do you think was key to you winning this award?

My awesome international collaborators are key because this study involves data collection efforts from nine countries, including Australia, Chile, China, Germany, Italy, New Zealand, South Africa, Switzerland, and the United States.

What do you see as the lasting/unique contribution of this work to our discipline? How can it be used to drive changes in organizations, the employee experience, and so on?

Understanding how people with different cultural values may react to job insecurity differently by displaying different types and levels of proactive behaviors, which are becoming more important in light of today's growth in precarious forms of employment, changing employment conditions, and greater mobility across organizations. This will help global organizations to understand employees with their unique cultural backgrounds.

Are you still doing work/research in the same area where you won the award? If so, what are you currently working on in this space? If not, what are you working on now and how did you move into this different work/research area?

Yes. I am still doing research on job insecurity. I am currently working on research on job insecurity's potential antecedents and its long-term consequences on organizations, employees, and their family.

What is a fun fact about you that few people know?

Many moons ago, I attempted to cycle from Chengdu to Tibet, about 2,275 km (~1,414 miles). Although I only completed one quarter of the trip and had to return because of altitude sickness, I summited three mountains that are over 4,000 meters (~13,000 ft) tall. I hope I am a better academic than a cyclist.

What piece of advice would you give to someone new to I-O psychology? (If you knew then what you know now...)

Hard work pays off.

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BayState IO

Beth Melillo and Pete Rutigliano

Nobody's parking in Harvard yard right now, not even I-O psychologists. However, even before the pandemic turned "Zoom" into an adjective, BayState IO was connecting New England-based I-O psychologists in a virtual setting using the platform so that driving through Boston's cow-paths-turned-roads wasn't necessary.

What Is BayState IO?

BayState IO is a membership organization connecting professionals in Massachusetts who apply principles and practices of psychology to the workplace through internal organizational practice, external consulting, and academia. The group formed in 2018 after learning the previous organization of psychologists and psychometricians, New England Society of Applied Psychologists (NESAP), had shuttered a few years prior—after 25+ plus years—leaving I-O psychologists in the area without a way to connect.

NESAP arose and grew as a group to meet the needs of its members, practitioners applying backgrounds in clinical and social psychology to the workplace. When exploring the past of NESAP prior to launching BayState IO, past presidents shared how NESAP members used their psychological training in the workplace in various coaching roles internally, and many focused on the bread-and-butter work of I-O psychologists doing selection and assessments.

Although NESAP had disbanded, there was still interest for a local group to connect I-O practitioners. This interest was driven by early career professionals looking to explore and expand the network connecting I-O psychologists in Boston as well as to include a broader focus of topics such as talent management, organizational development, employee experience, people analytics, and more, which represent the broad spectrum of areas where I-O psychologists practice.

BayState IO launched in September 2018 with an engaging panel event on the past and history of leadership development that drew in just over 30 people, pulling together a diverse set of speakers on the topic: **Ashita Goswami**, Salem State University, PhD; Walter Jackson, Director of Development at Bates Communication, PhD; and Jen Bunk, career coach, PhD.

Since the launch, BayState IO has focused on connecting I-O psychologists in the Boston area and beyond through informal networking events and speaker-driven events, both live and virtual. For example, in May 2019, SIOP Fellow and Northeastern professor **Paula Caliguiri**, PhD, presented on the topic of cultural agility. Some of the virtual speakers the group has welcomed over the last few years include **Jennifer Martineau**, PhD, Center for Creative Leadership, presenting on her latest research and book, *Kick Some Glass*, and **Rob Rubin**, PhD, DePaul University, promoting how to make evidence-based or informed leadership development decisions in organizations.

Like many cities, Boston has a wealth of professional networking groups to join, but what makes BayState IO unique is what makes I-O unique—an emphasis on providing programming that reflects the scientist-practitioner model and grounding in evidence-based practices that advance science in the workplace.

Members of BayState IO include transplants to the region and also homegrown individuals. Although there isn't a doctoral-level I-O psychology program in Greater Boston, there are a number of master's-

level I-O psychology and organizational leadership programs as well as doctoral-level psychology programs at Boston's numerous universities. BayState IO encourages members to join who have received training in graduate level psychology or are current students.

As mentioned, the current 25 BayState IO members are as diverse as you would expect for a field as diverse as I-O psychology, holding internal and external roles in organizational development, selection, training, change management, analytics, and HR. Those who attend programs or join as a member can expect a place to connect with peers who can "talk shop" around core I-O topics like selection and assessment, organizational development, learning, analytics, and more. Membership in BayState IO offers a way to connect with professionals that apply psychology in the workplace, participate in programs, and access to our online members-only LinkedIn group.

As a newly formed and still growing group, we are looking to grow our presence and offerings in the area, as well as to raise the profile of I-O psychology within the region.

You can learn more about other benefits of membership, the open roles on our executive team, and BayState IO on our website (www.baystateio.com) or by following the [LinkedIn page](#). Once on the website, sign up for our mailing list to get news and notification about upcoming events.

The BayState IO Executive Leadership Team:

Beth Melillo, MS, PHR, President

Ryan Stebbins, MS, VP Technology/Web Administrator

Adam Smith, PhD, VP, Membership

Angela Ackerman, MS, Treasurer

across nine countries. My idea came from the international prevalence of job insecurity and the growing importance of proactive behaviors.

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Are you still doing work/research in the same area where you won the award? If so, what are you currently working on in this space? If not, what are you working on now and how did you move into this different work/research area?

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An Update From Your APA Council Representatives

Written by Gavan O'Shea

APA Council Representatives: Tammy Allen, Jeff McHenry, Gavan O'Shea, and Sara Weiner

Typically held in conjunction with the annual summer convention, the APA Council of Representatives (COR) met on August 5 and 6 to virtually discuss, debate, and vote on a diverse array of issues. Although the four of us were curious about how well a 2-day, 200-plus-person Zoom call would accommodate the COR's interactive style and packed agenda, we were all pleasantly surprised with how smoothly the process went. On the meeting's first day, APA President and SIOP member **Dr. Sandy Shullman** highlighted several of APA's advocacy and outreach efforts initiated over the past several months, including

- Using policies that the COR has passed to develop 13 press releases highlighting critical topics, such as [LGBTQ rights](#), immigration policy (e.g., family separations, [confidentiality of mental health records](#)) and the rights of [international students](#) studying in the US.
- Highlighting how health disparities have been exacerbated by COVID-19 through the [#EquityFlattensTheCurve](#) initiative.
- Partnering with over 60 international psychological associations to develop joint statements on issues such as home violence, which has become a critical global concern in the COVID-19 era.

Another excellent example of APA's "giving psychology away" is its *Policy Statement on COVID-19*, which the COR voted to accept during the August meeting. Reflecting the collaborative input of APA's boards, committees, and council representatives, the statement highlights both the impact of COVID-19 across all aspects of our society—including health and well-being, family and social development, education, training and learning, work, and both human and organizational performance—as well as the ways that psychology can help mitigate that impact. [Jeff McHenry](#) co-led the development of the section focused on the workplace and on human and organizational performance, with [Tammy Allen](#) contributing content. Dr. Shullman lauded the process used to generate the statement by saying that it reflects "how to think broadly across the organization—it really was a 'One APA' policy."

The COR voted on several other issues, including

- Opening the door to Council representation for the Ethnic and Minority Psychological Associations (EMPAs). This resolution, which passed with over 98% of the Council's support, gives each of the five current EMPAs the option to either be represented by a member with full voting rights or to continue to send a delegate to Council meetings.
- Passing a motion to grant voting rights to those who have been graduate student members of APA for 1 year. The minimum requirement for acceptance to graduate student membership status is "enrollment in good standing within the past 12 months in a regionally accredited graduate or professional school for graduate work in the field of psychology."

Given that these motions have been approved by Council, they will now be voted on by the APA membership in the coming months. To help those of you who are APA members make an informed decision around graduate student voting, we plan to share some additional details on the issues that have been

raised around voting rights for graduate students within the context of voting considered more broadly across all of the APA member categories.

Finally, two elements of the second day's agenda may interest SIOP members:

- Dr. Katherine McGuire, APA's Chief Advocacy Officer, shared several advocacy efforts that were coordinated with SIOP, including APA's testimony to the House Judiciary Committee on [policing reform](#) and the creation of the APA "Dynamics of Learning" [Fact Sheet](#) through the Education Directorate's [Coalition for Psychology in Schools and Education](#).
- Earlier this summer, APA's Division 42 (which was established to support the business and professional practice needs of clinical and healthcare psychologists) informed the Council of an intent to change their name from "Psychologists in Independent Practice" to the "Society for Practicing Psychologists." Because this change equates "practicing psychologist" with clinical practice, the four SIOP Council Representatives stood in unified opposition to it. Through a formal letter of objection signed by the leaders of five additional APA Divisions along with SIOP, Jeff McHenry led the effort to educate our Council colleagues that there are a wide variety of professionals who identify as practicing psychologists working in contexts far beyond healthcare—including education, public safety, criminal justice, the military, sports and athletics, for-profit business, professional associations, and many more. Thanks to the thoughtful, collaborative, and respectful way these views were shared, Division 42 agreed to withdraw the vote on their proposed name change and plans to seek input from other divisions before proposing another alternative.

Thank you for your interest in learning more about the issues that have been on the Council's agenda. If you have questions or would like to discuss any of these issues with the four individuals who represent SIOP on the Council, please contact [Tammy Allen](#), [Jeff McHenry](#), [Gavan O'Shea](#), or [Sara Weiner](#).

SIOP Organizational Frontiers Series Report—August 2020

Kevin Murphy and Angelo DeNisi

The SIOP Organizational Frontiers Series continues to provide interesting volumes that attempt to move the scholarship in I-O in new directions. This is a list of the volumes that are in varying stages of processing right now.

The following volumes were developed under the editorship of **Rich Klimoski**; the first three should be available soon:

- *Senior Leadership and the Agile Organization*—**Stephen Zaccaro**
- *Social Networks at Work*—Daniel Brass and Stephen Borgatti
- *Psychology of Entrepreneurship*—Michael Gielnik, Melissa Cardon, and **Michael Frese**
- *Understanding Trust in Organizations: A Multilevel Approach*—Nicole Gillespie, Ashley Fulmer, and Roy Lewicki

The four new volumes have been developed under our editorship, are under contract, and are being written:

- *Neurodiversity in the Workplace*—**Susanne Bruyere**
- *Data, Methods and Theory in the Organizational Sciences*—**Kevin Murphy**
- *Age and Work: Advances in Theory, Methods, and Practice*—**Hannes Zacher** and **Curt Rudolph**
- *Expatriates and Managing Global Mobility*—Soo Min Toh and **Angelo DeNisi**

Who and Where Is SIOP?

An Inside Look Into Our Current Member Demographic Data and Potential Uses for the Future

Victoria Lykins

In this digital age, it seems that every organization and subscription service is bombarding us with requests for information and surveys about our experiences, and for what? Does the information really get utilized, or does it simply slip into the ether? I thought filling out my SIOP demographics profile would be the same experience; I would fill out the information, update periodically, and it would sit on a server somewhere expiring. However, after a conversation with Caitie Jacobson and Amy DuVernet, co-chairs of the Membership Analytics Subcommittee, I learned just how wrong my preconceived notion was.

SIOP is an organization that values and investigates the demographic data of its members. Filling out the demographic sections of your membership profile helps the Membership Analytics Subcommittee put together reports to inform and allocate resources for attracting, selecting, and retaining SIOP members.

What Is the Membership Analytics Subcommittee and What Do They Do?

The Membership Analytics Subcommittee is responsible for analyzing and sharing membership composition trends to support SIOP's mission of meeting the needs of all members. This relatively new subcommittee is part of the overall Membership Committee, led by Tiffany Poeppelman, and is staffed with over 35 volunteers who are passionate about SIOP, its mission, and gathering specific data to support current members and engage with future members of the SIOP community.

Most recently, the subcommittee completed a deep dive into our membership demographics and found many interesting trends that highlight the top locations of our members, membership data type, and the types of decisions that can be made leveraging this critical data.

Article Highlights

States with the most members are California, New York, Virginia, Texas, Illinois, and Florida. Chicago, New York, and Washington DC metropolitan areas have been the top areas for membership since 2017.

Members are not located solely in densely populated metropolitan areas.

The Southern region has the largest number of members, followed by the Midwest, Northeast, and Western regions.

Membership data can be used to build networking groups, help inform D&I campaigns, identify member potential hubs, and inform future conference sites.

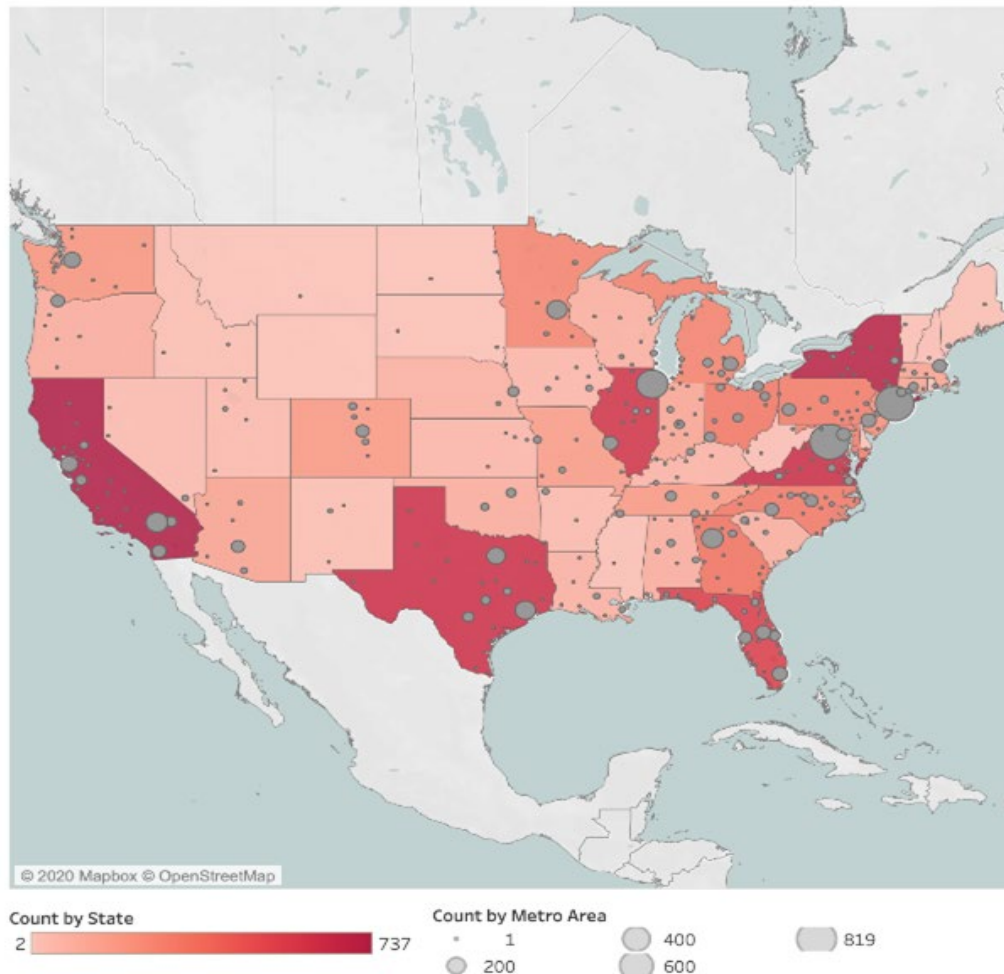
How to update your member demographic information.

Key Findings for U.S. Data

Overall Data

Data collected from 2019, the most recent complete year of data, can be interpreted in a few ways. It is important to note that the data analyzed are based on United States membership trends, which make up approximately 90% of membership statistics. The first is a look at overall data for U.S. membership, which shows the states with the largest concentration of members. Figure 1 illustrates that the six states with the most members in descending order are California (8%), New York (8%), Virginia (7%) Texas (7%), Illinois (7%), and Florida (6%).

Figure 1
Metropolitan Area Concentration in 2019
 2019 Location - Metro Areas

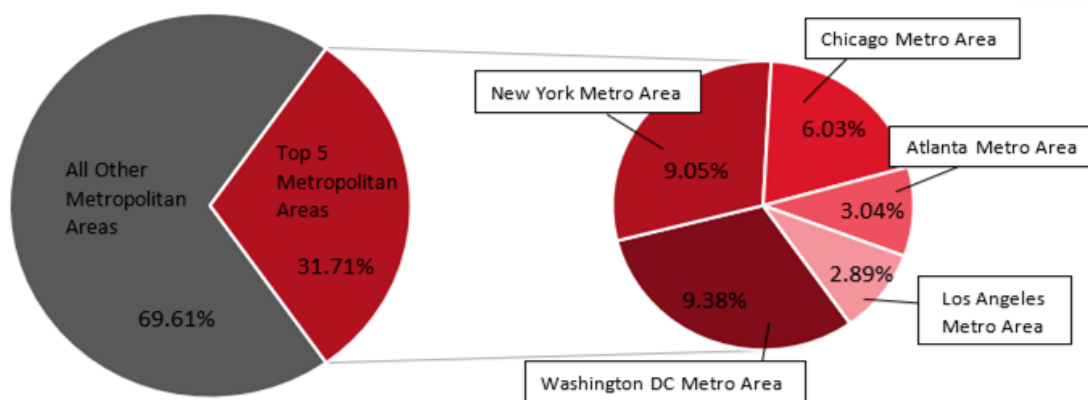


These states have been the most densely populated across the last few years and each consistently encompass above 5% of members each year. Although California remains the most frequently reported state, there are recent trends that show that members are becoming more common across more central and eastern regions of the United States.

Metropolitan Area Data¹

The data were also examined by metropolitan area, as can be seen in Figure 1² with the gray bubbles. As shown in Figure 2, the top five metropolitan areas represent over 31% of all members.

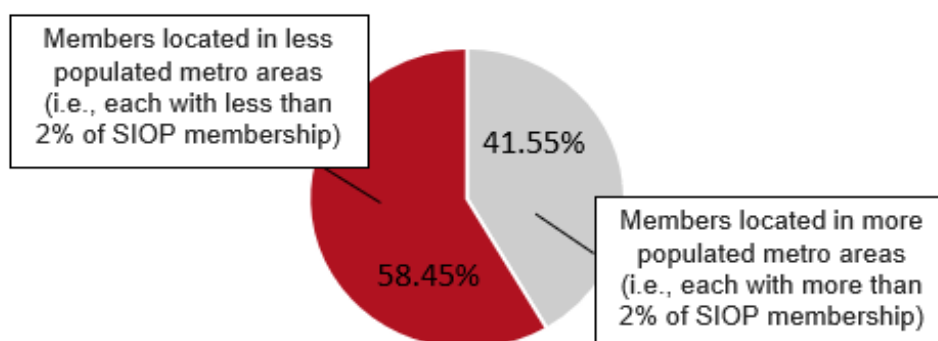
Figure 2
2019 Top Metropolitan Areas Broken Down



The top three metropolitan areas for membership since 2017 are the Chicago, New York, and Washington DC areas. Those three metropolitan areas combined consistently make up 21–26% of all SIOU U.S. memberships.

Another interesting finding about metropolitan data was that while 31% of members could be found in the top five metro areas, the majority of members were located in areas that each made up less than 2% of the overall SIOU membership, as seen in Figure 3. This reveals that SIOU members can be consistently found not only in densely populated metropolitan areas but also throughout the country.

Figure 3
Total SIOU Membership



Regional Data

Each region of the country was broken down to examine where the largest and smallest number of members reside, as seen in Figures 4–7. In 2019, the concentration of members in each state and region was largely driven by the major metropolitan areas. For the Western region, the top metro areas were Los Angeles, Seattle, San Francisco, San Diego, and Denver. For the Midwest, the top metro areas were Chicago, Minneapolis, Detroit, St. Louis, and Cleveland. For the Southern region, the top metro areas were Washington DC, Atlanta, Houston, Dallas, and Orlando. For the Northeast, the top metro areas were New York, Philadelphia, Boston, Pittsburgh, and Hartford.

Figure 4
2019 Western Region Data
 2019 Location - Western Region

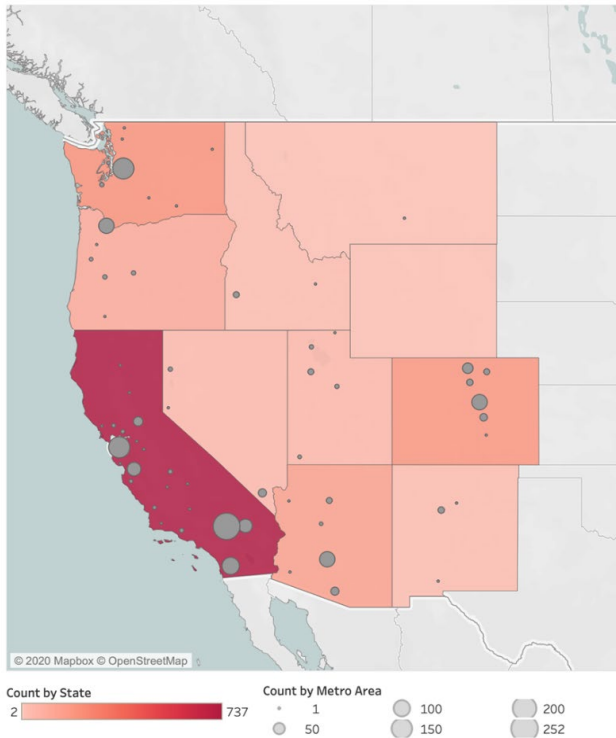


Figure 5
2019 Midwestern Region Data
 2019 Location - Midwestern Region

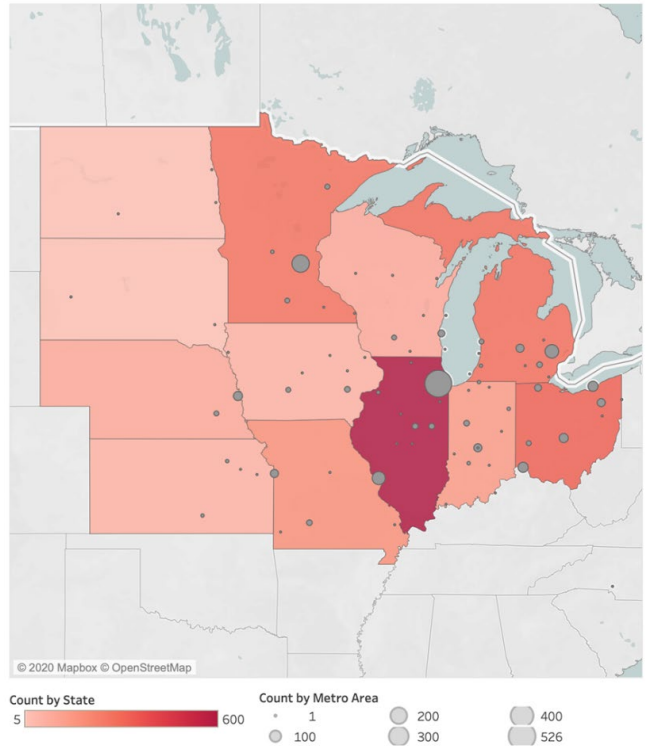


Figure 6
2019 Southern Region Data
 2019 Location - Southern Region

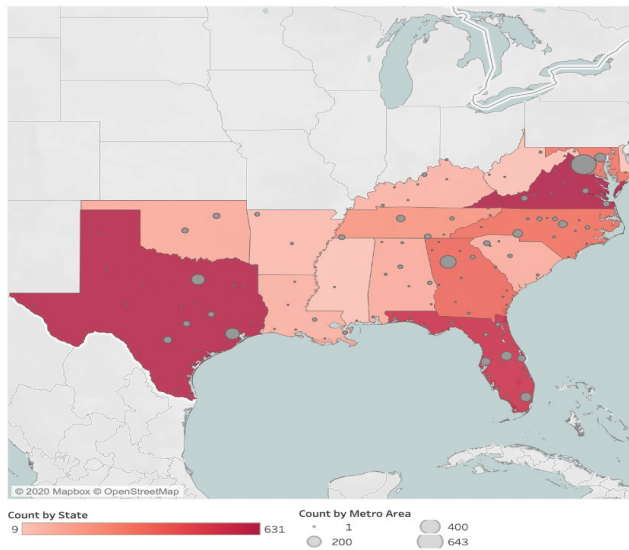


Figure 7
Northeastern Region Data
 2019 Location - Northeastern

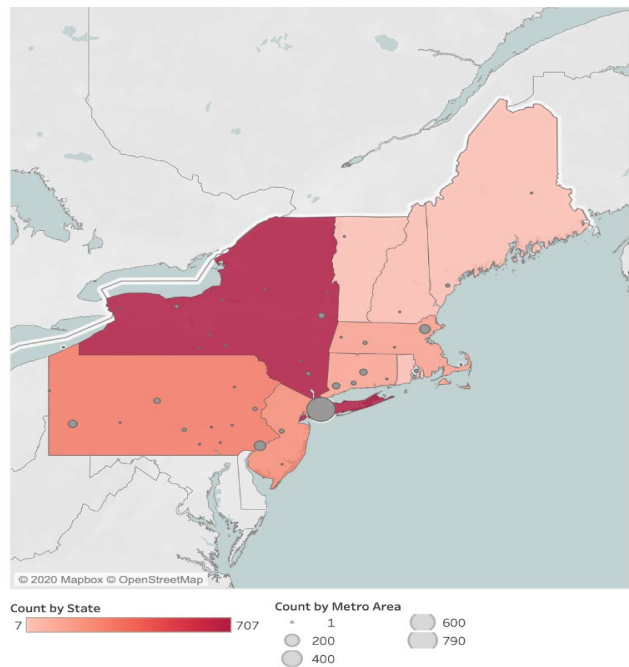


Table 1 provides a summary of which states have the highest concentration by region. Overall, the Southern region has the most members (41%), likely due to the number of states included. This is followed by the Midwest (25%), Northeast (18%), and Western (16%) regions.

Table 1

Membership Concentration Within U.S. Region

Region	Highest member concentration	Lowest member concentration
Southern	Texas and Virginia	Alabama
Midwest	Illinois	North and South Dakota
Northeast	New York	Rhode Island, Vermont, and New Hampshire
Western	California	Wyoming

The Top Metropolitan Areas 2017 Through 2019³

From 2017 to 2019, three metros consistently represented the most populated areas as far as membership totals: New York, Washington DC, and Chicago. The top six metropolitan areas have remained consistent from 2017 to 2019, but there have been shifts in other metro areas. The San Francisco Metro Area has been declining since 2017, and the Houston Metro Area has been increasing since 2017.

2017	2018	2019
1. New York Metro Area (8.66%)	1. New York Metro Area (9.28%)	1. Washington D.C. Metro Area (9.38%)
2. Washington D.C. Metro Area (7.86%)	2. Washington D.C. Metro Area (7.68%)	2. New York Metro Area (9.05%)
3. Chicago Metro Area (5.33%)	3. Chicago Metro Area (7.47%)	3. Chicago Metro Area (6.03%)
4. Los Angeles Metro Area (3.93%)	4. Los Angeles Metro Area (3.19%)	4. Atlanta Metro Area (3.04%)
5. Atlanta Metro Area (3.14%)	5. Atlanta Metro Area (2.98%)	5. Los Angeles Metro Area (2.89%)
6. Minneapolis Metro Area (2.64%)	6. Minneapolis Metro Area (2.65%)	6. Minneapolis Metro Area (2.54%)
7. Dallas Metro Area (2.25%)	7. Houston Metro Area (2.19%)	7. Houston Metro Area (2.33%)
8. San Francisco Metro Area (2.14%)	8. Dallas Metro Area (2.06%)	8. Dallas Metro Area (2.09%)
9. Houston Metro Area (2.09%)	9. San Francisco Metro Area (1.98%)	9. Seattle Metro Area (1.83%)
10. Orlando Metro Area (1.87%)	10. Seattle Metro Area (1.97%)	10. San Francisco Metro Area (1.81%)

Membership Type Data

The location data for members in 2019 were also broken down by membership type. Table 2 shows the top five or six states for each membership type, broken down by percentage of the total. Additionally, the tables show the number of location fields that were left blank. As can be seen, students were least likely to leave their location blank. (Great job filling out your profiles, students!)

Table 2

Membership Type Breakdowns by State

Member		Associate		Retired	
State	Percentage	State	Percentage	State	Percentage
California	7.56%	California	9.20%	Florida	9.48%
Virginia	6.78%	Virginia	7.25%	California	8.91%

Texas	5.56%
New York	5.10%
Illinois	5.04%
<i>Left blank</i>	12.43%

Illinois	6.80%
New York	6.53%
Texas	4.41%
<i>Left blank</i>	16.84%

Texas	6.32%
Virginia	5.17%
Pennsylvania	5.17%
<i>Left blank</i>	14.08%

Student affiliate	
State	Percentage
New York	9.75%
Texas	7.60%
Illinois	7.22%
California	6.74%
Florida	6.51%
Virginia	5.77%
<i>Left blank</i>	6.97 %

Fellow	
State	Percentage
Texas	8.05%
Virginia	7.12%
Florida	6.50%
North Carolina	5.26%
New York	4.95%
California	4.95%
<i>Left blank</i>	10.84%

What Data Matter and Why?

Your answers to SIOP membership profile questions are compiled into a database that the committees like the SIOP Conference Committee may be able to use to determine SIOP events, such as where the annual conference should be held. According to location data from 2016–2019 members, there are high concentrations in California, New York, Texas, Florida, Illinois, and Virginia. Going back to 2016, SIOP conferences were held in California (Anaheim), Florida (Orlando), Illinois (Chicago), Virginia (National Harbor), and the 2020 conference was set to be held in Texas (Austin). Thus, there is reason to believe that site location and membership concentrations are related—membership is likely to increase in places where conferences are held or are likely to be held.

Fun Fact!

Canada, Australia, United Kingdom, Germany, and Singapore have consistently remained the countries with the largest number of members outside of the United States.

Another possible use for knowing the geographical data of SIOP members is creating better opportunities for local networking. For instance, knowing where members reside may allow for better opportunities to match mentors and mentees in a given geographical area. Moreover, location information leads to awareness of areas that may be able to form or re-energize local groups for networking and socializing. In the future, member data such as applied or academic interest may also be leveraged to create location-specific networking groups focused on specializations of I-O. Additionally, the overall Membership Committee can use location data to create more targeted and relevant diversity and inclusion initiatives, in partnership with the D&I portfolio. Local connections and events would allow members to see each other more than once a year at the annual conference and to build meaningful connections. Moreover, given the impacts of COVID-19, valuable virtual

Possible Uses for Geographic Data

- Build location specific networking groups
- Help inform D&I campaigns
- Identify student member hubs
- Identify potential I-O job hubs
- Inform future conference sites

connections can be fostered through meetings, presentations, and social gatherings among members using location and membership-type data.

The differences in member locations show how important demographic information can be for creating and implementing recruiting and retention initiatives for each member type. Events for each member type could be planned based on the needs of that group. For example, an area with a high concentration of students may benefit from a presentation on applying to doctoral programs or entering the workforce.

Let's Fill Out Those Fields!

The membership data covered in this article are based solely on two fields: location and member type. With only those two categories, information can be turned into decisions, but imagine how much more can be done if we fill out the entire demographic information section.

As we fill out our individual membership fields, the Member Analytics Subcommittee plans on using data to compile reports that summarize other aspects of membership data, such as ethnicity, gender, interest areas, and if members are practitioners or are academically focused. These future reports will further help with networking opportunities and the goal of connecting SIOP members.

Now I am sure that you are as invigorated as I am to update your membership data, but how do you do that? To find and fill your empty fields follow the below steps:

Filling Out Demographic Information

Log into your account at siop.org

In the top right corner click *My Account* and then *Manage My Account*.

Under *Account Actions* on the right-hand side, choose *Edit Demographic Information*.

Update your information and click *Save* at the bottom of the page.

There you go! Your newly updated information can now be used by the Member Analytics Subcommittee to make new reports and the Membership Committee to implement new initiatives for the members of SIOP.

I am off to update my member information and hope you will join me!

Notes

¹ Overall, metro areas were found by approximating a zip code for each city location entered by members then linking the zip code to metropolitan statistical area codes and names. Cities and zip codes that were not within a metropolitan statistical area were tagged as non-metropolitan areas. Individuals in a non-metropolitan section may not be counted with the metropolitan numbers.

² Washington–Arlington–Alexandria comprise the Washington DC Metro Area. New York–Northern New Jersey–Long Island comprise the New York Metro Area. Chicago–Naperville–Joliet comprise the Chicago Metro Area. Atlanta–Sandy Springs–Marietta comprise the Atlanta Metro Area. Los Angeles–Long Beach–Santa Ana comprise the Los Angeles Metro Area. Orlando–Kissimmee comprise the Orlando Metro Area.

³ Washington–Arlington–Alexandria comprise the Washington DC Metro Area. New York–Northern New Jersey–Long Island comprise the New York Metro Area. Chicago–Naperville–Joliet comprise the Chicago Metro Area. Atlanta–Sandy Springs–Marietta comprise the Atlanta Metro Area. Los Angeles–Long Beach–Santa Ana comprise the

Los Angeles Metro Area. Minneapolis–St. Paul–Bloomington comprise the Minneapolis Metro Area. Dallas–Fort Worth–Arlington comprise the Dallas Metro Area. San Francisco–Oakland–Fremont comprise the San Francisco Metro Area. Houston–Sugar Land–Baytown comprise the Houston Metro Area. Seattle–Tacoma–Bellevue comprise the Seattle Metro Area.

LEC Postponed to 2021
Leading Edge: Leadership Development

Karen B. Paul, 3M
Chair of 2021 Leading Edge Consortium

Due to COVID, the 2020 LEC has been postponed to the fall of 2021 as we plan on an exciting LEC on Leadership Development. According to the Conference Board (2020) C-Suite Challenge, talent is the number one stress point globally for CEOs, with talent shortages acutely felt across all industrial sectors. The need for leadership development has never been more urgent. Companies of all sorts realize that to survive in today's environment, they need leadership skills and organizational capabilities different from those that helped them succeed in the past, and they need these skills at all levels. Yet, what are these skills and how best to develop leaders for a future that has yet to arrive is the subject of many debates in organizations, consulting firms, and academia. For these and other reasons, the SIOP 2021 Leading Edge Consortium (LEC) will focus on the topic of *Leading Edge: Leadership Development*.

On behalf of the SIOP LEC Design Team and myself, we look forward to seeing you next year:

- **David V. Day**, Claremont McKenna College
- **Gordon (Gordy) Curphy**, Curphy Consulting
- **Alexis Fink**, Facebook
- **Mike Benson**, General Mills
- **David B. Peterson**, Google
- **Allan Church**, Pepsico
- **Laura Mattimore**, Procter & Gamble

Announcing the SIOP 2021 Preconference Workshops

Rob Michel
Edison Electric Institute

The Workshop Committee has identified a diverse selection of innovative and timely topics to offer this year as well as a spectacular set of experts to lead these workshops. The lineup includes:

- ***Designing Data-Driven Systems: AI and Data Science in I-O Psychology.*** Richard Landers, University of Minnesota; Morgana Carter, Intel
- ***Surveys and Beyond: Evolving Employee Listening Systems to Assess, Implement, and Sustain Change.*** Sarah Johnson, Perceptyx; Elizabeth McCune, Microsoft
- ***The Future of Work: Multidisciplinary Provocations and Prognostications.*** Evan Sinar, BetterUp; Kevin Crowston, Syracuse University School of Information Studies
- ***Making I-O Contributions More Strategic and Influential in Organizations.*** Bill Schiemann, Metrus Group; Jerry Seibert, OrgVitality
- ***Using Storytelling to Create Inspirational Leaders.*** Christine Boyce, Right Management & ManpowerGroup; Mitch Gold, Gallagher Integrated
- ***Data Visualization: How to Make a Picture Worth a Thousand Words.*** Paul Tsagaroulis, U.S. General Services Administration; Liberty Munson, Microsoft
- ***Making Leadership Development Stick: A Look Beyond Traditional Programs.*** Amy Grubb, FBI; Jeff McHenry, Rainier Leadership Solutions
- ***Legal Update: What's New and How It Affects You.*** Katey Foster, APTMetrics; Kate Bischoff, tHRive Law & Consulting

As with the conference itself, this year's workshops will look and feel different from previous years, with a "hybrid" approach that will include some in-person live workshops on Wednesday, April 14, 2021, at the Hilton New Orleans Riverside and some virtual live workshops in the weeks leading up to the conference. The committee is currently working to determine the best mix of in-person and virtual workshops. Please look for more detailed workshop descriptions in the preconference announcement and on the SIOP website when conference registration opens.

The 2020–2021 Workshop Committee consists of:

Rob Michel, Edison Electric Institute (EEI) (Chair)

Megan Leasher, Talent Plus (Chair-in-Training)

Reeshad Dalal, George Mason University

Matt Fleisher, FTI Consulting

Anne Hansen, Amazon

Jan Harbaugh, SHL

Erica Hauck, PepsiCo

Ted Hayes, U.S. Department of Justice

Ted Kinney, PSI Services

Kelsey Kline, Intel Corporation

Dan Russell, RHR International

Veronica Schmidt Harvey, Schmidt Harvey Consulting

Taylor Sullivan, HumRRO

Members in the Media

Amber Stark

Awareness of I-O psychology has been on the rise thanks to articles written by and/or featuring our SIOP members. These are member media mentions found from July 1, 2020, through Sept. 15, 2020. We scan the media on a regular basis but sometimes articles fall through our net. If we've missed your or a colleague's media mention, please send them to us! We push them on our social media and share them in this column, which you can use to find potential collaborators, spark ideas for research, and keep up with your fellow I-O practitioners.

COVID-19 Related Items

Tomas Chamorro-Premuzic on whether the pandemic will reshape the notion of female leadership: <https://hbr.org/2020/06/will-the-pandemic-reshape-notions-of-female-leadership>

Mark LoVerde on what to do if employees want to continue working from home: <https://trainingindustry.com/articles/remote-learning/what-if-employees-want-to-continue-working-from-home/>

Cathleen Swody on the upswing in work-related anxiety as a result of COVID-19: <https://www.usnews.com/news/best-states/maryland/articles/2020-07-04/after-shutdowns-in-maryland-offices-reemerge-with-changes>

Denise M. Rousseau on how your personality type helps determine how you respond to COVID-19: <https://www.post-gazette.com/life/lifestyle/2020/07/13/COVID-19-shutdown-quarantine-introverts-extroverts/stories/202006240117>

Cathleen Swody on how tech giants are handling the unprecedented mental health crisis in the workplace: <https://fortune.com/2020/07/14/cisco-hewlett-packard-vmware-mental-health/>

Irina Cozma on what to say to your boss if you're struggling emotionally while working during the pandemic: <https://www.businessinsider.com/what-to-say-to-boss-struggling-emotionally-working-during-covid-2020-7>

Allison Traylor has seven tips for managing healthcare teamwork during a pandemic: <https://www.infectiousdiseaseadvisor.com/home/topics/covid19/seven-tips-for-managing-healthcare-teamwork-during-the-pandemic-expert-interview-2/>

Tara Behrend on how COVID-19 will affect future office design: <https://www.facilitiesnet.com/fnPrime/details/How-COVID-19-Will-Affect-Future-Office-Design--5477>

Brian Swider with tips for the two kinds of people who work from home: <https://www.govexec.com/workforce/2020/07/tips-2-kinds-people-who-work-home/167190/>

Hannes Zacher and **Cort Rudolph** on how the COVID-19 pandemic has negatively influenced subjective well-being: <https://scienmag.com/study-covid-19-pandemic-has-negatively-influenced-subjective-well-being/>

Cathleen Swody on how to take care of staff during this stressful year:

<https://www.newhope.com/staffing-and-operations/weigh-how-can-i-take-care-my-staff-during-stressful-year>

Kristen Shockley and **Alexander Alonso** on challenges I-O psychologists will face in helping open up workplaces: <https://www.apa.org/members/content/post-pandemic-workplace>

Several SIOPers examined the wide-ranging effects of COVID-19: <https://psycnet.apa.org/fulltext/2020-58612-001.html>

Steven Zhou examines how working from home may have hidden and unexpected negative side effects: <https://www.washingtonexaminer.com/opinion/op-eds/permanent-work-from-home-can-be-a-wolf-in-sheeps-clothing>

Cathleen Swody on how to stay focused while working from home: <https://www.wsj.com/articles/how-to-stay-focused-while-working-from-home-11598814000>

Tomas Chamorro-Premuzic on the long-term psychological effects of continued remote work: <https://www.fastcompany.com/90544975/4-major-long-term-psychological-effects-of-continued-remote-work>

Feedback

Irina Cozma on how to be honest without being hurtful when giving feedback: <https://medium.com/authority-magazine/dr-irina-cozma-giving-feedback-how-to-be-honest-without-being-hurtful-7d53caf705df>

Dale Rose on the importance of peer feedback in the digital workplace: <https://globaladvisors.biz/2020/07/08/the-importance-of-peer-feedback-in-the-digital-workplace/>

Irina Cozma on giving honest, constructive feedback: <https://thriveglobal.com/stories/dr-irina-cozma-provide-the-feedback-as-soon-as-you-become-aware-of-it/>

Sylvia Roch examines whether employees prefer to receive ratings: <https://econtent.hogrefe.com/doi/abs/10.1027/1866-5888/a000243>

Workplace Discrimination

Michelle “Mikki” Hebl on why fighting workplace discrimination of LGBTQ+ employees boosts business: <https://houston.innovationmap.com/rice-business-on-lgbtq-workplaces-2646290936.html>

Larry Martinez on discrimination in Portland: <https://pamplinmedia.com/but/239-news/474737-383740-study-discrimination-in-portland-widespread-at-work-in-community>

Victoria Mattingly on organizational psychology and DEI principals: <https://www.hrpodcasters.com/lets-talk-organizational-psychology-dei-principals-w-victoria-mattingly/>

Tomas Chamorro-Premuzic on fighting racism at work: <https://www.marketwatch.com/story/fighting-racism-at-work-means-hiring-employees-with-these-qualities-and-the-best-companies-know-it-2020-08-04?mod=home-page>

Belonging

Adam Grant on how to lessen loneliness and boost belonging at work: <https://www.mysanantonio.com/business/article/How-to-Lessen-Loneliness-and-Boost-Belonging-at-15374730.php>

Leadership

Tomas Chamorro-Premuzic on the three key qualities of an inclusive leader: <https://www.businessinsider.com/key-attributes-inclusive-leader-professor-business-psychology>

Workplace Issues

Caitlin Demsky on how to deal with a workplace bully: <https://www.inverse.com/mind-body/how-to-deal-with-a-workplace-bully>

Productivity

Adam Grant on consistent productivity: <https://goodmenproject.com/featured-content/to-be-consistently-productive-strengthen-your-skill-in-attention-management/>

Miscellaneous

Adam Grant asks are you a giver or a taker: https://www.ted.com/talks/adam_grant_are_you_a_giver_or_a_taker

Tomas Chamorro-Premuzic on how to curate your digital persona: <https://hbr.org/2020/07/how-to-curate-your-digital-persona>

Tomas Chamorro-Premuzic on how the best way to learn any skill never being the best way for everyone: <https://medium.com/personal-growth/the-best-way-to-learn-any-skill-is-never-the-best-way-for-everyone-bef1650dbd60>

Adam Grant on burstiness, the key to creativity: <https://blog.dropbox.com/topics/work-culture/forget-brainstorming--burstiness-is-the-key-to-creativity-->

Adam Grant on how teaching your kids kindness may help them succeed later in life: <https://www.wbur.org/kindworld/2020/07/21/kids-kindness>

Tomas Chamorro-Premuzic on how much bad sleep can hurt your career: <https://hbr.org/2020/07/how-much-is-bad-sleep-hurting-your-career>

Cathleen Swody on how to bounce back after losing a job: <https://www.fastcompany.com/90540199/how-to-bounce-back-after-losing-a-job>

Ian Gellatly and **Richard Goffin** look at organizational attachment:
<https://econtent.hogrefe.com/doi/abs/10.1027/1866-5888/a000252>

Brian Holtz investigates whether the emotion of shame helps to explain why employees might engage in exemplification as a relatively constructive coping strategy in response to abusive supervision:
<https://onlinelibrary.wiley.com/doi/abs/10.1111/joop.12327>

Cort Rudolph, **Rachel Rauvola**, **David Costanza**, and Hannes Zacher on generations science:
<https://blog.oup.com/2020/08/generations-science-is-bunk/>

Allison Gabriel on why women bully, belittle, ignore and gossip:
<https://www.postbulletin.com/business/workplace/6645509-Why-do-women-bully-belittle-ignore-and-gossip>

Ann Howell on how it's OK to put your dream job on hold: <https://hbr.org/2020/08/its-okay-to-put-your-dream-job-on-hold>

Membership Milestones

Jayne Tegge



SIOF has always positively contributed to my career, although the nature of that contribution has changed over the years. When I initially joined, SIOF helped me learn about all the different aspects of I-O psychology. It also gave me a chance to meet major players in the field even though I was very early in my career. During graduate school SIOF was the single best place to exchange ideas, test out theories, and actively engage with people who constructively challenged my thinking and development as an I-O psychologist. Upon graduating SIOF provided a great source of networking to explore career opportunities. Most of all, SIOF has enabled me to keep

connected with the research side of our field even though I work as a practitioner. SIOF's focus on objectivity and evidence makes it stand out from many other professional associations. The content and insights I get from participating in SIOF is typically far more well-developed and rigorously tested than what one finds in most other professional associations in my field. Every year I learn useful things from SIOF that I doubt I would find anywhere else.

Steven T. Hunt

Technology & Work, SAP Innovation Office

Please welcome our new **professional members**.

Audrey Allen
Hubert Annen
David Arena
John Arnold
Michael Baer
Vanessa Barros de Sousa
Aaron Bazin
Richard Beyer
Cody Bok
Mette Buchman
Allison Burrus
Jessica Cardenas
Cheryl Carr
Cortnee Carter
Nitya Chawla
Kiara Clark-Settles
Laurie Cure
Cherie Curtis
Amanda Cushman
Jeffrey Dahlke
Cory Davenport
Rushika De Bruin
Michael DeNunzio
Bobbie Dirr
Eric Dordel

Genevieve Drake
Donna Edsall
Grace Ewles
Elizabeth Fleming
Alissa Fleming
Yesenia Florez
Abigail Folberg
Katarzyna Fuiks
Danielle Gheorghe
Elisabeth Gilbert
Elizabeth Good
Jennifer Grabski
James Grady
Samantha Guerre
Robert Harris
Peter Hegel
Paul Helmreich
Christoph Nils Herde
Zachary Herman
Sue Highland
Philip Hinson
Kevin Hoff
Sarah Hohmann
Lea Holden
Laurene Hondius

Christina Huff
Insiya Hussain
Claudia Ip
Ryan Jacobson
Seulki Jang
James Judd
Sophie Kay
Melissa Kloner
Ellen Kollar
Dorien Kooij
Daniel Krenn
Amanda Ksiezopolski
Robert Laukaitis
Kali Lentz
Michael Lerman
Christina Li
Xu Lian
Rachel Lillibridge
Timothy Lisk
Brendan Lortie
Graham Lowman
Natalie Luna
Sophia Lythcott
Hannah Markell-Goldstein
Alyssa Marshall

Jaclyn Martin
Sebastiano Massaro
Austin McClelland
Josh McKenna
Rosezina Meadows
Shay Meinzer
Holly Mercer
Miriam Michael
Melissa Minardo
Yumiko Mochinushi
Sylvia Mol
Caleb Montgomery
Madison Moore
Kimberly Morse
Jimmy Mundell
Heather Myers

Rebecca Natale
Caleb Navarre
Christina Norton
Tania Ocana
Jeffrey Olenick
Bogdan Oprea
Wanda Pemberton
Kara Polk
Awilda Ramos
Jason Rucker
Rachel Saef
Hannah Samuelson
Liz Schlickbernd
Margery Sendze
Oren Shewach
Daniel Shore

Kimberly Silva
Tyrone Smith
Adam Smith
Vivian Stark
Melissa Steach
Zehra Surani
Kazuhiro Suzue
Anton Sytine
Greg Turner
Jake Vassello
Jasmine Vergauwe
Julianna Walsh
Cranla Warren
Yuha Yang
Irene Zinnel

Please congratulate our new **Sterling Circle** members, SIOP members for more than 25 years!

Nathan Ainspan
Julian Barling
Brian Bellenger
Chieh-Chen Bowen
David Chan
Gordon Curphy
Joerg Dietz

Mark Freeman
Heidi Glickman
James Kauffman
Lisa Kobe Cross
Anne Marrelli
Orit Menkes
Cindy Parker

David Pegorsch
Christian Resick
Kimberly Schneider
Damian Stelly
Manuel Tejada
Thomas Timmerman
Shinichiro Watanabe

Please congratulate newest pathway to member upgrade member

Tanya Goodman

IOtas

Jen Baker

Appointments/Transitions

Amanda L. Thayer has accepted a position as an assistant professor at Florida Tech in the Industrial & Organizational Psychology department.

Wayne J. Camara has transitioned from ACT to the role of Distinguished Research Scientist for Innovation at the Law School Admissions Council.

Lauren Salomon was hired as a learning and development education specialist at Harris Health System in Houston, Texas.

Melissa Keith (Purdue University) joined the I-O faculty at Bowling Green State University. Fellow faculty members include **Clare Barratt**, **Margaret Brooks**, **Scott Highhouse**, **Sam McAbee**, and **Mike Zickar**.

Noelle Newhouse has been promoted to the rank of professor at The Chicago School of Professional Psychology. She has been teaching full-time for 10 years.

SIOF member **Betsy Schoenfelt** has been named the senior director for Applied Psychology at APA effective.

Former *TIP* Editor **Tara Behrend** is the new National Science Foundation program officer for Science of Organization

Lori Foster has been elected to the position of President Elect of the International Association of Applied Psychology. She follows in the footsteps of previous SIOF members **Morris Viteles**, **Ed Fleishman**, **Michael Frese**, and **Jose Maria Peiro**.



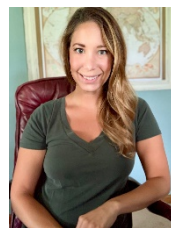
Thayer



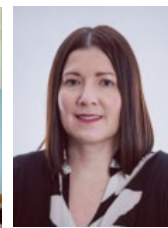
Camara



Salomon



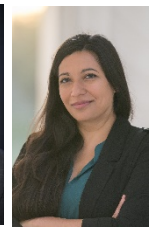
Keith



Newhouse



Schoenfelt



Behrend



Foster

Awards



SIOF Fellows **Leslie Hammer** and **Ellen Ernst Kossek** are the 2020 recipients of The Ellen Galinsky Generative Researcher Award, given by The Work and Family Researchers Network. This award recognizes a work-family researcher or research team who have/has contributed break-through thinking to the work-family field via theory, measures, and/or data sets that led to expansive application, innovation, and diffusion, including the sharing of research opportunity in the spirit of open science.



Daniel Schroeder has been included in Marquis Who's Who, celebrated for dedication to the field of industrial-organizational (I-O) psychology and for 25 years of professional excellence into his work with Organization Development Consultants, Inc. (ODC) and Edgewood College. Marquis Who's Who biographical volumes select individuals based on factors such as position, noteworthy accomplishments, visibility, and prominence in a field.



Nathan Ainspan has received a Theodore Roosevelt Government Leadership Award, which is awarded to "distinguished federal officials and industry leaders for outstanding achievement in delivering on government's promise to serve the American people." For 2020, Nate was one of two people selected to receive the Defender award.

Books



James P. Armatas has written a memoir about his 50-year career as a psychological consultant to CEOs and their companies. *Management Practices of Successful CEOs: Memoir of a Psychological Consultant to Management* is available now in multiple media formats.