TIP Volume 59 Number 4 Spring 2022 Editor: ./Steven Toaddy

Editor's Column: Time for a Change

./Steven Toaddy

As I package up an issue of *TIP* and send it off to the SIOP Administrative Office for publication, I try to reflect on all of the excellent content I've just had the opportunity to preview and to try to extract patterns, themes, and trends in those contributions. Always, there is practical advice; there's attention to science and to practice (and, in more cases than not, to both at once); there's attention to everyone from our most well-situated, long-standing members to our graduate student hopefuls to those whose membership or voices are prevented by systemic inequalities in our world. All of that brings me comfort and reminds me of just how much our Society is actively endeavoring to consider and to change, and the amount of work that we are collectively doing—many of us on a volunteer basis—to advance not our careers or even our reputations but, instead, our field and the larger world that it serves.

In this issue in particular, there are many artifacts that strike me as being oriented particularly toward inviting readers to make fairly foundational changes in the way that they go about their work. Some, like the one about translating the SIOP Guidelines for Graduate Education into an actionable, competency-based format for master's programs, have been simmering quietly since 2016; others, like the one about the UN's Sustainable Development Goals and the one about demographic-item best practices, are examples of updates and additional information on ongoing initiatives. Most, though, seem to be newly launched responses to perceived needs for change. Let me elaborate and, in so doing, draw your attention to some choice morsels:

- There are two COVID-reaction how-to articles, one about performance management and the other about building a resilient work culture. In both cases, the call to change is to avoid simply going forward into the future (or even current and past, at this point) world of work without paying attention to the substantial ways that the pandemic has altered that world.
- Based on empirical work that, if I'm understanding things correctly, was galvanized by a reviewer's comments for a submission to SIOP's Annual Conference (Thanks for your reviewing service!), we're invited to rethink the way that we assume that management and psychology departments do and do not differ.
- We're challenged to think differently about the strategy that we use when choosing what jobs to take by way of a personal narrative shared by our Prosocial Subcommittee.
- We're invited to step back and reconsider the way that we think about and deploy participation activities (and grading) in the classroom, delivered in a particularly engaging intrafamilial-dialogue format.

The list could go on, but let me stop there; if the above eight articles don't make the trend clear, perhaps no number would (and perhaps the trend is only in my head anyway). My experience with reading these articles was very often one of reading a bit, making a note in my workflow-management system to substantially alter the way that I go about a routine or even deeply impactful, infrequent, personal activity, and then return to reading—rinse, repeat. Perhaps these will have the same effect on you.

Looking at the calendar, I note that it is also time for a change of editors. My successor is already making waves within SIOP, and so the change won't stop with that of their name on the masthead, I think. I'm excited to see where they take the publication in their 3-year term as editor. As I reflect back on my past 3 years in the role, a smile blossoms on my face. I have almost nothing but gratitude for the interactions I have had with so many contributors, administrative staff, and Executive Board members during my time in the role, and I'm also grateful to you, reader, for your time and for giving us all something on which to work collectively. So long.

President's Column: Two Questions Answered

Steven Rogelberg

Dear SIOP,

Welcome to my last Presidential column.

In this column, I answer two questions:

Q1: What excites me most about I-O psychology?
Q2: What excites me most about SIOP as a professional society?

Before I answer, I decided to ask these two questions to two very different groups. I gathered input from a sample of graduate students, and I gathered input from a sample of people who have been members for 50+ years. I share below a sample of representative comments. The data collected are interesting and energizing to read. Your task, as you scan below, is to guess which of these comments came from a student versus the 50+ year group. See how you do:

What excites you most about I-O psychology?

1. "Its steady progress in contributing to the science of work and organization."
2. "The ability to impact decisions and directions that can improve many work lives."
3. "The potential to have a substantial impact on the lives of many people via affecting the conditions of their work lives. More so now than ever before based on I-Os paying attention to basic life issues (fair pay, discrimination, etc.), not just organizational performance."
4. "Phenomenal blend of science and practice that enables all of us to continue to learn and apply our skills."
5. "The ability to provide solutions that help organizations, employees, consumers, and all."
6. "Learning ways to help individuals and teams thrive at work."
7. "The real-world impact of the field."
8. "The applicability of so much of what we study to real, important, and immediate problems."
9. "The potential for our field to impact organizations in a meaningful way, molding evidence-based strategies that help employees and employers make their companies healthier and more equitable."
10. "The numerous ways we can make a difference in people's lives."
11. "Mixing science and practice."
12. "The ability to impact so many people in a variety of settings, whether academic or applied! I love how relevant the field is to not only us but the society as a whole."

What excites you most about SIOP as a professional society?

1. "How to do it all better and to grow and to have more to offer others."
2. "The deep and continuing concerns for practice and science."
3. "SIOP is the ONLY association where like-minded, or at least concerned, professionals can assemble and exchange regardless of age, experience, or field of expertise."

4. “The fellowship of unbelievably capable colleagues, who are not only highly competent but willingly leave their egos behind when sharing ideas and best practices. Our tagline could well be ‘We are here to help!’"
5. “It is an organization whose goals I share and that provides opportunities to collaborate with others in the pursuit of those goals.”
6. “Meeting others who are interested in the same topics. Making connections between academia and industry. Getting feedback for ongoing research.”
7. “It’s nice to have a community of individuals who share the same interests and are at so many different stages and positions in their careers. I feel that SIOP opens the door for great learning experiences, discussions, and networking.”
8. “Resources specific to I-O and a ‘professional home’ for people like me.”
9. “Access to new tools and lines of thinking as soon as they become available.”
10. “The ability to network with others in my field and stay current on hot topics in I-O psychology.”
11. “SIOP facilitates connections to other researchers who study similar topics that I do, connections with practitioners who run into issues related to what I research, and personal connections with friends and colleagues.”
12. “It's a great way to connect and network with other professionals and to learn more about latest research.”

First, as for who provided the comments, in both lists, 1–5 came from 50 year+ members, and comments 6–12 came from students. What is striking is how much overlap there is between this junior group and this seasoned group. For what is most exciting about I-O, the themes are

- Improving lives and organizations
- Blending and integration of science and practice
- Ability to provide solutions
- How relevant what we do is

For what excites you most about SIOP, the themes are

- Helping members grow through opportunities, learning, and resources
- Helping blend science and practice
- Bringing together professionals with similar interests and values

I could not agree more with these ideas. This brings me to my answers to the two questions.

Q1: What excites me most about I-O psychology?

What excites me about I-O psychology is that it is an evidence-based field fully dedicated to understanding and working to improve individual, team, and organizational health, well-being, effectiveness. I-O can truly make a difference in the lives of so many, and it does it in a science-grounded way. What further excites me about I-O psychology is that it attracts so many terrific people, people dedicated to trying to do good for others.

Q2: What excites me most about SIOP as a professional society?

SIOP is a key mechanism for bringing together people and helping I-O professionals make a positive difference in all that we do. SIOP is not only the glue that helps bind us together, but it is also an engine for making us better through collaborative opportunities, learning, and resources. Stated differently, SIOP is a gravitational force that brings us together, but at the same time, it is a force that allows us to grow and be the best professionals we can be. I also can't stress enough that I love SIOP because we have the courage to do what so few professional organizations in the world attempt to do—bring science and the practice together under one roof. It is something we should be so proud of. It is much easier to segregate the science and the practice, but not us; we try to integrate it for the benefit of all. We do this because we know that we are all better when we work together—better together. It can create messiness at times, but this means we are trying to do something incredibly special. I am so proud to be part of Team SIOP.

Closing Thoughts

I can't believe my presidential term is coming to a close. Although it has been a ton of work, I have loved being your president. I have loved doing all that I can to enact and advance our organizational mission in a values-based way. I have loved working with our incredible Executive Board and dedicated Administrative Office (special shout out to the best partner a president could ever ask for—SIOP Executive Director Tracy Vanneman). I have loved interacting and engaging with our volunteers and members. And, while at times the work was heavy and fraught with difficult choices, I tried my best to make decisions that elevated our people and advanced our discipline with transparency and integrity. Thank you deeply for being part of SIOP. It is the people that make the place. And, we are truly better together.

Hope to see you all soon.

Very gratefully yours,

Steven

The Bridge: Connecting Science and Practice

Co-Editors: Apryl Brodersen, Metropolitan State University of Denver; Sarah Layman, DCI; 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, Allen Gorman and John Meriac highlight fundamental principles and current issues in performance management within a remote/hybrid work environment. The goal is to start a conversation about areas for potential collaboration between academics and practitioners to help establish evidence-based recommendations.

Performance Management in a Virtual/Hybrid World of Work: How Can Science Inform Practice?


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Throughout the COVID pandemic, the nature of work has changed. Many of the "temporary" changes that were implemented during the pandemic are likely to remain in some form. For example, remote work has increased substantially, and meetings are frequently held over Zoom or similar technology. The benefits of remote work are well recognized, and it is expected that many organizations will never go back to the traditional full-time, in-office work model (Castrillon, 2020). These changes present several challenges for researchers and practitioners of performance management—defined for the purposes of this article as the continuous process of identifying, measuring, and developing the performance of individuals and teams, and aligning performance with the strategic goals of the organization (Aguinis, 2009). We recommend that organizations prepare for a brave new world of performance management that can be flexible and adaptive to the needs of our current—and perhaps permanent—reality.

The purpose of this article is to highlight several fundamental principles and current issues in performance management within a remote/hybrid work environment. Although many issues surrounding the changing nature of work and the implications on performance management in virtual environments have been discussed by scholars (e.g., Cascio, 2000; Tippins & Coverdale, 2009), this article is timely because the pace of change has increased dramatically. Through identifying known and unknown issues, we hope to stimulate discussion about areas for potential collaboration between academics and practitioners to help establish evidence-based recommendations for the next phase in the evolution of work.

Prepandemic Fundamental Principles and Best Practices + Implications for Postpandemic World of Work

The performance management literature offers many recommendations that are important to retain, such as the use of job analysis, consideration of subgroup differences, and methods for maximizing performance. The discussion below summarizes some of those prepandemic fundamental principles and best practices while emphasizing implications for the current (and future) world of work.

Job Analysis

Decades of research has clearly suggested that job performance is fluid and dynamic (Austin & Villanova, 1992). Scholars and practitioners have underscored the importance of adaptive performance (e.g., Pulakos et al., 2000), recognizing the need for employees to respond to changes in their organizations or environments to remain successful. Such change makes job analysis critical for ensuring that performance management systems accurately reflect the current requirements of the job. One example of rapid changes during the pandemic has been the rise in telehealth services (Rendall, 2022). Prior to the pandemic, typical medical appointments involved receiving healthcare in person. However, for many appointments, telemedicine has become the safest and most effective option over the last 2 years. Similarly, virtual, rather than on-site, job interviews have been used frequently throughout the pandemic (Maurer, 2021). These changes have increased use of technology and raised new questions about privacy and compliance with regulations. These are just two examples, but they open an important question for organizations to consider about their performance management systems: What new elements of job performance should be incorporated due to the pandemic?

Subgroup Differences

Although pandemic-related research is currently underway and only just becoming available to the scientific community, scholarly discussions have recognized the differential impact of the pandemic on employee subgroups. For instance, work–family conflict issues have presented many new challenges for working parents during the pandemic (e.g., Rudolph et al., 2021). Lack of childcare and the shift to remote learning for school-age children placed tremendous time- and strain-based conflict onto parents, especially when facing pressures to adapt in response to either remote work or in-person work with an increased risk of infection. Similarly, the pandemic has created many new pressures for older workers, who are at greater risk if infected (Iles & Parker, 2021). Certainly, there are many more worker subgroups facing new pressures during the pandemic. These and other situations have created immense pressures for workers that may be reflected in job performance. Thus, it is important to consider their impact on employee performance as well as subgroup differences that may result from some employee groups being disproportionately impacted.

Measurement Issues

Classic perspectives on imperfect performance measures recognize the impact of both contamination and deficiency (Murphy et al., 2019). More specifically, information that is unrelated to performance may influence the ratings that an employee receives (contamination), or performance ratings may fail to capture all relevant aspects of job performance (deficiency). Due to the pandemic and the shift to remote work, there are potential new problems that may arise with both contamination and deficiency. For example, managers may be more attuned to employee behaviors that were not previously defined as important aspects of performance (e.g., being on camera for meetings). Additionally, reduced opportunity to observe key behaviors may lead to performance judgments that fail to capture the key aspects of job performance or focus more on aspects of the job that used to be important but are no longer relevant. These issues could potentially lead to situations where managers automatically perceive in-office workers more favorably than remote workers. Both researchers and practitioners should focus their attention on the nuances of measurement issues due to the pandemic.

Contextual Performance

Citizenship behavior has been conceptualized in many different ways (Hanson & Borman, 2006), but most sources agree that it (a) is not formally required and (b) has a positive impact on the organization and/or its members. Williams and Anderson's (1991) model delineates behaviors directed to individuals (OCB-I) and toward the organization (OCB-O), which are distinct from task performance. Within remote or hybrid roles, citizenship behavior may take different forms such as supporting coworkers with new technology, arranging virtual team-building meetings and other types of social support, or exerting extra effort to meet customer needs through different modalities. It is important to ask, though: To what extent are managers aware of such behavior, and do they have the opportunity to observe it?

At the same time, new challenges have emerged regarding forms of workplace deviance, or counterproductive behavior. Employees are facing new environmental stressors and uncertainties, which may in turn foster negative emotions and ultimately manifest themselves in counterproductive behavior (Fox et al., 2001). Many organizations are seeing increased levels of employee stress and burnout, with some sectors such as the hospitality industry facing much higher emotional-labor burdens (e.g., Tunguz, 2021). For instance, adherence to safety precautions has created frustrations for employees (Smith, 2021), whereas other employees feel unsafe if coworkers or customers choose not to take the same precautions (e.g., Morgan, 2020). To further complicate the issue, increased stressors can vary across regions or times as infection rates climb. Such issues may result in increased levels of disengagement or other forms of counterproductive behavior, particularly in remote or hybrid environments.

Performance Management Motivation

There are powerful forces that impact the motivation of managers to provide feedback, and there are individual differences in the ability to provide feedback. For example, giving meaningful feedback is rarely rewarded in organizations, and the performance management process is frequently fraught with political motivations (Murphy & Cleveland, 1995). Moreover, some managers are more comfortable than others when it comes to giving feedback (Villanova et al., 1993), and some managers are more motivated than others to provide meaningful feedback (Speer et al., 2020). One could argue that motivation to provide feedback and manage the performance of remote employees might be even lower than what would be expected in a face-to-face environment. For example, managers may lack the motivation to provide feedback to employees whom they do not see on a regular basis or for whom they have had little opportunity to observe their day-to-day work behaviors. Additionally, researchers have postulated that consequences of ratings serve as an antecedent of raters' motivation to provide accurate ratings and feedback (e.g., Decotiis & Petit, 1978; Harris, 1994). With employee satisfaction and retention being key concerns in the current labor market, what consequences may result from negative feedback and ratings? Are managers confident about the information they have available to make accurate judgments, especially in virtual environments? With many organizations currently not providing raises or bonuses contingent on ratings, does this reduce rater motivation? We recommend that researchers and practitioners investigate the effectiveness of simple mechanisms, or "nudges," that might improve motivation, such as regular feedback meetings with all employees regardless of location or regular but brief reports sent by remote employees to their managers on their daily activities and progress.

Giving and Receiving Feedback

Research suggests that job performance feedback should be frequent and timely for it to be effective (London, 2003). It is clear that the once-a-year performance review has many limitations from a developmental perspective. Every few years, a discussion emerges on whether performance appraisals should be eliminated due to their shortcomings, and a major point within this debate has centered on the need for more frequent but relevant feedback (e.g., Pulakos et al., 2015).

These issues will likely remain, or could even become more, important with the lack of role clarity within remote or hybrid roles. However, what is the optimal timing and method for feedback for a remote/hybrid workforce? Should the feedback be provided in writing, on a phone call, on a video call, or perhaps in person depending on the criticality of the feedback? Many sales teams operate remotely with employees on the road for extended periods, yet they convene in person regularly to maintain a sense of connection and purpose. Perhaps there is utility in gathering remote/hybrid employees together in person from time to time (with appropriate safety precautions) to share feedback and set goals for the future. From a manager's perspective, the inability to observe daily performance makes it difficult to provide feedback on specific behaviors. From an employee perspective, a lack of regular in-person communication could impact the employee's willingness to accept feedback, especially if it is negative.

The social context of performance management has been recognized for many years by scholars and practitioners, with a key focus on the feedback climate (Levy & Williams, 2004). A prominent area within this domain has been the feedback environment (Katz et al., 2021; Steelman et al., 2004). Coupled with the changing nature of work and many jobs shifting to remote or hybrid roles, considering the climate surrounding performance management is critical. However, with team members having fewer or different forms of interactions, how does a climate take form or change? Employees differ quite a bit in their propensity to seek feedback and their motives for doing so (Dahling et al., 2015), and such differences may be exacerbated in remote settings. As an example, an employee that has already formed a close working relationship with his or her supervisor may already have an ongoing dialog to seek informal feedback, but a remote newcomer in the organization may face greater obstacles in developing a relationship where he or she feels comfortable asking for feedback in the same way. Such differences may translate into actual performance differences or perhaps different performance judgments that are reflected in ratings.

Practical Recommendations and Avenues for Future Research

As we continue to navigate the many changes brought about by the pandemic, we must confront the fact that remote work may become a permanent reality for many organizations, perhaps much more so than previously imagined. As I-O psychologists, this presents us with a unique opportunity to reevaluate many of our preexisting conclusions regarding effective performance management, especially considering that the literature base is almost exclusively built around processes developed and examined in traditional face-to-face work environments. Given the literature and implications reviewed above, we offer the following practical recommendations for performance management systems and encourage additional research on each as relevant to a postpandemic world of remote/hybrid work.

1. Flexibility and agility are key for the dynamic workforce of today. Goals and targets will undoubtedly change based on changing conditions in the work environment. **Managers and employees will need to adjust expectations collaboratively, and managers should help to prepare employees to be able to handle a fluid and dynamic work environment.**

2. Core HR functions like job analysis are essential tools to help ensure that relevant behaviors are captured within performance management systems. With the rapid shifts we have observed within many organizational roles, **ensuring that job analysis information is up to date and accordingly reflected in performance appraisals is important.**
3. If the pandemic has taught us nothing else, it is that we are all human, and we bring our human lives with us to the workplace (whether at home, in the office, or somewhere in between) every day. The line between work and life has blurred even more, but work performance has always been dynamic and fluid. **Managers should take this opportunity to talk with their employees about optimal work schedules, and managers should help employees to feel comfortable discussing life circumstances that may impact their work performance.**
4. Frequent feedback is critical to engage remote workers. **Feedback should focus on goals and behaviors that have been developed collaboratively between the manager and the employee.**
5. The social context of performance management is critical to consider as we move forward. **Utilizing appropriate technology and ensuring an open dialogue for feedback is at least as important now as it was before the pandemic**—perhaps even more so because of the ambiguity and new demands placed on employees.

In closing, we would like to underscore that these are just a few key issues that are likely to impact performance management in the present and future due to the pandemic. Many more challenges are likely to emerge for practitioners, and at this point there are more questions than answers. Nonetheless, many lessons from the scholarly literature can inform decisions in the short term, and the new landscape also provides many new opportunities for partnerships with researchers to answer these (and other) questions facing organizations.

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Overcoming Crisis: Building a Resilient Work Culture in the Era of COVID-19

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The onset of the COVID-19 pandemic prompted organizations to rapidly transition to remote or virtual work environments. This environmental jolt placed extreme demands and stressors onto organizational cultures, and its lingering effects are still not completely understood. In an attempt to summarize strategies for managing the effects of the COVID-19 pandemic on organizational culture, we distill recent research to provide evidence-based practices for organizations and practitioners to consider as they navigate current and future crises. Organizations are not likely to return to normal anytime soon, with some changes (e.g., remote or virtual work) becoming permanent fixtures in the workplace. We provide a list of recommendations such as effective leadership, supportive work environments, successful innovation, and knowledge management to help organizations build a more resilient work culture.

There is no question that organizational cultures, referred to as the shared perceptions of beliefs, ideologies, and values among employees, have changed because of the COVID-19 pandemic. In the United States, the widespread concern for employee health and safety forced organizations to transition from brick-and-mortar to virtual workspaces overnight. In 2017, a Gallup survey estimated that only 37% of workers in the US worked remotely. This estimate nearly doubled within 3 years, with growing estimates now suggesting that over 60% of all U.S. workers work in a remote or virtual setting (Kantar, 2020). Although companies hoped the "transition to virtual" would be temporary, new variants and occupational challenges such as vaccine and mask mandates turned weeks into months, and months into years. Despite a call for research to examine the effects of these changes on organizational culture, the impacts on organizational culture remain relatively uncertain. In this article, we summarize recent empirical research and practitioner literature regarding the effects of the COVID-19 pandemic and inform evidence-based practices for organizations and practitioners to consider as they navigate current and future crises. Specifically, we answer the following questions: (a) What are the impacts of COVID-19 on organizational culture? (b) How do these challenges impact organizational outcomes? (c) What can organizations do?

What Are the Impacts of COVID-19 on Organizational Culture?

A new pneumonia-like virus first appeared in Wuhan, China in December of 2019 (Katella, 2021). This virus, later named COVID-19, spread across the globe through human-to-human contact. In March of 2020, the World Health Organization (WHO) officially declared the COVID-19 disease a pandemic (Katella, 2021). This declaration forced organizations to react swiftly in compliance with government policies (e.g., shutdowns, social distancing, and mask mandates) to stop the spread of the disease. Although the effects of COVID-19 are felt globally, three challenges that U.S. organizations are still faced with today include (a) maintaining organization connectedness after shifting to virtual work environments, (b) increased stressors and work demands, and (c) and increased work–life conflict. These challenges and related outcomes are discussed in the following sections.

Shifting to Virtual Work Environments

The most apparent impact to organizations and work cultures has been the necessity for greater reliance on virtual work. Organizations have long viewed virtual work, or telecommuting, as a viable alternative to the traditional work environment (e.g., Golden, 2012; Nilles, 1998). Employees in virtual work environments rely on tools such as video conferencing and instant messaging to keep in touch with colleagues (Parker et al., 2020). The lack of face-to-face interaction has resulted in less spontaneous communication, which has long been considered a symbolic or natural phenomenon in workplace settings. Symbolic work is tangible, ritualistic workplace behaviors such as a coffee and hallway conversation or "watercooler talk." Through symbolic work, employees have been able to solicit quick reactions or suggestions, stay informed about workplace news, or interact with individuals outside of their typical routine. These behaviors reinforce group norms that influence organizational culture, and the shift to virtual work has left employees feeling less connected to their coworkers, supervisors, and the organization.

Organizational connectedness, or the extent to which individuals perceive they are part of the organizational community (Raghuram et al., 2001), is a prevalent issue resulting from the transition to virtual work. Employees who work virtually will have less informal and spontaneous contact with coworkers, supervisors, and other members of leadership (Cascio, 2000). The "out of sight, out of mind" mentality promotes isolation and a lack of attachment, which detracts from the benefits of organizational membership (Raghuram et al., 2001). Because of the forced shift to a greater dependency on virtual work, organizations must find a way to keep this connectedness with their employees intact. Practices such as relaxing social interaction and communication through instant messaging, phone calls, or emails are essential to preserving the symbolic work culture in organizations. This informality can range from planned or impromptu conversations over a virtual cup of coffee to using "emoticons" or "gifs." Leaders can utilize these "incidental conversations" to check in on organization members or identify current obstacles (Ratković et al., 2021). Initially, mandatory videoconferencing exchanges masquerading as recreation might seem draining to employees; however, the repetition and creation of new rituals will eventually result in stronger connections, greater interest, and better results in the organization (Kim et al., 2021). Strong interpersonal relationships can act as a catalyst to help transfer existing traditions and corporate ideology throughout groups within an organization. Informal communication and workplace "gossip" are often viewed as effective behaviors for organizational storytelling (Martinescu et al., 2019; Ratković et al., 2021). However, the stressors of shifting to a virtual work environment are only part of the story as other demands and stressors are exacerbated by an event such as the COVID-19 pandemic.

Increased Stressors and Work Demands

The pandemic has had several negative impacts on individual and organizational well-being. The stress experienced by employees in this type of environment comes from multiple avenues, leaving them trying to adapt to work demands that look entirely different than they did 3 years ago or address burnout that has slowly crept into their lives. This new landscape so many find themselves in is uncertain and ever-changing, resulting in increased role strain, health issues, and declining mental health (Green et al., 2021).

Although people from all backgrounds have been impacted differently, some demographics have faced more challenges than others. Racial and ethnic minorities, those from lower socioeconomic backgrounds, and women have all experienced disproportionate inequalities in the workplace (Kantamneni, 2020). A typical workday has drastically changed, with working parents trying to juggle their virtual environment while homeschooling or caring for small children simultaneously. Women have taken some of the most significant steps backward in the last several decades in terms of career equality during the pandemic, with research suggesting that the gender gap has grown by 20–50% (Collins et al., 2021). Racial inequalities have also been magnified, with Black, Latino, and Native American communities facing higher levels of contagion and fatalities, followed by reduced access to quality physical and mental health services (Fortuna et al., 2020). Many individuals have also lost jobs or have been affected by financial strain due to illness, caretaking, or health concerns. These increased demands put added stress on individuals' available cognitive, emotional, physical, and financial resources, which deplete over time, and lead to higher levels of work–life conflict. Finding an individual not personally impacted by various stressors related to the pandemic is now exceedingly rare.

One of the most salient considerations when looking at COVID-19's impact on employee mental and physical health is the transition to focus less on acute stressors and more on chronic stressors (Cuellar et al., 2020). An individual may have the internal resources to manage an increase in stressors for a short period; however, ongoing stressors can lead to more severe concerns (e.g., burnout, trauma and stress-related disorders, or physical conditions). Adjusting to the new demands of work–life obligations has left many employees and organizations worried about the adverse effects of these stressors on performance and well-being in the long run. Organizations must be aware of and empathetic toward employees' attitudes to critically assess organizational support. Minimizing these effects requires action from the organization, which must originate from a place of openness and understanding. Failure to address these issues will lead to additional stressors such as increased employee work–life conflict and adverse outcomes such as lower employee engagement and job performance among impacted employees.

Increased Work–Life Conflict

Organizations who fail to adjust their culture to the virtual and hybrid realities of work through COVID-19 are likely to see an increase in work–life conflict among their employees. Some employees, especially those who have embedded themselves in their workplace role, may prefer virtual or remote work. For others, these work-from-home (WFH) models are likely to increase interrole conflict, especially those with young children and those embedded within their communities outside of work (Rubenstein et al., 2020; Schieman et al., 2021). As employees resume their prepandemic nonwork activities, the blurred lines created between work and personal domains by WFH models are likely to cause issues. These blurred lines occur in employees who can no longer detach from work to focus on personal activities or attend to familial responsibilities (Rubenstein et al., 2020). Organizations that fail to integrate cornerstones of resilience into their culture, like flexible scheduling, employee assistance resources, and open communication, will likely see much higher instances of employee interrole conflict, leading to increased stress, decreased engagement, and withdrawal (Phillips, 2020).

How Do These Challenges Impact Organizational Outcomes?

Employee Engagement

Declining employee engagement is an unfortunate outcome that organizations may experience due to pandemic-driven changes. Understanding the components of engagement, including vigor, absorption, and dedication, is key to developing strategies to mitigate this decline (Bakker & Demerouti, 2007). Vigor alludes to employees feeling energized by their work, whereas absorption occurs when employees are so focused on work that they lose all sense of time. Dedication refers to an employee's commitment to the work and the feeling that their work is essential. External stressors brought on by events such as a pandemic can impact each facet of engagement. Facing a persistent threat to their health and the health of loved ones will likely draw cognitive and emotional resources away from an employee's focus on their job. Being energized by their job and focusing on their work while remaining committed to the job will only become more complex as external stressors draw upon more and more of these resources. Lower cognitive and emotional resources will likely result in less available energy necessary for employees to feel vigor. Concerns for self and family health will redirect feelings of commitment and job importance. Often, these concerns are prioritized lower than existential fears associated with drastic changes in the home and community. All of these can hurt employee engagement, which can negatively influence employee job performance (Christian et al., 2011).

Job Performance

As engagement and work–life balance are impacted, employee job performance suffers accordingly (Christian et al., 2011; Wayne et al., 2017). Specifically, low engagement will likely impact task and contextual performance (Christian et al., 2011). Employees with low engagement will be less motivated to perform job tasks to the best of their ability. They will be more likely to aim for the minimum standards to conserve their cognitive and emotional resources for external threats. Contextual performance will likely suffer as the effort required for extra-role behaviors will be reduced considering their perceived lower priority. Likewise, the added external strain caused by inadequate work–life balance is likely to impact employee performance significantly. Work–life conflict leads to a reduction of resources for home life, a poor mood when at work, and emotional exhaustion from being unable to balance the required roles in both domains (Johari et al., 2018; Wayne et al., 2017). Left unchecked, these reductions in performance and increased strains are likely to culminate in withdrawal behaviors at work and an increased likelihood of turnover (Rubenstein et al., 2020).

What Can Organizations Do? Build a Culture of Resiliency

One way organizations can lessen the impacts caused by COVID-19 is to build a work culture around resiliency. We define resiliency as the ability for organizational members to respond positively to disruptive and challenging events, recover from setbacks, and thrive (Kennedy et al., 2016). A culture of resiliency allows for flexibility across processes and functions so people can anticipate changes, adapt quickly, and innovate (Lengnick-Hall et al., 2011) during times of crisis. Research points to several drivers that can foster a resilient work culture (Aldianto et al., 2021, Marco-Lajara et al., 2021). These include providing effective leadership, supportive work environments, successful innovation, and knowledge management to help organizations build a more resilient work culture.

1. **Effective leaders.** Having a leader who frequently thinks outside the box to align the organizational goals with internal and external environments is vital toward building a resilient culture. These leaders are quick, adaptable, and flexible in responding to unforeseen events in unfamiliar circumstances (Aldianto et al., 2021). They also foster trust at all levels of the organization through transparent communication, and they empower employees to participate in decision making and information sharing (Amis & Janz, 2020). For example, leaders can host virtual "town hall" meetings or release recorded videos that explain how the organization has adjusted to the effects of COVID-19 (Woodward, 2018). Leaders must continually examine customer and employee needs to identify where process and service improvements are needed. Effective leaders can accomplish this by relaxing rigid policies, such as inflexible vacation time or work schedules. The trust between leaders and employees is paramount to creating a resilient work culture.

2. **Supportive work environments.** The needs of employees will differ by organization. Therefore, establishing a clear channel for communication and feedback will allow employees to voice their concerns and allow for incremental improvements. A study conducted by Gigauri (2020) examined initiatives that HR managers used to support their employees during the pandemic. Quantitative data collected from 48 organizations suggested that employees felt most supported when HR helped them update virtual-work-environment skills, established flexible working hours, and adopted less strict policies regarding performance management (Gigauri, 2020). The company Square quickly distributed tips on homeschooling children and mental health resources during their transition to a virtual work environment (Liu, 2020). In addition, establishing flexible working hours and adopting more lenient performance management systems may help to increase trust and compassion between employees and their employers. Other companies, like Google and Target, are reallocating money budgeted for in-office usage to the pockets of their employees (Liu, 2020). For example, monthly allowances are given to employees to expense at-home office equipment or food purchases to ensure that employees are taken care of holistically. Leveraging organizational culture to create a supportive work environment may strengthen individual resilience and allow employees to adapt to future challenges.

   Another way to support work environments is to conduct regular engagement surveys, including open-forum options to give employees the ability to convey their unique experiences and possible threats to well-being. Hammer (2021) offers HRD interventions such as competency mapping as tools that organizations can use to enhance an employee's abilities and mitigate adverse effects. Bilotta and colleagues (2021) further underscore the importance of adopting these tools to meet organizations' specific needs.

3. **Innovation and knowledge management**. The pandemic has catapulted organizations toward adopting innovative solutions. For example, to protect employees and serve customers facing mobility restrictions, grocery stores have now shifted their primary business model to supporting online ordering and delivery (Baig et al., 2020). Healthcare providers now offer the delivery of telemedicine and teletherapy to accommodate their patients. Brick-and-mortar schools pivoted to entirely online or distance learning. As businesses eventually return to in-person or hybrid environments, organizations can utilize technology to maintain and enhance knowledge management through media platforms (e.g., SharePoint, Yammer, Slack, LinkedIn). If used properly, organizations can use these forms of communi-

cation to maintain and preserve their culture as part of an effective strategy to communicate transparently, collaborate across functions, and update knowledge management systems as necessary.

Conclusion

The lasting effects of COVID-19 on organizational culture are difficult to predict. However, impacts from prior crises have often produced enduring changes that eventually make their way into the everyday operations of organizations (Hurley-Hanson et al., 2011). Therefore, we should expect that the changes (forced or voluntary) that organizations have experienced during the pandemic are not likely to disappear completely. Modifications, such as the rise of remote or virtual work environments, are likely to become permanent fixtures within organizational structures.

It may be necessary to incorporate aspects of resiliency into organizational cultures. Above all else, resilient work cultures allow for dynamic changes in strategic planning that are essential to minimizing the harmful effects of future crises. Below, we have created a list of actionable items for creating a more resilient culture, broken down by the impacts of COVID-19 discussed in this article.

Best Practices and Recommendations	
Impacts due to COVID-19	Recommendations
1. Job demands and stressors	● Provide adequate training and resources to help employees feel supported through the transition of working remotely ● Reallocate in-office funds (e.g., catered lunches, work equipment) directly to employee pockets with monthly allowances or stipends to encourage a productive work environment at home
2. Employee engagement	● Allow employees to focus primarily on the job by making employee assistance resources convenient for employees to access and utilize ● Facilitate virtual communication options (e.g., open forums) that allow and encourage employees to support one another quickly and easily
3. Work–life conflict	● Provide flexible hours to accommodate working parents ● Offer additional benefits such as more sick and vacation days ● Provide mental health and physical wellness interventions to support those who feel isolated
4. Job performance	● Be understanding of employees during difficult times; consider modifying performance management systems to be more lenient ● Identify performance and skills gaps and develop them with existing employees
5. Organizational connectedness	● Facilitate engagement surveys including open forum options to give employees the ability to convey their unique experience and possible threats to well-being ● Relax social interactions and create new traditions to take the place of impromptu meetings such as lunch conversations or coffee breaks

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Ask Me Anything (AMA) About Graduate School:
How Online and Brick-and-Mortar Programs Are Viewed on the I-O Psychology Reddit

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Industrial-organizational (I-O) psychology continues to be one of the fastest growing fields (U.S. Bureau of Labor Statistics, 2014). As the field continues to grow, so do the number of graduate programs offering graduate degrees in I-O psychology. There are now 28% more master's programs in the field of I-O psychology than a decade ago (Bailey, 2020). With this unprecedented increase in programs and students, there has been an increase in the number of graduates from online programs. As noted by Landers (2018) with current trends, the future composition of SIOP membership may soon include more online graduates than graduates from traditional brick-and-mortar programs. Data from the Society for Industrial and Organizational Psychology indicate that the number of new student members from online or distance programs far outstrips the number from traditional brick-and-mortar schools for the discipline (Landers, 2018). As online learning becomes more of a norm, students continue to search for information regarding online I-O psychology graduate programs.

The relative success and educational quality of online and traditional higher education programs has been hotly debated (Wagner et al., 2011; Wickersham & McElhany, 2010), with some studies indicating little differences between online and traditional courses in higher education. Other research indicates concerns around long-term career prospects of students in online graduate programs (Bendersky et al., 2008) as well as degree completion rates (Gazza & Hunker, 2014). The increase in online programs granting master's- and doctoral-level degrees in I-O psychology has created an influx of online graduates joining SIOP. This trend has prompted internal research from SIOP for I-O-psychology programs in particular. A subcommittee of the SIOP Education and Training Committee found that although universities attempt to maintain rigor in their programs' educational standards, concerns remain about the faculty of the online programs (Dahling et al. n.d). Specifically, the relevant background of the faculty teaching in the online programs was difficult to determine. The results of a survey conducted by the committee indicated a slight negative view of online degree holders. These results were not a critique of the quality of education provided by these online programs but a recognition that SIOP had to develop relationships with these institutions to better understand the quality of education offered.

Without clear guidance on program quality, it remains up to students to decide which programs best meet their needs. Students tend to find much of their information about potential graduate programs online (Constantinides & Stagno, 2012) and are often swayed by modality in their choice of graduate school (Leach et al., 2017). Many students use social media sites like Twitter and Reddit. Reddit is one of the world's most popular websites with 52 million users visiting the site per day (Kastrenakes, 2020). Reddit is a social news-aggregation, web-content rating, and discussion website (Schmidt, 2019). Reddit contains multiple subreddits, which are "user-created areas of interest where discussions on Reddit are organized" (Anderson, 2015). These subreddits allow interested individuals to discuss topics of interest. A growing area of Reddit is the industrial-organizational (I-O) psychology Reddit, where users come to learn more and discuss topics about the field of I-O psychology. I-O psychology Reddit currently has 19,760 members (Reddit, n.d.), which has grown substantially from when the site first began in 2011 with 76 members (Wayback Machine, n.d). In comparison, SIOP has 9,000 members (SIOP, 2022), so this subreddit may have more members than there are active SIOP members.

Reddit is one of the most popular resources for online information. Many users (also known as Redditors) use the site to learn about a variety of topics including potential graduate programs. Reddit has proven useful as a data source in studies of mental health (Boettcher, 2021) and news sources (Ovadia, 2015). Reddit has been cited as a rich data source comparable to Amazon MTurk (Jamnik & Lane, 2017).

Although assessments of online education have been primarily conducted in individual courses, most research does not look at the evaluation of online programs versus traditional brick-and-mortar schools. Parahoo et al. (2016) developed a student satisfaction model in higher education to assess online programs. Their model has been used to assess both online and traditional forms of higher education (Lazarevic & Bentz, 2021). Their data indicated that student satisfaction in online education was evaluated by students using the following criteria:

1. Student interactions with faculty, other students, administration, and IT
2. Faculty empathy, defined as faculty's level of caring for students
3. University reputation, defined as the overall reputation of the university
4. Faculty feedback, defined as the quality of feedback students receive from faculty
5. Physical facilities, including location and physical facilities offered

Each of these criteria was found to be related to overall student satisfaction, making this model an ideal framework to use to assess student satisfaction through relevant variables students use when evaluating programs. Although this model of student satisfaction is commonly assessed using a Likert scale, for the present study we propose to evaluate Reddit comments using this model qualitatively. Previous research has used this model as the basis for qualitative research (O'Malley, 2020).

The present study attempted to evaluate the qualitative feedback about I-O psychology graduate programs posted to Reddit to assess differences across online, in-person, and hybrid-learning-modality programs. The authors attempted to address the following research questions:

Research Question 1: What factors are most often discussed in relation to I-O psychology graduate schools?

Research Question 2: What differences in terminology are there between brick-and-mortar and online-only programs?

Research Question 3: Are there differences in language and sentiment over time?

Method

Graduate student coders collected comments from Reddit threads on the I-O psychology Reddit page. The I-O psychology subreddit contains threads devoted to a variety of topics related to the field of I-O psychology. The I-O psychology Reddit page has Graduate School Q&A Mega Threads, which are threads dedicated to answering questions about graduate school admissions and programs. Users ask questions about graduate school admissions and programs in these threads. Other users then post answers or responses. The threads are organized by school year. Four research assistants were asked to collect comments related to specific brick-and-mortar (face to face), online, or hybrid programs. Before data collection began, the research assistants went to the SIOP Graduate Training Programs page and identified graduate programs as face to face, online, or hybrid. Hybrid was defined as offering both online and face-to-face components of the program (Abdelrahman & Irby, 2016). Each research assistant was assigned a thread and then collected relevant comments. Using the name of the schools, the comments were coded as belonging to schools that were (a) face to face, (b) online only, or (c) hybrid. Some institutions appeared on multiple lists of programs because they offered face-to-face, online, and hybrid programs. General comments about online or brick-and-mortar education were not included in the dataset because the Parahoo et al. (2016) model is specifically related to student satisfaction, which has been used as a measure of program quality (Braskamp et al., 1979). Comments that were not associated with a program were deemed to be outside of the scope of the present study. Using sample comments, the research assistants were trained until they reached consensus on the coding for sample comments.

294 relevant comments were collected and coded. Using the Parahoo et al. (2016) model of student satisfaction, comments were categorized as being related to any of six topics: (a) IT/Admin/student interactions, (b) faculty empathy, (c) faculty feedback, (d) university reputation, and (e) physical facilities. Because Reddit users may write comments that touch upon a variety of issues, each post could be coded as more than one category. Any comments that did not fit into any of these categories were categorized as "other."

Results

Data from the entire corpus were analyzed using Voyant tools (Sinclair & Rockwell, 2016). Voyant tools is a computer-assisted text-analysis (CATA) program that provides researchers count measures of the words in a corpus of text. Figure 1 contains a word cloud of all the terms produced by Voyant tools. The qualitative data were organized by year and modality for analysis. The word "program" was central to the corpus across years and modality.

Figure 1

Word Cloud of Entire Corpus

Table 1a contains sentiment scores by year and modality. The corpus was analyzed for sentiment scores using Daniel Soper's sentiment analyzer (Soper, 2006). The sentiment analyzer scores the corpus from -100 (completely negative sentiment) to +100 (completely positive sentiment) using a common dictionary of terms to categorize language as positive or negative. The overall corpus had a slightly negative sentiment score of -15. The only positive score was for online programs discussed in 2018–2019. All the other scores were negative with the sentiment scores for online for 2017–2018 being the lowest at -85.7. Hybrid programs from 2017–2018 had no programs listed, and there was no analysis conducted. Overall, these sentiment scores indicate that the majority of comments were negative in nature. Average sentiment scores for face-to-face programs was -23.73, for online programs it was -45.53, and for hybrid programs sentiment scores were -40.65. Sentiment scores varied considerably over time without consistency.

Table 1a

Sentiment Scores by Year and Modality

	Modality			
	F2F	Online	Hybrid	Entire corpus across all years
Year				
2016–2017	-43.1			-15.1
2017–2018	-9.6	-85.7	-45.2	
2018–2019	-23	27.5		
2019–2020	-19.2	-78.4	-33.1	
Average	-23.73	-45.53	-40.65	

Table 1b contains most frequent words by year and modality. The term "program" appears most often. All program names were removed.

Table 1b

Most Frequent Words by Year and Modality

	Modality			
Year	F2F	Online	Hybrid	Entire corpus across all years
2016–2017	program (11); good (6); programs (6); phd (5);	-	-	program (185); programs (80); good (78); phd (56); students (53)
2017–2018	program (57); good (28); programs (28); io (21); students (20)	course (3); master's (2); nonsense (2); offer (2); poor (2)	program (7); programs (7); good (6); i've (5); master's (5)	-
2018–2019	program (26); students (11); phd (9); programs (8); good (7)	program (6); field (5); I've (4); applied (3); fairly (3)	-	-
2019–2020	program (59); phd (23); good (20); programs (19); like (15)	professional (4); chicago (2); equal (2); faculty (2); good (2)	program (12); dc (6); phd (6); faculty (5)	-

*word counts appear next to each term in parentheses

Table 1c contains number of posts, percentage of posts, and unique terms by year and modality. Unique terms are words that only appear in that specific year and modality's corpus not the entire corpus. This list included some program names and locations that have been redacted and replaced with the term "program name" by the researchers. Some negative terminology like "nonsense" and "negative" appear in the online comments. Among the face-to-face program language there are terms such as "TA" and "OHP" and "IO" reflecting some discussion of the subfields of I-O.

Table 1c

Unique Terms by Year and Modality

Year	Modality	Number of posts	% of year's posts	Unique terms (in comparison to corpus)
2016–2017	F2F	13	100%	program name (4), position (2), org (3), focused (3), PhD (2)
2017–2018	F2F	98	86%	exec (9), io (21), program name (6), aren't (6), apparently (6).
2018–2019	F2F	44	78.5%	program name (5),TA (4), reviews (3), ra (3), apps (3).
2019–2020	F2F	92	82.8%	health (9), ohp (5), occupational (7), io (14), probably (6)
2017–2018	Online	4	3.5%	nonsense (2), course (3), negative (1), wouldn't (1), vanguard (1)
2018–2019	Online	12	21.5%	talked (2), structured (2), solution (2), quit (2), gig (2)
2019–2020	Online	3	2.7%	equal (2), faculty name (1), joke (1), program name (1), program name (1).
2017–2018	Hybrid	12	10.5%	program name (4), program name (3), program name (4), leadership (2), program name (2)
2018–2019	Hybrid	-	-	-
2019–2020	Hybrid	16	14.4%	program name (7), creation (2), computational (2), online (5), dc (6)

*word counts appear next to each term in parentheses

Table 2 contains percentages of the coded categories from the Parahoo et al. (2016) model. The most common category discussed in the posts by coders were university reputation across multiple years with it accounting for 100% of the comments from 2016–2017.

Table 2

Percentage of Comments Relating to Student Satisfaction Topics by Year: Face-to-Face Programs

	2016–2017	2017–2018	2018–2019	2019–2020
Faculty empathy	0	0	0	1%
Faculty feedback	0	11%	0	17.5%

Student, IT/admin staff interactions	0	1%	6.8%	3.1%
University reputation	100%	88%	63.7%	78.3%
Physical facilities	0	0	0	0
Other	0	0	29.5%	0

Table 3 contains percentages of the coders categories for online programs. Across all years, university reputation was the most prominent category for online programs with at least 80% of posts discussing university reputation across all years.

Table 3

Percentage of Comments Relating to Student Satisfaction Topics by Year: Online Programs

	2017–2018	2018–2019	2019–2020
Faculty empathy	0	0	0
Faculty feedback	20%	0	20%
Student, IT/admin staff interactions	0	0	0
University reputation	80%	90%	80%
Physical facilities	0	0	0
Other	0	10%	0

Table 4 contains percentages of the coded categories from the student satisfaction model regarding hybrid programs; university reputation was the most common category across all years with 92.3% of posts discussing reputation in 2017–2018 and 81.3% in 2019–2020. This indicates that the most common topic identified among these posts is the reputation of the university.

Table 4

Percentage of Comments Relating to Student Satisfaction Topics by Year: Hybrid Programs

	2017–2018	2019–2020
Faculty empathy	0	0
Faculty feedback	7.7%	18.7%
Student, IT/admin staff interactions	0	0
University reputation	92.3%	81.3%
Physical facilities	0	0
Other	0	12.5%

Table 5 contains representative comments by modality that represent some of the common content found in these threads. Program names and city names have been removed. These comments seem to highlight the focus of many of the threads on university reputation as a driving factor.

Table 5

Representative Quotes by Modality

Modality	Representative Quote
F2F	“Most of the programs around [program 1] have smaller faculties and are very much focused on professional students. None aside from [program 2] offer a PhD in straight I-O psych. Consequently, they don't usually show up on the "best schools" lists because most of the ranking methodologies emphasize research productivity at PhD programs rather than professional training at terminal master's programs. I would not

	recommend [program 3], but [program 1] and [program 2] are both good programs. (I'm not sure that [program 1] is worth the cost relative to your other options, but the quality is good.)
Online	“I'm doing the online master’s program at [program 4] and am about three quarters of the way through. I've had a fairly positive experience with it. I work full-time and found it a good solution to obtaining my masters without having to quit my FT gig”
Hybrid	“I am having difficulty choosing where to attend. No programs seem to be top-notch in training and seem to have good opportunities for internships. They both say that there are opportunities for paid internships to help pay for the total cost. According to the professors who reached out to me from both schools, they don't give any funding to masters' program students or any tuition waivers.”

Discussion

Based on these initial findings, it appears that the focus of much of the discussion about master’s and PhD programs in I-O on the I-O psychology subreddit revolved around university reputation. Many of the comments defaulted to university reputation as the key issue of quality. Overall, the sentiment of the corpus appeared to be negative. This indicates that the language used when discussing specific graduate school programs through the I-O psychology subreddit is largely negative, either by discussing barriers to entry or the reputation of programs.

PhD and MA programs should be mindful of reputation because much of the online discussion on Reddit discussed university reputation. It would be useful to study university reputation as a heuristic used by students in their decision-making process. Future research should assess brand recognition of universities as a way students may evaluate brick-and-mortar and online programs. The greater amount of negative sentiment attributed to online programs should encourage online-only programs to assess their university branding and work to improve this brand recognition. If online-only programs hope to compete for top students for their MA and PhD programs, it appears reputation is key. Both online and traditional programs could consider focusing on communicating student successes as well as their research productivity to attract higher quality students. Student placements in internships and jobs may well also improve university reputation overall.

This study has several limitations. First, the I-O psychology Reddit page is not a representative sample of all I-O academics or practitioners. A survey study assessing the views of SIOP members or I-O practitioners may prove valuable to understand the driving forces of university reputation. Second, the use of open source qualitative data allowed the present research to draw general conclusions about many programs without generating the predictive capability between quantitative variables. Qualitative studies should be conducted about the process by which students are assessing online and face-to-face programs. This type of study may help online, hybrid, and brick-and-mortar programs better understand the factors driving such decisions. Another limitation was that there was little distinction made between online and hybrid programs in the SIOP graduate training programs database. Thus, there was significant overlap in language used between online and hybrid programs because some programs were included in both categories. In the future, a clearer distinction should be made between online and hybrid programs.

Future research should analyze quantitative student satisfaction data longitudinally. Tracking changes of opinions of online and face-to-face programs may prove beneficial to MA and PhD program directors in the field of I-O psychology across all modalities. Collecting data on this topic more consistently and across programs will help programs address student concerns. Data of this type may also provide more objective metrics for students struggling to identify a program that they wish to attend.

A deeper analysis of the differences between online, hybrid, and face-to-face programs would benefit SIOP and graduate school programs. A major future concern of those working in I-O psychology is maintaining the vitality of the field (Woo et al., 2022) through higher education quality. The COVID-19 pandemic has shown that online education will remain a viable option for the foreseeable future (Ali, 2020). By helping online and traditional programs serve students, SIOP and graduate programs will maintain a robust pipeline of talented I-O professionals. The goal should be that these professionals receive a high-quality education regardless of modality.

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A Tale of Two Departments:
Examining Differences Between I-O Psychology and Management Programs

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I-O psychology graduates are in the fortunate position of having many good career options available to them. When navigating these options, often the first fork in the road is the choice to pursue an academic career or an applied one (e.g., industry, government). If one chooses the academic route, the next two choices are (a) “Should I work in an institution that emphasizes research, teaching, or a balance of the two?” and (b) “What type of department do I want to call home?” Unlike in many scholarly disciplines, I-O psychology graduates have more than one academic department in which they may find a job, the most common of which are psychology and management. However, reliable information about the differences between these options is scarce. The purpose of this article is to address that scarcity.

The differences between being a professor in psychology and management have been discussed for at least 50 years (Lawler, 1971; see also Aguinis et al., 2014). Indeed, this topic of discussion reflects a broader conversation within I-O psychology about the professional identity of I-O psychologists (Ryan & Ford, 2010). To date, perceptions about how psychology and management departments may differ have largely been informed by individual experiences and the informal sharing of those experiences with others. In fact, our roundtable submission to SIOP in 2021 on this very topic (which was rejected) received a reviewer comment reflecting exactly that:

> I think the differences [between psychology and management departments] are largely overstated. I would see much more value in an objective or systematic exploration of any meaningful differences between the two types of schools rather than a reliance on personal anecdotes even from well-regarded faculty. Without some support for meaningful differences, this round table seems like it would be entirely dependent upon the specific experiences of a few faculty. That may result in spreading stereotypes about each type of school only substantiated by a few faculty’s personal experiences.

We largely agree with this reviewer. To our knowledge, the only difference between psychology and management that has been systematically explored is salary, which most recently showed that the median salary of SIOP members in management departments is 68% higher than members in psychology departments (SIOP, 2020). Although salary is, of course, an important consideration in the jobs one chooses, it is not the only consideration. Teaching and research expectations, mentorship opportunities, relationships with industry, among many other factors, may all be taken into account when selecting a job. Therefore, it is critical to identify the substantive differences between psychology and management programs so that I-O psychology graduate students and current faculty considering a career change can better determine what types of programs may provide a better fit for them.

To examine what is currently known about the differences between psychology and management departments, we conducted a survey of over 300 faculty in June of 2021. We report the results of that survey next.

Sample and Recruitment

Participants were recruited through listservs from the Academy of Management (i.e., human resources, RMNet) and the Society for Personality and Social Psychology where potential participants were presented with the study description and link to complete the survey. We also emailed our survey to I-O psychology program directors and requested that the survey be forwarded to other I-O faculty in their departments.

Among those who participated in the survey, there were n = 307 responses, 82% of which were from the United States. Half of participants were affiliated with a psychology department, 41% were affiliated with a management department (or an equivalent within a business school), and the remaining participants were affiliated with a different department. Among the types of institutions in which participants were employed, 7% were in teaching-focused institutions, 36% were in balanced institutions, and 44% were in research-focused institutions. The vast majority of participants (88%) were faculty members, and the remaining 12% were students. Within the ranks of the faculty members, 3% were instructors/lecturers/adjuncts, 24% assistant professors, 26% associate professors, and 35% full professors. Given the low representation of participants from teaching schools, our analyses focused on participants from balanced and research-intensive institutions only.

Measures

Our survey was divided into five sections: research, teaching, mentoring, hiring, and subjective comparisons. A full list of questions and the results are provided here:
https://osf.io/ps5c4/?view_only=0a65ee6fdef3492bbc59c1ad51aee683

For the first four sections, unless described otherwise, participants indicated their (dis)agreement to a number of statements using a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Research was assessed with five items (sample item: “Grant funding is a major priority in my department.”). Teaching was assessed with four items (sample item: “My undergraduate students expect their professors to emphasize real-world, practical applications of the material they’re learning.”). Mentoring was assessed by five items asking respondents to state how many students (i.e., PhD and/or master’s) they mentored (sample item: “How many master’s students are you currently advising?”). Hiring was assessed by 11 items (sample item: “Job applicants with an I-O background are able to meet the needs of my department [e.g., teaching, research, etc.].”).

In the final section of the survey, we used seven-point, semantic-differential scales to measure participants’ subjective comparisons between management and psychology departments. Participants were asked to respond to statements by comparing whether each question related more strongly to (1) management faculty or (7) psychology faculty (sample item: "At comparable institutions, who do you believe has a more difficult time earning tenure?").

Results

For concision, we will highlight the key findings from each survey section. We refer interested readers to the study's Open Science Framework webpage (provided earlier) for full details of our results. We will discuss our results regarding research, teaching, student mentorship, and hiring. Because our subjective comparison findings (i.e., the last section of our survey) touch on each of these four areas, we will discuss them throughout the results section where they inform our other findings.

Research

Two themes emerged when examining perceptions of research foci and support within each department. First, corroborating past research (SIOP, 2020), financial support for research was deemed to be less of an issue in management departments than in psychology departments. Management scholars perceived more adequate financial support from their institutions ($M = 3.35$) and perceived grant funding as less of a priority within their departments ($M = 2.00$), relative to psychologists ($M = 3.97$, $t(242) = 2.41$, $p < .05$, and $M = 2.94$, $t(242) = 5.34$, $p < .001$, respectively). These findings are further corroborated by the subjective comparisons data. Specifically, both management scholars ($M = 3.11$) and psychologists ($M = 2.52$) believed that management departments have more resources to support their research than psychology departments at comparable institutions, with psychologists more strongly holding this belief ($t(242) = 2.62$, $p < .01$).

Second, management scholars more strongly agreed that their departments maintained lists of "top-tier" research outlets ($M = 3.74$) and emphasized publishing in these outlets ($M = 3.90$), relative to psychologists ($M = 2.85$, $t(242) = 4.90$, $p < .001$ and $M = 3.44$, $t(242) = 2.76$, $p < .01$, respectively). Furthermore, management scholars from research-intensive schools reported that their departments would prefer that they publish just a few articles in "top-tier" journals than several articles in other outlets ($M = 4.04$), relative to psychologists from the same type of institutions ($M = 3.53$, $t(132) = 2.32$, $p < .05$. This second theme corroborates a fairly well-known trend in business schools, in which publication in specific journals is emphasized for the purpose of maintaining AACSB accreditation (see also Aguinis et al., 2020).

Teaching

We found only one difference between psychology and management departments in terms of teaching. Specifically, management participants more strongly agreed that their undergraduate students expected professors to emphasize practical applications of the course material ($M = 4.43$), relative to psychologists ($M = 4.10$, $t(242) = 2.94$, $p < .01$), although both groups of participants generally agreed to students having these expectations. We interpret this difference in beliefs as potentially reflecting the greater emphasis on theory within various psychology courses, as well as the emphasis in psychology curricula on research methods and statistics.

Beyond the above finding, however, no differences were found in terms of semesterly teaching load (psychology: $M = 12.5$ credits; management: $M = 13.0$ credits, $t(242) = 0.80$, $p = .425$) and the number of hours per week spent on course-related work (psychology: $M = 16.6$ hrs; management: $M = 16.7$ hrs, $t(242) = 0.11$, $p = .912$). Thus, although students' classroom expectations might differ between the two types of programs, their respective workloads associated with teaching appear to be comparable.

Student Mentorship

Participants from both types of departments reported working with a similar number of PhD students and master's students (psychology: *M*s = 2.76 and 3.65, respectively; management: *M*s = 2.08 and 1.87, respectively, *t*s ≤ 1.90, *p*s ≥ .058). However, of these students, psychologists tended to advise more PhD students as a dissertation chair (*M* = 1.62 students) and more master's students for non-thesis capstone projects (e.g., cumulative exams, internships; *M* = 2.65 students), relative to management scholars (*M* = 0.90 students, $t(242) = 3.22$, $p < .01$, and *M* = 0.60 students, $t(242) = 2.22$, $p < .05$, respectively). Thus, although the mentorship load does not appear to differ between types of departments, psychologists seem to serve in a greater *variety* of mentoring roles. In other words, as mentors, psychologists tend to "wear more hats" than their management counterparts.

Interestingly, whereas the above findings indicate that mentor loads do not differ between the types of programs, our participants held a different set of personal beliefs. Participants from both types of programs generally believed that psychologists tend to have greater mentor responsibilities than management scholars (management: *M* = 4.56; psychologists: *M* = 5.25), and psychologists more strongly held this belief ($t(242) = 4.34$, $p < .001$). Thus, the area of student mentorship seems to be one in which the beliefs of psychologists and management scholars do not necessarily align with reality. Perhaps due to their beliefs about mentorship differences, both psychologists (*M* = 5.69) and management scholars (*M* = 4.62) alike tended to perceive psychology students as receiving better training to conduct high-quality research, relative to management students at comparable institutions, although this belief was significantly more pronounced among psychologists ($t(242) = 7.00$, $p < .001$).

Hiring

As expected, relative to management scholars, psychologists felt that job applicants with an I-O background could better meet their departments' needs (*M* = 3.84 vs. *M* = 4.32, respectively, $t(242) = 3.52$, $p < .001$), whereas the opposite pattern was found for job applicants with a management background (*M* = 4.74 vs. *M* = 3.67, $t(242) = 8.55$, $p < .001$). Interestingly, psychologists and management scholars alike tended to more strongly agree that organizational psychology and organizational behavior topics (e.g., motivation, leadership) were favored by their departments (*M* = 4.44 and *M* = 4.57, respectively), relative to industrial-psychology and human resource topics (*M* = 3.94 and *M* = 4.08, respectively, *t*s ≤ 5.46, *p*s < .001).

Last, management scholars tended to agree that applied/industry experience is seen favorably by their departments (*M* = 3.50), whereas psychologists tended to disagree that applied experience was seen favorably (*M* = 2.67). This latter finding is particularly striking, given the widespread emphasis on the scientist–practitioner model in I-O psychology. We were also personally surprised by this finding, given our beliefs (and personal experience) that students in I-O psychology programs tend to emphasize practice more than those in management programs.

Conclusions

We started this contribution by noting that the most notable known difference between careers of I-Os in psychology and management departments is the salary difference. Our findings show that the salary gap is replicated in a research–support gap, favoring working in management rather than psychology departments. As for teaching, we found that the experience of teaching undergraduate students is relatively similar in both types of departments. However, there is more skill variety in mentoring graduate students in psychology departments, in comparison to business schools. At the same time, there is an emphasis among business schools on publishing research in specific, targeted journal outlets, whereas this emphasis appears to exist to a lesser extent in psychology departments. Thus, if an I-O psychologist is more inclined toward teaching and having a variety of student-mentoring experiences, they might be more satisfied in psychology departments. Additionally, the research philosophy of each I-O psychologist (particularly with regard to publication quality and the importance of research-impact metrics) will determine their fit within psychology or management schools. That both psychology and business schools emphasize organizational psychology and organizational behavior research topics means that researchers emphasizing organizational psychology topics might find it easier to be hired in business schools (and potentially even in I-O programs), in comparison to researchers focusing on industrial psychology.

All in all, we hope that the information gained from our research will ignite additional investigations, aiming at identifying the reasons for our findings. Our findings should be of interest to psychology departments and to the field as a whole worried by the “brain drain” (Aguinis et al., 2014). It should also be of value to I-O psychologists considering their career paths.

Acknowledgements

We are grateful to Abby Corrington, **Charles Gorman, Amy Kristof-Brown,** Lorianne Mitchell, **Frederick Morgeson, Mickey Quiñones,** and **Paul Spector** for their insightful feedback on our survey instrument, and to Paul Spector for helping us disseminate our survey.

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Translating SIOP's Guidelines for Graduate Education Into a Robust Competency Development Process for Master's-Level I-O Professionals

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Introduction

Despite the preprofessional nature of graduate programs in I-O psychology and the general orientation of our broader profession, there is currently no clear and scalable mechanism for ensuring consistent and comprehensive educational quality in graduate education programs for I-O psychology. This is particularly true for master's programs in I-O psychology that are increasingly competing against alternative degree programs that promise quicker and more "business-relevant" career paths. To be clear, efforts to create and sustain any sort of formal accreditation of graduate programs can create more problems than solutions; this article is not intended as a call for anything so formal. Instead, our goal is to provide an example of how to build a competency-focused curriculum and associated evaluation process around SIOP's most recent *Guidelines for Graduate Education and Training* (Guidelines; 2016). Specifically, we focus on how this is possible in the context of a terminal master's degree program in I-O psychology, although our process can generalize well to any form of I-O graduate training.

First, a little background: The original *Guidelines* were created in 1985, with revisions in 1999 and most recently 2016. Their purpose is to direct I-O psychology curriculum planning efforts in all I-O graduate education programs (master's and doctoral level) and provide students with a clear idea of the competencies they are responsible for mastering during their graduate education (SIOP, 2016). These *Guidelines* highlight and generally define the breadth of knowledge, skills, abilities, and other qualities needed to succeed as an I-O psychology professional but do not clearly delineate master's- versus doctoral-level education or address the discipline in which the program is situated (e.g., psychology department, business school). In this article, we outline the method we followed to translate and structure the current *Guidelines* into an end-to-end curricular model tailored to a comprehensive terminal master's degree program in I-O psychology. We then describe how we are using this model in an ongoing manner to guide student development and evaluate and improve our course offerings.

We completely understand that this may not seem like the most exciting or cutting-edge article you have seen in *TIP*. However, we challenge you to identify a topic that is more important to the continued viability of our profession. If we do not understand how to properly develop competency-focused education models and demonstrate actual competency development in our students, how can we expect to continue to be taken seriously as professionals in the increasingly crowded professional services spaces in which we operate? With this serious question in mind, our goals for this project were to

1. Critically evaluate and align our own master's of science (MS) degree program's curriculum with the *Guidelines* to ensure a comprehensive educational opportunity for our students.
2. Create an evaluation framework, tools, and associated process that can help us to meet ongoing university-level program evaluation and review requirements.
3. Provide students and program alumni with a clear sense of what is required to be a competent I-O psychology professional, where they are demonstrating proficiency and mastery, and where they need to continue to work on building and sustaining competence.
4. Provide students with competency-related language and tools to help reduce the mystery of what an I-O professional can do for employers and for others who are not familiar with the I-O value proposition.

Method

We admittedly did not set any speed records with this work; those of you regularly teaching the equivalent of a 4:4 load will understand why. We hope, though, that our efforts can help other programs make progress more rapidly. We started wrestling with a draft of the current *Guidelines* back in early 2016. In the summer of 2021, we landed on a framework that we believed would work for our graduate program, which provides a comprehensive master's-level education for I-O professionals working in pretty much every area of I-O practice. Although we recognize that our model may not fit all other programs, we believe some variation on this process could be useful for any graduate program interested in leveraging the SIOP *Guidelines* to improve their program's comprehensiveness, quality, and overall educational impact. For clarity, we split our narrative into two sections: competency-model condensing and evaluating competency development.

Condensing the Competency Model

The *Guidelines* are very informative but unwieldy for use in any setting outside of academia. Working through the following steps helped us condense the full competency set outlined in the *Guidelines* to a more manageable set of meta-competencies around which we have aligned our curriculum and broader educational model:

1. With a team of talented graduate student assistants and the four core I-O faculty in our program as content experts, we reviewed the original competency definitions provided in the *Guidelines* and generated a set of three to four Student Learning Outcome (SLO) statements linked to each competency. As the *Guidelines* do not clearly differentiate between doctoral- and master's-level competence, we drafted these initial SLOs to apply to terminal master's students and MS program graduates (e.g., for *Research Methods*: "Apply scientifically oriented procedures, techniques, and tools to conduct empirical investigations in I-O psychology." Similarly, for *Job Evaluation and Compensation*: "Recognize and monitor developing legal and social issues surrounding compensation").
2. Using the *Guidelines'* competency definitions and our initial master's-degree-specific SLOs, we cross-mapped each of the *Guidelines'* 26 competencies against the learning targets for each of our core MS degree program courses at the time (2016–2017). We quickly identified a few competency areas for which our course-related coverage was thinner than desired. As a result, we revamped about a third of our course offerings to make them more comprehensive and to ensure that our core curriculum supported development of at least introductory proficiency for all the competencies in the *Guidelines*. We revised our competency-by-course cross mapping and then identified which competencies from the *Guidelines* would be targeted most strongly in each of our courses.
3. We started exploring ways that we could group or otherwise restructure the 26 competencies from the *Guidelines* into meaningful meta-competencies. This process was driven by careful consideration of the competency definitions in the *Guidelines* and our master's-level SLOs. We first arrived at a condensed framework involving seven meta-competencies: (a) foundational knowledge of I-O psychology; (b) theoretical bases for I-O psychology research and practice; (c) applied research and evaluation KSAOs; (d) essential I-O practitioner KSAOs; (e) influential person-level factors; (f) influential organizational and environmental factors; and (g) influential interpersonal and social phenomena.
4. At this point, we began laying groundwork to facilitate ongoing evaluation and tracking of student competency development through these courses (more on this in the next section). Each instructor selected one to three of our master's-level SLOs for each of the 26 competencies that they felt were most aligned with topics emphasized in their courses. In each course syllabus, these course specific SLOs are emphasized as part of the stated learning objectives for the course, helping to frame each

course in terms of the I-O competencies it is designed to develop. At the end of each semester, students report on the extent to which they feel confident in their abilities to address, answer, and/or do each of the things identified in these core SLO.

5. As we discuss in the next section, the general vision for this ongoing competency-focused evaluation has not changed; in many ways it has been strengthened and become more real by positive feedback we have received from students, alumni, and internship-site supervisors. However, after a couple of semesters of doing what we outlined in the preceding two steps, we realized that our approach was still unnecessarily complex for our intended purposes: There were simply too many separate meta-competencies to be useful in real-world conversation, especially between students and prospective employers. After further evaluation, we reduced our framework to four core I-O meta-competencies that are now at the heart of our program's curriculum and competency development evaluation efforts: (a) psychology of work, (b) professional practice, (c) talent management, and (d) work design. You can see the details of this breakdown, including how we organized the competencies from the *Guidelines* in "The Details" section of this part of our graduate program's website: https://bit.ly/3HrAjlN. We also refined the SLOs associated with these meta-competencies to better align them with the types of work we were seeing master's-level professionals tackling in practicum and postgraduation work assignments.

Evaluating Competency Development

In addition to aligning our curricular and educational experiences to the *Guidelines*, we also endeavored to develop a robust and multifaceted student, curriculum, and broader program-level evaluation framework and process. The information gathered through this process helps us to track the extent to which our courses and other learning-related experiences (e.g., graduate assistantship positions, practicum placements, mentoring programs) collectively contribute to the development of student proficiency or mastery in the core competency domains. This type of outcome and impact information is increasingly important to prospective students, employers, and university-level accreditors.

Over the course of this project, we experimented with several approaches for gathering pertinent evaluation data, settling this past semester on a multipronged method that includes consideration of (a) student work products from specific courses, (b) a written reflection paper and presentation in which students connect their practicum experiences to a subset of core competencies, and (c) an evaluation of on-the-job performance from students' practicum supervisors. As a result of this competency-alignment project, we also added two evaluation elements we believe are worth sharing: a recurring evaluation of student confidence and a competency-focused electronic portfolio (e-portfolio).

Recurring Evaluation of Student Confidence

We developed a recurring end-of-semester evaluation in which students respond to a series of behavioral statements modeled around the revised master's appropriate SLOs noted earlier. Data from these assessments can be linked to course instructor ratings of demonstrated competence against the SLOs for a given course. This information could further be used to populate a student competency development record (i.e., fancy spreadsheet) to track personal competency development. This information could also be aggregated within a specific course, across a cohort of students, or across a set of courses to help our faculty identify strengths and weaknesses relative to these competencies.

Our decision to evaluate student learning in terms of *both* course grades and self-perceived confidence is driven by the understanding that demonstrated competence emanates from a combination of knowledge and the confidence to effectively apply that knowledge. This notion is supported by a large and diverse research literature, which also suggests that confidence, not just knowledge, predicts ability and motivation. This is perhaps most noticeable in much of the research pertaining to self-efficacy (e.g., Bandura, 1977; Stajkovic & Luthans, 1998; Weinberg et al., 1979). Confidence is especially important to success in the predominantly practitioner-oriented roles pursued by most master's program graduates.

Because multi-item confidence assessments more accurately reflect competence than a single-item rating of overall confidence for a broad topic (Favazzo et al., 2014; Nuhfer & Knipp 2003), we strengthened our semesterly confidence assessment by breaking the competency-specific SLOs into behavioral questions. For instance, the question, "What are the steps in conducting a needs analysis?" is one of a broader set of questions in the section of our assessment targeting our talent management meta-competency. We used specific questions because confidence tends to be inflated when confidence ratings are not paired with questions (Favazzo et al., 2014). We further strengthened our assessment by following the advice of Nuhfer and Knipp (2003) and allowing students to complete the assessment at home, with plenty of time for self-reflection. Some practical benefits of confidence-focused assessments are that they (a) are time efficient (i.e., students do not have to generate a complete response to such questions, but instead can cognitively process how they would respond), (b) make it possible to avoid creating another typical and high-stakes "testing experience," and (c) can be motivating to students (i.e., encouraging them to keep working on competence development in areas where reported confidence is low; cf., e.g., Bell & Volckmann, 2011).

We currently use an Internet-based survey (via Qualtrics) with branching logic to ensure that each semester's evaluation is tailored to each student's learning and development experiences that semester. Students identify themselves (for program-level tracking) and then select the learning and development experiences in which they were engaged during the semester from a master list of the available options. Selected experiences are then pushed forward through the rest of the assessment, and students reflect on these experiences as they rate their confidence in their ability to respond to a series of behavioral questions that target each of our four meta-competency domains. Students are also asked to reflect on and share examples of how their learning and development experiences contributed to growth in each of the four meta-competency domains.

Implementing this system helps our students understand what they should expect to learn, monitor their progress toward these learning objectives, and identify areas for further development. Accumulating data through this process helps us provide students with competency-related goal-directed feedback that they can use to work toward addressing discrepancies between their current and ideal future levels of competence. In essence, we are using the *Guidelines* and our condensed meta-competencies as the structure for an I-O education performance management system, minimizing ambiguity in the educational process and maximizing our ability to monitor competency development.

Competency-Focused e-Portfolio

To take this a step further, we created a customizable e-portfolio template for our students, designed within Google sites for ease of use. We encourage students interested in being considered for "graduation with distinction" honors to build and maintain this e-portfolio beginning in their first semester. These e-portfolios can become a visible and searchable record of competency development, showcasing actual work samples and work products as proof of competence. We challenge students to identify three to five pieces of evidence demonstrating their competence in each of our four meta-competency areas. This might include sharing outcomes or deliverables associated with class projects, papers, internships (as permitted by employers), or independent research. Here is a an example: https://sites.google.com/mocs.utc.edu/bethanywhitted/

These e-portfolios help us accomplish at least four goals associated with our broader competency-focused redesign and evaluation undertaking (cf. Knight et al., 2008). First, we provide students a structured way to showcase their personal and professional competencies in terms of the overarching I-O psychology competency framework, providing actual work samples to future employers (a sort of interactive résumé). Second, these e-portfolios highlight the value of these I-O competencies to potential employers and prospective graduate students who may be unfamiliar with our field of research and practice. Third, by regularly updating and maintaining these e-portfolios, we provide students a mechanism for integrating their various learning-related experiences each semester with the core competencies that are at the heart of graduate training in I-O psychology. We have already heard a great deal of positive feedback from our students regarding how this process makes coursework more meaningful for students when they understand how it is associated with their developing mastery of essential I-O psychology competencies.

Fourth, these e-portfolio sites provide our program faculty with another resource that can be used to establish students' competence and readiness for graduation. We currently factor these e-portfolios into our process for recognizing top students, also considering course-related performance, practicum performance and impact, participation in general program activities and operations, and other evidence that a student has developed mastery in one or more of the four meta-competency domains. We are exploring ways that we may eventually integrate the evaluation elements described here into our annual comprehensive examination.

Discussion and Conclusion

The process we have taken within our graduate program to translate and apply the *Guidelines* for curriculum revision and ongoing development and program evaluation can be generalized to any I-O graduate program (including in-person and online offerings). We hope the information provided here will help you see the full potential of this type of competency-focused alignment much more quickly than was the case for us. Although this work took us several years to complete, that timeline was mainly due to competing priorities and a fair amount of trial and error. Graduate program faculty following a process similar to what we have outlined here could realistically complete this work in 2 to 3 months with the engagement of key program stakeholders.

We believe our progress over the past few years has improved our ability to provide and hold students accountable for a well-rounded educational experience that makes it possible for them to develop competence in critical areas that I-O psychology professionals need. We believe this combination of clear, competency-related learning objectives and ongoing competency and performance monitoring and management will lead to further developments in our curriculum, stronger motivation among our students to persevere, and a clearer and more complete understanding within the business community of the value our graduates can bring to organizational settings.

For our program, as we suspect will be the case for most master's-level programs, the most difficult challenge was determining how to best make use of the *Guidelines*, which are clearly drafted for traditional doctoral-level training programs. Our experience leads us to believe it is overly simplistic to assume that doctoral I-O training leads to mastery, whereas master's I-O training does not. Consequently, we will continue to examine how these core I-O competencies manifest themselves in different ways for master's- and doctoral-level I-O professionals.

There are many future directions to take with this type of work. For example, we are currently preparing to test the validity of our recurring confidence assessments by correlating students' ratings on these assessments with actual course grades, workplace accomplishments, and comprehensive exam scores. Evidence of relationships would provide further support that confidence assessments can help us understand developing student competence. Other future extensions may include (a) examining the ways in which specific courses meet specific competencies, (b) determining the perceived value and utility of competency-focused e-portfolios to I-O employers, and (c) exploring whether our more robust evaluation process reduces the value of traditional written comprehensive examinations.

There are also limitations and challenges to what we have done so far and will be able to do in the future. We are aware of many of these and are confident you thought of several while reading this article. We look forward to discussing these limitations and working to address them with input from interested readers of this journal and from engaged I-O graduate program directors who are participating in the relatively new and increasingly valuable I-O program directors alliance (https://groups.io/g/iopds).

We encourage other I-O graduate programs to consider working through some variation of the process we have outlined here. The goal is not to create homogeneity across all graduate programs but rather to help graduate programs identify the strengths they can build on to ensure the best possible education for their students. Ultimately, we would like to see an increase in consistent quality of educational experiences across graduate programs in our field. One of the beautiful realities of working with competencies, however, is that there are many ways to achieve similarly good outcomes. Please feel free to contact us if you have any questions or want more information about anything we discussed in this article.

Acknowledgments: The authors sincerely appreciate the help and insights provided by the following individuals over the course of work described in this manuscript: **Brian O'Leary, Alexandra Zelin, Kristen Black,** Chris Maples, and Ellie Risinger.

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Approaches to Prosocial I-O Psychology Work: Joshua Caraballo

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As part of the SIOP Prosocial Subcommittee's ongoing efforts to spread awareness of prosocial I-O psychology, we interviewed **Joshua Caraballo**, an I-O psychologist doing prosocial work. Joshua earned his doctorate in psychology with an emphasis on business and consultative psychological methods at the Chicago School of Professional Psychology. He has worked with nonprofits for over a decade and as a Research and Evaluation professional for more than 5 years. He currently works with MindSpark as a senior director of Impact. Joshua has a particular interest in the use of social-psychological, mass media research designs and their subsequent models for human change. These models drive betterment at the individual, group, and societal levels both in and out of the workplace.

Joshua's career provides one example of how I-O psychologists can pursue prosocial work, and as such, his story offers several pieces of advice on how to become involved in prosocial work as an I-O psychologist. The following narrative outlines his career journey.

When Joshua was earning his doctorate, he expected to become a data scientist at a major consulting firm. His career had already seemingly pivoted from his initial degrees in the performance arts: an undergraduate degree in performance acting and a master's in motion picture producing. At the outset, it appeared as though he would need to sacrifice one passion for another.

To Joshua's dismay, once he graduated with his doctorate, he found himself doing work that felt nothing like the traditional I-O psychology roles he had learned about in graduate school. He found himself even further from the expectations he had for his life. He worried that he was not making the best use of his training because he was not working in the capacity he initially expected to be: "I thought, well, maybe it's not really I-O, right? I started to question, like, why did I go through this entire process of gaining an I-O doctorate if I'm not truly 'putting it into work?'" As a member on a board of directors, or a manager, or director, he did not find himself doing much in terms of data science. He was not using big data and quantitative science to solve business issues.

However, Joshua realized that he was using I-O psychology regularly, just not in the way he expected. "I think that sort of thing is what a lot of us as professionals go through," he said, "where we feel like we have the imposter syndrome. And in reality…we are using I-O. We're using it every single day…I'm still using all the things I learned in my doctorate."

For example, in Joshua's work with the Children's Services Council of Broward County, his I-O psychology training allowed him to understand the context of and to evaluate the validity of protective factors to defend against child abuse and neglect. Joshua realized that it is his skills and approaches to problems that make him an I-O psychologist, not the number of quantitative journal publications he does per year. "Not that there's anything wrong with an I-O psychologist doing primary research and big data as their career focus," he explained, "as this is sorely needed. However, I started to realize that my career trajectory would be different and acknowledging this was a big step in finding my path."

More importantly, Joshua knew that the work he did in the nonprofit sector improved lives. In Joshua's own words, he feels he was "put on this earth to assist others." This alignment between Joshua's purpose and work became indispensable to his career.

For Joshua, the knowledge that his unique expertise as a psychologist is being used in the service of others is the connecting theme that motivates him, especially during tough times. Over Joshua's decade-long tenure in the nonprofit sector, tough times came in many different forms, from the international pandemic to within-organization resistance.

Resistance from organizational leaders was a frequent challenge he faced. In many of his past roles, Joshua would need to help organizations internalize the value of data-based initiatives and of supporting difficult-to-quantify assets, such as soft skills. Although organizational leaders would easily align with efforts regarding monetary or other tangible outcomes, convincing executives of the value of abstract outcomes, such as psychological safety, was more difficult.

Because of Joshua's commitment to helping others, he was able to persevere through obstacles and build an effective approach to helping organizations through their hesitancy. Joshua's approach to resistant companies can be characterized by the phrase "listen and learn." In his experience, the best method for aiding hesitant clients is by listening to their perception of the issue and helping them figure out the best approach for their situation. He did not find that any one particular model or technique from the literature sufficed in all situations.

He said, "Learning and development, as we know for adults, anyway, is about allowing them to figure out what they want, what's most important to them." After all, said Joshua, there may be factors the consultant is not aware of but the client is. For this reason, approaches that are generally effective may not be the most appropriate in a particular organization. For this reason, ongoing professional growth, openness to change, malleability, and authentic conversations are some of the most valuable skills Joshua has accumulated over the years.

Joshua said that the experiences he had working through organizational resistance were valuable opportunities to learn how to approach issues from a compassionate standpoint. They were also opportunities for Joshua to use what he had learned from his earlier performance arts degrees. Joshua said that although some people do not see them this way, the performance arts are about psychology as well because they are about the human condition and understanding people's stories.

Joshua found that he could use his passion for the performing arts in his work as an I-O psychologist; he did not need to sacrifice one passion for another. "The reality is that all humans learn and grow through stories." He said, "Those that are most profound in our lifetimes become the impetus for mirroring decisions and behaviors that help make the human condition better." Joshua continued: "This, in my opinion, is the essence of what all business interactions and services should begin with. With that in mind, storytelling becomes more than just an art form or something nice to have; it becomes a vital aspect and core competency of what it means to be successful in your chosen industry." Joshua's focus on transformative human stories helped center him throughout his career, and his goal of helping others acted as his purpose.

Joshua believes that finding one's purpose, as he did, and then continually aligning one's life with that purpose are the keys to thriving. Regarding his life's purpose, he remarked, "I've answered that question for myself, and so now the challenge becomes integrating that into everything I do." According to Joshua, everyone should understand what makes them happy and engaged at work and beyond. He learned that he could use his skills to aid in the betterment of others. Joshua also learned how to implement his other talents in his work. His work with his current organization, MindSpark, is a great example of this.

MindSpark is a nonprofit provider of professional learning and development programs. Their programs focus on equity building, real-world problem solving, workforce literacy, innovation, and social emotional intelligence, among other goals (mindspark.org/programs). Although not their only area of interest, MindSpark focuses on programs for K through 12 professionals.

A unique aspect of the programs provided by MindSpark, according to Joshua, is that they focus on the human condition; they implement transformative and disruptive practices that utilize concepts like hope to strengthen empathy, resilience, and problem solving. These disruptive practices work through using models of change that are tailored to each engagement and through telling compelling stories.

According to Joshua, stories provide a common framework by which people structure information. Content creators can capitalize on these familiar story structures to create moving narratives with likable characters that model positive change. He said, “We must begin with the conventions that are already in place to set the tone for consistency and perceived stability.” This common ground with the audience allows a rapport to be built that engages them in the narrative. Joshua said that such a narrative “has the potential to change their worldview and inspire change.”

Stories are powerful. Joshua said, “The things that motivate us, move us, and inform us day to day are really human stories.” MindSpark’s emphasis on storytelling aligns closely with Joshua’s interests—in particular, his passion for the performing arts. So, MindSpark allows him to apply both his skills in psychology and his skills in storytelling to his life’s aim of improving the human condition. A key part of aligning one’s life with one’s purpose, as shown by Joshua’s work with MindSpark, is finding an organization with which one shares values. Joshua spent his early career years discovering his own interests and values through various positions. He realized that in addition to his passions for storytelling and improving the human condition, he had a passion for excellence and beauty—the elements that foster a sense of awe and wonderment in him for the world.

According to Joshua, excellence and beauty also involve storytelling. He said, “These values relate to some of the key elements of storytelling, such as the journeys of historical figures who have come from humble beginnings and go on to do some amazing, awe-inspiring things that benefit society.” With such journeys as inspiration, he said that people can “turn those stories into our own reality, since each of us has the capacity to do great things in life.”

In his current work at MindSpark, Joshua can implement these strengths daily because MindSpark also believes in high society-level goals, such as increasing equity and harnessing the power of personal and collective well-being. MindSpark, according to Joshua, truly believes in the power of education to transform human beings. MindSpark provides him with an avenue to use his strengths to realize his ideals.

Joshua also learned through his experiences that his preference was for nonprofit organizations. Although Joshua emphasized that prosocial work was still possible in for-profit companies, he said nonprofit work provides a greater opportunity to focus on prosocial outcomes because monetary gain is not a competing motivator. “The for-profit choice doesn’t really negate you being able to help people, but obviously when you’re working for a nonprofit it’s a given,” Joshua said. “The mission and the vision you decide to align yourself with puts you, in my opinion, in a much greater position to see the fulfillment of your work.”

Joshua said another characteristic generally unique to nonprofit work is the opportunity to observe the positive impact the application of I-O psychology can have on people's lives. This is possible because the nature of nonprofit work directly involves psychologists in efforts to better society. For instance, he said that MindSpark cultivates a culture of disruption and growth that permeates all they do. This culture results in high satisfaction in their services; an overwhelming majority of survey respondents count MindSpark's programs among the best learning experiences in their lifetimes. Joshua said, "That alone is inspiring and motivational, but not enough for us to ever rest or become complacent. We want to continue this pattern well into the future, remaining relevant and truly transformative in all we do."

Today, Joshua thoroughly vets companies for alignment with his values before he considers working with them. To him, there may be no more important standard by which to evaluate organizations. Aligning one's daily life with one's values is to Joshua "how you validate who you are. When you don't get to see parts of yourself in your everyday life, that's when you feel lost." People who cannot see their purpose reflected in their actions and environment lose touch with that purpose. Joshua said the opportunity to work in a company that allows him to pursue his dearest values is the "opportunity to live and thrive every single day."

One specific behavior that Joshua values in the organizations he has chosen is the ability to make real efforts toward social change. Rather than just "checking a box," initiatives are incorporated into the day-to-day activities of the organization. For instance, rather than simply providing equity training, a good prosocial organization will make equity "embedded in everyday interactions with people. It has to be interwoven into the work that we do." Joshua said, "That's what the best nonprofits understand and do every day."

Another example of how this is done comes from an organization for which Joshua serves as a member on the board of directors: National Voices for Equality Education and Enlightenment. For over 12 years, NVEEE (https://www.nveee.org) has elucidated the need for assisting school-aged youth in preventative measures to ensure the reduction of bullying behaviors, suicidal ideation, and other youth crises. Similar to how MindSpark works, these organizations take the time to put actions behind their words, leaning into the difficulties and gritty details inherent with doing this sort of work.

Joshua also adopts the values of his organizations. Alignment goes both ways. In regard to MindSpark, he said, "They truly believe that education is a conduit for social change, for pretty much any of the major issues that we're going through as a society, as human beings." Joshua recognized the truth in MindSpark's beliefs from his own experiences. He had an influential teacher that impacted his own development, named Mrs. Ayers, and recognized that his education had been transformational in his own life. "Mrs. Ayers was pivotal in helping me solidify my understanding of being a lifelong learner and visual artist." Joshua said, "Mrs. Ayers had a strategic understanding of how to mold and structure a young, high-school-aged man at a time when I was not thinking much about my future. She constantly challenged me but did it in a loving way. I'll never forget how she inspired me to always become better, and that is something I hope to do for others as well."

"By utilizing such a powerful force, like education, the sky's the limit," Joshua said, "because you can do anything with education. It has changed my life, made me a better person, and I will do anything I can to give back to this industry, because we cannot allow education to fail our children. Yet, this is exactly what is currently happening."

Although Joshua began his career by exploring and pursuing various positions, he eventually determined what his personal aims were and aligned his work and life to those aims. Joshua has spent his career developing his passion for helping others and learning how to apply his unique skills to make changes happen. This is what defines him as a prosocial I-O psychologist. He applies what he learned in his I-O psychology training to make positive social change.

Joshua's journey toward being an effective prosocial I-O psychologist is informative for others interested in getting involved in prosocial I-O. The first lesson Joshua learned that he recommends to I-O professionals early on in their careers is to take jobs that do not appear immediately relevant to their chosen career path. Instead of trying to specialize early on, professionals can allow themselves to explore different areas of work and different interests. "I think it's really important to take the time that's needed instead of jumping into a relationship, so to speak, and making sure that this is something you want to do long term."

Joshua said finding work that fits your heart is "sometimes as simple as allowing life to take place. You know, some of that mindfulness to accept what's given to you and to be able to utilize all the tools and knowledge that you've gained throughout your life and to be able to apply it to what is handed to you, instead of trying to make it fit some notion of what you think it should be." So, for those entering the area of prosocial I-O psychology who are uncertain of the best job for them, that is his advice: Keep an open mind.

Allowing oneself to explore various jobs is indispensable, according to Joshua, because it leads to discovering one's true values and work that allows the pursuit of them. This is the second lesson: Working toward one's values creates endurance in the face of hardship. Obstacles that would cause a less motivated person to quit can be weathered when doing something for the passion of it. "If you don't have a through line that's really connecting you to the work, then it's going to be very easy when these little clouds, if you will, come over you to be swept away in the madness of it." Joshua said, "You won't be able to bounce back so quickly."

These two lessons lead into the grand overarching message from Joshua; one of the best ways to live a successful life is to live one's inner convictions every day, and incorporate these into one's activities, both in and out of the workplace. Finding and pursuing those values are the most important steps in one's career. A core component of this approach is working for organizations that support one's values.

Aligning one's work with one's values is a journey, though, and sometimes a struggle. However, Joshua believes that the time and effort is worth the reward of living a meaningful life. "You're doing something that is so important for your life...and if it doesn't happen immediately, do not lose hope." Joshua said, "Just keep trying and eventually you will find that thing." Joshua's story demonstrates how when people follow their hearts and stay true to their morals, they can reach their full potential.

"We spend our entire lives trying to find something that we can align ourselves to and that we can be passionate about every single day. To find that, it's almost like finding your significant other. It's rare, but it happens, and it's out there if you're willing to find it."

Back to the SIOP You Love: Message From the 2022 Program Chair

Richard Landers
2022 Program Chair

We're only a few short weeks from the 2022 SIOP Annual Conference, and all signs point to this being a conference to remember. Not only will we return to the in-person SIOP experience (April 27–30 in Seattle) you know and love, but we've also added a sizable virtual program, available to both in-person and virtual registrants, to increase the accessibility of I-O psychology's "main event" to everyone who wants to be a part of our community.

Things have been so strange for so long! It all started in 2020, with "the conference that never was." It's hard to impress upon you just how strange things were when I stepped into the Program Trio role—or perhaps I should say, "witnessed the aftermath." So much planning, so many resources allocated, all pulled out from under everyone, followed by a last-minute and absolutely incredible-to-behold pivot to hold a virtual event. Let me impress upon you the fact that SIOP annual conference planning for a given conference year begins in earnest a couple of months *before* the previous year's conference is held. Under the leadership of Program Chair **Elizabeth McCune** and Conference Chair **Scott Tonidandel,** the success of the brave souls in the SIOP Administrative Office pivoting with basically a month to plan and execute was nothing short of astonishing.

It was also a bit intimidating, as the incoming Program Chair-in-Training, if I'm being honest.

In contrast, the 2021 SIOP Annual Conference was optimistically planned by Program Chair **Emily Solberg** and team as a hybrid event, but we learned much earlier—at least relative to SIOP 2020! —that things were not going to work out quite as we'd hoped. The pandemic was raging stronger than expected as late-stage planning was underway in early spring 2021, and our in-person experience was once again taken away. Fortunately, Emily alongside Conference Chair **Whitney Botsford Morgan** built in enough flexibility that the pivot was much more straightforward the second time around.

SIOP 2021 taught us a lot of lessons about how the SIOP community would engage with and react to a well-planned "virtual" experience, and these lessons built the foundation for what will this year become the 2022 SIOP Annual Conference.

Let me be clear here—barring some highly unexpected catastrophic change in the pandemic (knock on wood), we will have an in-person SIOP this year, for the first time since 2019. We will also be offering, for the first time, a truly cross-modal experience, with roughly 25% of all non-poster sessions being presented primarily online, available to both in-person and virtual registrants, across both the peer-reviewed and SIOP-curated invited program. We've also made a particular effort to make some in-person content available to virtual registrants in the form of two in-person rooms of the Washington State Convention Center being simulcast live online! All of this means that, regardless of the modality of your registration, there will be plenty of SIOP content to experience.

It has been evident to the conference leadership for months that there is a great hunger for an in-person SIOP experience, to connect with friends and colleagues in the familiar halls of a SIOP annual conference. To that end, and under the leadership of SIOP President **Steven Rogelberg**, our hope is to hit you right in the old SIOP feels. Symposia, master tutorials, panels, debates, the Exhibit Hall filled with

posters and random vendor swag! Alumni get-togethers, SIOP special events, THE FUN RUN! They're all back, much like you remember.
This is largely possible because of your enthusiasm in submitting to the SIOP annual conference and your registration to attend. THANK YOU. As you can see in the table below, we have a full program planned that will be split across roughly a dozen in-person tracks and half a dozen virtual tracks, as much content overall as we typically had prepandemic.

Format	**Event type**	**Events**	**Timeline**
Virtual live	Virtual posters	500+	Begin April 20
Available to in-person	Peer-reviewed sessions	70+	
and virtual registrants	Simulcast in-person peer-reviewed sessions	32	
	SIOP-curated sessions	10	April 27–30
In-person live	Exhibit Hall posters	400+	
Available only to	Peer-reviewed sessions	170+	
in-person registrants	SIOP-curated sessions	30	

Uniquely this year, all poster presenters will have the opportunity to be presented in both virtual live and in-person live formats! Using the same virtual format supported by Virtual Chair that we used in 2021, virtual presentations will occur on April 20, the week before the in-person conference. Not only does this allow our vast number of student poster presenters an extra opportunity to practice their poster's elevator pitch, but it also increases the accessibility of posters to all audiences.

Finally, our SIOP-curated content will be as engaging as ever. This year, it includes

- Five Thursday Theme Track sessions celebrating Steven Rogelberg's presidential theme: "BETTER TOGETHER."
  - Being Better Together: Celebrating Mind, Body, and Community
  - Globally Together: Learning from and Partnering With I-Os Abroad
  - Better Together: Bringing the Joy Through Interactive Adventures
  - Building Together: Addressing & Dismantling SIOP Inclusivity Barriers
  - Intellectually Together: Hacking to Help Others—An I-O Psychology Hackathon

- Five Friday Seminars with cutting-edge training!
  - Practical Applications of Machine Learning in I-O
  - Designing an Optimal Remote Work Strategy: Challenges and Opportunities
  - Inclusive Leadership Training: Uber's Approach to Balancing Science and Practice
  - #TheGreatReckoning: Remote Working Experiences of Minoritized Employees
  - Building & Managing a Machine Learning Practice in Your Organization

- Three sessions from the Alliance.
  - Giving Away I-O Psychology: How & Why to Volunteer Your Time and Talent
  - #TimesUp: How Real I-Os Step Up at Work
  - Global Talent Management Post-Pandemic: Remote, Hybrid, and In-Person Work

- Four sessions curated by a special team dedicated to creating high-engagement Special Sessions.
  - Facilitated Discussion of the Challenges Facing the Field of I-O
  - Humanism in AI

    - Religion in the Life and Career of I-Os
    - Post-COVID New Norm: Hybrid Work Model From the Perspective of Industry HR
- Over a dozen communities of interest on topics from employee health and well-being to the role of I-O psychology in fighting disinformation.
- Four sessions hand picked by the Executive Board to keep you informed about SIOP!
- Almost a dozen themed virtual networking sessions tied to poster sessions!
- Award addresses from our Dunnette and Distinguished Contributions Award Winners!

SO MUCH CONTENT. I hope to see you in the hallways of the Washington State Convention Center in Seattle, and if not there, then virtually!

Academics' Forum: On Creating a Sustainable Research Pipeline

Cindy Maupin
Binghamton University

One of the biggest pieces of advice I received immediately after securing my first faculty position was to make sure I created a "sustainable research pipeline." Over the past 3 years as an assistant professor, I have continued to hear echoes of this same advice: in response to the pandemic ("You'll be okay if you have a steady pipeline!"), when reviewing job candidates ("We want someone with a strong pipeline!"), and when talking about my third-year review materials ("Make sure you highlight your pipeline!"). As you progress through the later stages of graduate school and into the early stages of an academic career, creating this "pipeline" of research projects becomes a key goal that dominates your focus. However, there are a number of traps that junior academics might encounter while trying to create an effective pipeline for their tenure goals. So, today I want to talk about advice for creating a *sustainable* research pipeline that will help to get you through tenure and beyond.

This topic first came to me in a recent conversation with my dear friend, Gouri Mohan, who is also an assistant professor (for the IESEG School of Management in France—and yes, I am *totally* jealous that she lives in Paris!). As I have mentioned in previous columns, it is extremely beneficial, both professionally and personally, to maintain your friendships with other junior faculty members. Gouri is an excellent sounding board when talking through my experiences in academia, and this conversation was no exception! Together, we crowdsourced the following "dos and don'ts" to help junior faculty members create *sustainable* research pipelines:

1. DO have projects in different stages of the research process.

This is the most common advice we both received from others, and it makes a lot of sense. For example, it would be overwhelming to collect data on *all* of your projects at the same time. A better strategy is to stagger your projects across different stages of the research process. For instance, you could aim for having some projects in the early stages, some in the data collection stage, some in preparation for submission to conferences and journals, and some that are under review. I find it especially helpful to visually organize my current projects by the stage they are in and then to critically evaluate the balance of my pipeline. Do I have an overabundance of projects in one stage versus the others? Are there any stages that are getting a bit sparse? How do I need to reprioritize projects to keep a steady flow of effort across each research stage? If all of your projects are in the same stage, the workload can quickly become unmanageable. Instead, spreading out your projects across the research cycle helps you to always have the next thing lined up and ready for your attention to keep up your research momentum. That said…

2. DON'T try to take on too much at once.

Sometimes we can convince ourselves that "more is better" when it comes to our research pipelines. This trap is especially likely to occur if you also have difficulty saying "no" to opportunities. However, just like during graduate school, there is a lot to balance as an early career researcher. Many of us not only have research responsibilities but also teaching, service, and mentoring roles that occupy our time. So, think critically about the research projects you already have underway before committing to new ones. Is taking on this additional project *actually* feasible given your current project load? If so, go for it! Just be aware that you will find the limit to what you can handle sooner than you think. On the other hand, if you already feel overwhelmed, maybe you classify some projects into the "not yet" category so you can continue making progress on your research goals. It is important for tenure to get projects out the door and through the publication process, and that can be difficult to achieve if you are constantly beginning new projects without finishing other projects first. Along with balancing the research stages of your projects…

3. DO balance your authorship positions.

Experience is a wonderful teacher, and both Gouri and I have learned this lesson the hard way! Balancing your authorship positions is strategically important when creating a sustainable pipeline because your authorship position heavily dictates the time and effort that is required of you for each project. *Of course* you have to be able to lead some of your projects to show your future tenure committee that you're capable of pushing forward a research program. However, if *all* of your projects are ones that you are leading, you can quickly burn yourself out because your full attention is required in too many places at the same time. Instead, collaborating with others and occasionally taking on smaller authorship roles can allow you to contribute to the field in a way that better aligns with the bandwidth you have available. Aligning your projects such that you are the first author on some, but *not* on others, is a great way to keep up your research productivity without sacrificing your ability to get projects through the publication process. Last…

4. DON'T forget the "2.5" rule.

This last tip is *especially* critical for crafting your sustainable research pipeline: Make sure you plan for each stage of each research project to take about 2.5 times longer than you anticipate. This was advice shared by an amazing scholar, **John Mathieu**, at a doctoral consortium I attended several years ago, and it has rung true in just about every research project I have ever undertaken. You think you can run those analyses in 2 weeks? Plan for 5 weeks. You think that paper you just submitted can be published within the next year? Plan for 2.5 years. There are so many unforeseen obstacles and challenges that come up during the research process, and in order to meet a hard deadline like a tenure evaluation, it is critically important to plan enough buffer time into your research pipeline to ensure you have time to achieve everything you need to before your tenure case is under review.

Research can be difficult to manage, especially when there are so many strategies for doing so. However, through following these "dos and don'ts," we believe that all of you can create more sustainable research pipelines and truly set yourself up for success in the long term!

Women at Work: Trends Around the World

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Hannah Hoffmann and Shannon J. Rowley
Wayne State University

In recent decades, women have experienced positive global shifts in economic empowerment and equality in work. Key drivers of these positive shifts include advances in women's educational attainment, organizational practices, and public policies. Beyond the positive impact of economic progress for women themselves, such advances also produce positive outcomes for organizations, surrounding communities, and national economies. However, there is still much work to be done to advance gender equality around the world. I-O psychologists—including both practitioners and researchers—have an important role to play in the advancement of women in work on a global scale. This article reviews recent data highlighting the global progress women have experienced in economic empowerment and provides recommended steps for I-O psychologists to consider in closing the remaining inequalities that exist for women in work.

Data show positive shifts for women at work around the world over recent decades. For example, education for women—a driver of financially viable career paths (World Bank, 2015)—is increasing around the globe. Girl's primary-school enrollment rates doubled over the second half of the 20th century in South Asia, Africa, and the Middle East, rising faster than boy's enrollment rates and substantially reducing gender gaps in schooling (World Bank, 2012). On a global scale, 95% of the gender gap in educational attainment has closed (World Economic Forum, 2021). In terms of women's rights, almost every country in the world has ratified the Convention on the Elimination of All Forms of Discrimination against Women (Revenga & Shetty, 2012); additionally, gender equality is a dedicated UN Sustainable Development Goal with multilateral support to see improvements by 2030 (United Nations, 2021). With such shifts in public policy and social advocacy, women are also experiencing greater success in the workplace than ever before. More than 500 million women worldwide have entered the labor force over the past 30 years (Revenga & Shetty, 2012). In addition, the percentage of skilled female professionals and corporate board members is rising, and the gender wage gap is decreasing (Millennium Project, 2017; World Economic Forum, 2021).

Research shows that such progress creates measurable value for society. For instance, a recent study found that gender equality improves economic performance and quality of life: Researchers found that as more women were employed around the world, national economies incrementally flourished (UN Women, 2017). Another study found that as more women entered the workforce, wages rose—including for men (Weinstein, 2018). In terms of organizational benefits, a *Harvard Business Review* survey (2013) revealed that women were rated higher than men at every management level in their leadership evaluations. Higher ratings included areas such as developing others and building relationships, as well as traits specifically correlated with leadership effectiveness. These studies highlight that women are not only becoming more visible in work but that their presence in work has measurable benefits to organizations, communities, and national economies.

Such notable progress toward women's economic empowerment is worth celebrating. Yet, there is still much to be done. Although women's equality and economic empowerment have improved over recent decades, widespread gaps still exist: In 2019, the global gender pay gap remained at 23%, and women remain underrepresented in high-productivity sectors (OECD, 2019). Around the world, women continue to face laws and social norms that inhibit their ability to participate in work (World Bank, 2021). Unfortunately, COVID-19 has further exacerbated preexisting gender inequalities leading to a disproportionate economic burden on women (World Bank, 2021). Thus, although positive changes are occurring for women around the world, significant inequalities still remain. At the current rate of change it is estimated to take over 200 years to reach equal economic participation for women on a global scale (OECD, 2019; UN Women, 2021). Now is the time to both embrace the progress that has been made and continue to work fervently to overcome the barriers that persist for women around the world.

The field of I-O psychology is well positioned to drive progress forward for women in work. In fact, key strategies to advance women's global economic empowerment have direct relevance to I-O psychology. Recent recommendations to achieve women's equality have been published by various governmental and international groups. These recommendations include organizational practices such as fair recruitment, selection, and promotion practices; increased representation of women in organizational leadership; training and professional development for women, particularly in fields with higher gender disparities such as STEM; parental leave and family-friendly policies for both men and women; equal pay for work of equal value; safe and harassment-free workplaces; and gender-sensitive procurement and value chains (UN Commission on the Status of Women [CSW], 2017; UN Women, 2017; UN Women, 2021; World Bank, 2015). These recommendations present an undeniable case that I-O psychology has an important—if not key—role to play in advancing women's equality in work. I-O psychology practitioners should consider how to advocate for gender equality in their organizations and larger professional communities with emphasis on the noted recommendations.

Similarly, researchers in I-O psychology can support women's economic equality through social advocacy research and an expanded understanding of women in work around the world. Key areas to support women's equality in work include research on discriminatory laws and social norms that drive gender inequalities in work, women in nonformal work (e.g., women-owned enterprises and the informal economy), women who work in developing countries, and economic empowerment for women in poverty (Saari, 2017; Schein, 2013; Traylor et al., 2020). These are critical areas for civil society groups, international organizations, and policy makers to address, and I-O psychology research on such topics could influence positive change (OECD, 2019; UN Women, 2016). For example, SIOP members led parallel panels at the 2017 and 2018 UN Commission on the Status of Women (CSW) to share strategies on how to drive women's participation in leadership at work and in their communities (SIOP UN Committee, 2017). In addition, the impact of COVID-19 on women in work has created a new research opportunity for I-O psychology. Although data are still emerging, it appears that women in work have been disproportionately impacted due to COVID-19 (World Bank, 2021). As the world continues to research the economic and social impact of COVID-19, I-O psychology can contribute to the conversation by exploring the impact on women in work.

Finally, it is important to note that gender dynamics are complex and can be impacted by many external factors. When participating in international research, interventions, or initiatives to advocate for women's economic empowerment, I-O psychologists should keep local context and realities at the forefront. Factors such as economic, political, legal, and institutional landscapes may cause variances in gender-inequality dynamics from country to country (UN Women, 2016). For example, women from different cultures may hold differing attitudes about appropriate approaches to women's advocacy (Folberg, 2020). Unintended bias on part of the I-O psychologist—including limitations in research theories, measures, and techniques—could disrupt well-intended efforts to support gender equality around the world (Gloss et al., 2017; Traylor et al., 2020). Thus, a keen awareness of context will be critical for I-O psychologists working around the world.

Table 1

Summary of Key Strategies for I-O Psychologists to Support Women's Equality in Work

I-O psychology strategies: Women's equality in work

Although many strategies exist to support women in work, not all are appropriate for every situation. Local realities and context should be considered before selecting a strategy. Additionally, it is useful to identify which strategies resonate with your own competencies and passions. Starting with both a contextual awareness and self-awareness will help narrow down potential strategies and next steps.

Function	Recommended strategy
I-O psychology practitioners	I-O psychologists can support change in their professional communities and organizations through practices including ● fair recruitment and selection ● women's representation in leadership ● training and professional development for women ● family-friendly employment policies for men and women (e.g., parental leave, on-site childcare or vouchers for childcare as benefit) ● equal pay for work of equal value ● workplace safety and anti-harassment measures ● gender-sensitive procurement and value-chain targets
I-O psychology academicians	Sharing research results with policy makers, civil society groups, and international organizations can be a powerful tool for social change. I-O psychologists can support advances in women's equality through research on ● discriminatory laws and social norms impacting women in work ● women in nonformal work ● work and women in developing countries ● work and women in poverty ● the impact of COVID-19 on women in work

Over the past several decades, women's economic empowerment has advanced significantly. Although crucial work remains to close the gender inequality gap, it is important to recognize and celebrate the progress that has been made. We invite you to join the dialogue with others who are making positive shifts for women in their communities and their lives. An encouraging number of organizations around the world are making gains in women's equality and economic empowerment. Several groups relevant to I-O psychology include

- **Economic Dividends for Gender Equality (EDGE) Certified Foundation**: A globally recognized certifier of gender equality in the workplace, the EDGE foundation assesses and awards the EDGE certification to organizations who meet gender equality criteria. https://edge-cert.org/

- **International Center for Research on Women (ICRW)**: A global research institute focused on issues related to gender inequality and poverty around the world, including women's economic empowerment. https://www.icrw.org/issues/economic-empowerment/
- **SheWorks!**: A global digital marketplace that matches female job seekers with remote-based positions, provides professional-development training for women, and offers workforce management solutions to employers. https://whereshemworks.com/
- **Social Institutions and Gender Index (SIGI)**: Developed by the Organisation for Economic Co-operation and Development's (OECD) Development Centre, this index measures discrimination against women in 180 countries using social institution dimensions (e.g., laws, social norms) and is an official data source for UN Sustainable Development Goal 5 (gender equality). https://www.genderindex.org/
- **UN Women**: The official United Nations entity dedicated to gender equality and women's empowerment programs, policies, and global standards. https://www.unwomen.org/en
- **Women Deliver**: A global evidence-based advocacy group that works to promote women's health and rights through conferences, communication tools, initiatives, and advisory roles. https://womendeliver.org/
- **Women in Informal Employment: Globalizing and Organizing (WIEGO)**: A global organization focused on improving working conditions for the women in the informal economy through research and advocacy. https://www.wiego.org/

Women are gaining visibility for the skills and talents brought to the table. They are becoming more empowered in their work, and this has a positive effect on the surrounding communities. Let the significance of what has been accomplished fuel your effort to work for the equal and fair treatment of women around the world. We encourage you to identify one action you can take as an I-O psychologist to support this important agenda. It may be as simple as learning about gender equality in your workplace, your local community, or even globally by getting involved with an organization—such as those listed above—to support women in work around the world. Everyone can enact change—what can you do today to support the fair treatment of women in work?

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Most Important I-O Articles for Research/Practice in the Last 5 (or so) Years

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Industrial-organizational (I-O) psychology academics and practitioners (*N* = 145) from around the world were asked to nominate what they believed to be, in the last 5 years, the most important published article for research and/or practice. The article provides a framework for crowdsourcing important advances in the field and can be directed toward specific types of advances.

I recently shared, on the BGSU industrial-organizational (I-O) psychology program listserv, a meta-analysis by Andrew Speer and colleagues (Speer et al., 2021) showing that the validity of biodata has been underestimated. I shared with my colleagues my belief that, along with a recent meta-analysis by Sackett and colleagues (2017) showing that assessment centers are better head-to-head predictors of job performance than GMA, the biodata meta-analysis shows that our field has been overreliant on the classic 1998 article by Schmidt and Hunter.

Sharing articles that may have been overlooked by busy colleagues and students made me think that it might be possible to crowdsource papers that prominent academics and practitioners in my network believe are the most important publications in recent years. Such a list might have a myriad of uses. It could provide the foundation for seminars on current advances. It could be used by students preparing for their preliminary (comprehensive) exams. And, it could alert busy practitioners, students, science writers, and other stakeholders to the important advances in the field.

I emailed 91 members of the Personnel and Human Resources Research Group (PHRRG or "frog"), a by-invitation group of I-O and related scholars founded over 35 years ago. I also emailed the editorial board of *Personnel Assessment and Decisions* (PAD; https://scholarworks.bgsu.edu/pad/), consisting of an additional 54 I-O scholars and practitioners from all over the world. This resulted in (*N* =145) invitations to accomplished I-O scholars, in both academic and applied settings, tasked with nominating a recent article of importance to the field. The invitation was as follows:

> *I am writing to get nominations for the most important I-O article in the last 5 years for research and/or practice. My goal is to bring to light important advances that may be overlooked by scholars, and that may have never reached practitioners. Please send me your pick for the most important contribution (in any journal), along with a very brief explanation of why you chose it.*

I then provided, as an example, my contribution which appears below. I received 18 nominations for articles. Some contributors nominated two articles. Many of these were edited for clarity and efficiency, so any mistakes are my own.

Nominated Articles

You will note that the articles for which I received nominations are presented in general categories: selection, personality/individual differences, leadership, and work/family/gender issues. A final section includes self-nominations from two late-career scholars. I gave these a separate section because I found it inspirational that both of these self-nominees indicated that their recently published article was the *most* important work of their careers. It was most certainly encouraging to me personally that my best work may still lie ahead!

Selection

1. Sackett, P. R., Shewach, O. R., & Keiser, H. N. (2017). Assessment centers versus cognitive ability tests: Challenging the conventional wisdom on criterion-related validity. *Journal of Applied Psychology*, *102*(10), 1435.

This article shows that comparing validities is more complicated than pulling effect sizes from Schmidt and Hunter (1998). When samples and criteria are held constant, assessment centers (corrected r *= .44) outperform cognitive ability tests (corrected* r *= .22) for predicting on-the-job performance.*
- Scott Highhouse, Bowling Green State University

2. Tippins, N. T., Oswald, F., & McPhail, S. M. (2021). Scientific, legal, and ethical concerns about AI-based personnel selection tools: A call to action. *Personnel Assessment and Decisions, 7* (https://scholarworks.bgsu.edu/pad/vol7/iss2/1/)

This article was already available via PsyArXiv before being published in PAD*, and it's one of the few articles that even before it was printed made an impact on practice (at least here in the Netherlands).*
- Janneke Oostrom, VU University Amsterdam

To me, there is "too much technology and too little science" in the application by various firms, and I worry about the effects on non-white males, females, and those who have immigrated.
- James T. Austin, Ohio State University

3. Dahlke, J. A. & Sackett, P. R. (2022). On the assessment of predictive bias in selection systems with multiple predictors. *Journal of Applied Psychology*. Advance online publication. http://dx.doi.org.ezproxy.bgsu.edu/10.1037/apl0000996

This article examines differential prediction in multipredictor selection systems and explores generalizability across race/ethnic and gender subgroups. This represents an important extension to the literature and addresses both a practically and scientifically important topic.
- **Deborah Whetzel**, HumRRO

4. Cucina, J. M., Caputo, P. M., Thibodeaux, H. F., & Maclane, C. N. (2012). Unlocking the key to biodata scoring: A comparison of empirical, rational, and hybrid approaches at different sample sizes. *Personnel Psychology*, *65*(2), 385–428.

The study shows empirically how much sample size will dictate the benefit of more refined keying for improving biodata validity. The research is important in its own right but also sets an example for other domains.
- **Fred Oswald**, Rice University

5. Lievens, F., & Sackett, P.R. (2017). The effects of predictor method factors on selection outcomes: A modular approach to personnel selection procedures. *Journal of Applied Psychology, 102*(1), 43–66.

This article presents a modular framework that identifies the important measurement components of selection procedures and reviews how each of these components affects validity, subgroup differences, and applicant reactions. I think this article has offered a new perspective in terms of how we should look at and study selection procedures.
- Janneke Oostrom, VU University Amsterdam

The major contribution of this article is it provides a roadmap for how we can generate more theoretically driven selection research and understand the implications of choices in the design in selection procedures.
- **Charles Scherbaum**, Baruch College, City University of New York

6. Sackett, P. R., Dahlke, J. A., Shewach, O. R., & Kuncel, N. R. (2017). Effects of predictor weighting methods on incremental validity. *Journal of Applied Psychology*, *102*(10), 1421–1434.

It emphasizes how adding new predictors to a selection battery can actually decrease the overall validity of a selection process depending on the weighting approach used (unit vs. regression weight), intercorrelations between predictors, and the validity of the additional predictors included. Practically, it's important because lots of practitioners still believe that "adding something else cannot hurt," which the paper shows is clearly wrong.
- **Nicolas Roulin**, Saint Mary's University

Personality/Individual Differences

7. Credé, M., Tynan, M. C., & Harms, P. D. (2017). Much ado about grit: A meta-analytic synthesis of the grit literature. *Journal of Personality and Social Psychology, 113*(3), 492–511.

Grit has garnered a lot of attention in the media and is purported to be one of the most important individual differences for predicting performance and success. The authors found significant overlap between grit and conscientiousness, questioning the construct validity of grit. Additionally, they found that grit had very little incremental validity over conscientiousness.
- **Jeff Cucina,** U.S. Customs and Border Protection

8. Walmsley, P. T., Sackett, P. R., & Nichols, S. B. (2018). A large sample investigation of the presence of nonlinear personality–job performance relationships. *International Journal of Selection and Assessment, 26*(2–4), 145–163.

Rather than conducting a primary study, the authors sought out a large multijob database (consisting of 123 validation studies) to test the hypothesis that personality has a nonlinear relation with job performance. They found minimal evidence of curvilinearity and provided insightful guidance for practitioners.
- Jeff Cucina, U.S. Customs and Border Protection

9. Roberts, B. W., Luo, J., Briley, D. A., Chow, P. I., Su, R., & Hill, P. L. (2017). A systematic review of personality trait change through intervention. *Psychological Bulletin, 143*(2), 117–141.

This should be required reading for I-Os who want to work with personality data, coach leaders, or avoid saying things such as "personality is all about faking!" that are not true.
- **Ted Hayes**, U.S. Department of Justice

10. Van Iddekinge, C. H., Aguinis, H., Mackey, J. D., & DeOrtentiis, P. S. (2018). A meta-analysis of the interactive, additive, and relative effects of cognitive ability and motivation on performance. *Journal of Management, 44*(1), 249–279.

This is a great piece because it shows the unimportance of interactions, even the most straightforward interaction ability x motivation. Given how attractive interactive explanations of phenomena are for laypeople (and scientists), this is sobering...
- **Cornelius König**, Saarland University

Leadership

11. Heimann, A. L., Ingold, P. V., & Kleinmann, M. (2020). Tell us about your leadership style: A structured interview approach for assessing leadership behavior constructs. *Leadership Quarterly*, *31*(4), 101364.

They basically develop a structured interview with behavioral questions designed to capture theory-driven leadership styles/constructs and demonstrate that interview ratings predict a host of relevant outcomes (from subordinates' organizational commitment to leader income) above and beyond many other predictors (e.g., self-ratings of leadership effectiveness, EI, etc.). Not only their study design/method is exemplary, but it has lots of practical implications to select or promote leaders in organizations.
- Nicolas Roulin, Saint Mary's University

12. Badura, K. L., Grijalva, E., Galvin, B. M., Owens, B. P., & Joseph, D. L. (2020). Motivation to lead: A meta-analysis and distal-proximal model of motivation and leadership. *Journal of Applied Psychology, 105*(4), 331–354.

This paper is one of the most downloaded from JAP*, and that's because it addresses a fundamental question: Do different leadership motivations matter? These findings have significant implications for leadership development programs and leadership.*
- Ted Hayes, U.S. Department of Justice

13. Finkelstein, L. M., Costanza, D. P., & Goodwin, G. F. (2018). Do your high potentials have potential? The impact of individual differences and designation on leader success. *Personnel Psychology, 71*(1), 3–22.

The contribution of this article is that it provides a framework that can be used by academics and practitioners for considering potential in organizations and the programs designed to realize that potential.
- Charles Scherbaum, Baruch College, City University of New York

Work/Family/Gender

14. Gabriel, A. S., Volpone, S. D., MacGowan, R. L., Butts, M. M., & Moran, C. M. (2020). When work and family blend together: Examining the daily experiences of breastfeeding mothers at work. *Academy of Management Journal, 63,* 1337–1369.

The reason why this research is deserving of a nomination is because it is normalizing conversations that were previously taboo: breastfeeding at work. It highlights the challenges that women experience, but also illustrates the benefits of supporting women as they blur the boundaries between work and family.
- **Traci Sitzmann**, University of Colorado Denver

15. Sitzmann, T., & Campbell, E.M. (2021). The hidden cost of prayer: Religiosity and the gender wage gap. *Academy of Management Journal, 64,* 1016–1048*.*

The theorized religiosity factors explained 37% of the variability in the global gender wage gap, an effect size of especially high magnitude in management and social science disciplines.
-**Kristen Shockley**, University of Georgia

16. Shockley, K. M., Shen, W., Denunzio, M. M., Arvan, M. L., & Knudsen, E. A. (2017). Disentangling the relationship between gender and work–family conflict: An integration of theoretical perspectives using meta-analytic methods. *Journal of Applied Psychology, 102*(12), 1601–1635.

This paper addresses an issue often discussed in the popular press of gender differences in work–family conflict. Contrary to popular belief, based on a meta-analysis of over 350,000 participants, they found minimal gender differences in the amount of conflict experienced across men and women.
- **Allison Gabrie**l, University of Arizona

Late Career Self-Nominations

17. Campion, M. C., Campion, M. A., Campion, E. D., & Reider, M. H. (2016). Initial investigation into computer scoring of candidate essays for personnel selection. *Journal of Applied Psychology, 101,* 958–975.

This has changed my professional life more than any other paper I have ever written.
*We explain how to "train" a computer program to emulate a human rater when scoring accomplishment records. We then examine the reliability of the computer's scores, provide preliminary evidence of their construct validity, demonstrate that this practice does not produce scores that disadvantage minority groups, and illustrate the positive financial impact of adopting this practice in an organization (*N *= 46,000 candidates).*
- **Mike Campion**, Purdue University

18. Sackett, P. R., Zhang, C., Berry, C. M., Lievens, F. (2022). Revisiting meta-analytic estimates of validity in personnel selection: Addressing systematic overcorrection for restriction of range. *Journal of Applied Psychology*. Advance online publication. http://dx.doi.org/10.1037/apl0000994

I view [this] as the most important paper of my career. It offers a substantial course correction to our cumulative knowledge about the validity of personnel selection procedures. We show commonly used correction procedures result in substantial overcorrection and that the validity of many selection procedures for predicting job performance has thus been substantially overestimated. Most of the selection procedures that ranked high in prior summaries remain high in rank, but with mean validity estimates reduced by .10–.20 points. Structured interviews emerged as the top-ranked selection procedure.
- **Paul Sackett**, University of Minnesota

Concluding Observations and Limitations

Before examining the nature and content of the nominations, I should emphasize that this is one of many possible lists, depending on the network one is relying on for the crowdsourcing. The scholars asked to make the nominations certainly skew "I" side, even though many of those sampled were OB scholars in schools of management. It seems likely also that the emphasis on research *and* practice in the instructions slanted nominations toward the "I" side of I-O. The most common topic of the 18 articles nominated (44%) was, not surprisingly therefore, employee selection. Selection is the oldest area of research in I-O (Vinchur, 2018) and is the dominant area of I-O practice (see Aguinis et al., 2014). More nominated articles (44%) appeared in *Journal of Applied Psychology* (*JAP*) than any other journal. In fact, no other journal appeared more than twice. This supports the idea that *JAP* is the flagship journal in I-O psychology (Highhouse et al., 2020). Finally, one-third of the nominated articles included Paul Sackett as an author. This suggests that Sackett is arguably one of the most influential I-O scholars in the last several years.

It is notable that the articles considered most important in the last 5 years did not include more contemporary workplace concerns such as job vacancies, remote work, and work meaning. This may be because these are less mature areas of research where we might expect fewer breakthroughs. We do see, however, multiple nominations for studies on artificial intelligence (AI), nonlinear or interactive relations among constructs, work/family conflict, subgroup differences, and challenging the rank ordering and magnitude of effect sizes for predictors.

It is important to reiterate that this is one list that may or may not be representative of the entire field. With that caveat in mind, this list provides important insight into the kinds of studies that are viewed as advancing the field forward. It also provides a general framework for crowdsourcing important advances in the future, and the approach can be tailored toward one's specific interest, whether it be theoretical advances, methodological advances, practical advances, or creative advances.

Note

I am grateful to **Maggie Brooks** for providing feedback on previous versions of this project.

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Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin*, *124*(2), 262.

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Max. Classroom Capacity: On Student Participation

Loren J. Naidoo, California State University, Northridge

I taught a person named Lawrence, one of my most memorable students, in my second semester as a freshly minted PhD at Baruch College 16 years ago. What I remember most about Lawrence was his participation. The class, social psychology, was taught in a large lecture auditorium packed with 115 students where it's difficult to get students to participate in class. To counter this I tried to learn every student's name (a huge challenge—read more about that here). I showed up early and chatted with students to warm them up and make the class feel more intimate. Lawrence stood out because he was so prolific and entertaining in his participation. He was the prototypical brash New Yorker. He had no shortage of opinions and was never shy about sharing them. He pulled no punches. He was always ready to challenge me about an idea, a finding, or a theory. If no one else raised their hand I could always count on Lawrence to answer a question (whether he knew the answer or not). If I teased the class about the perennially disappointing NY Knicks, I was sure to get an angry retort from Lawrence. The class loved it! I loved it! I feel like Lawrence's disinhibition encouraged and made students feel more comfortable to participate and created a very positive, fun learning environment that benefited everyone.

Max. Classroom Capacity is all about reaching our potential as instructors. Here's a strange admission: I haven't been in a classroom since March 12, 2020—2 years ago! Thanks COVID (sarcastically), and thanks (sincerely) to some grant-based course release. The thing I miss the most is that strange alchemy that can happen in the classroom where everyone is learning together, and it's a joy to show up every day. When I reflect on my most fantastic teaching experiences, they always seem to arise from the openness of the students to engage in the learning process both with me and with each other.

Most of us probably believe that students who are engaged in a class are likely to learn more than those who are disengaged. So, it makes sense that many instructors consider student participation as an important ingredient of an effective class. In some of my classes I have graded student participation. In others, like the one Lawrence was in, I haven't. The questions I want to consider are whether student participation in fact is important, what we can do to encourage student participation, and whether we should grade it. These are questions I ask myself all of the time, and I don't have a clear answer. In fact, this has been a topic of (unresolved) discussion in the Naidoo household. So, to help answer these questions, as well as to create work–family synergies, I've enlisted Dr. Kara Naidoo, associate professor of education at California State University, Channel Islands, a teacher-of-teachers, an expert on science education, and, also, my beloved wife!

Loren: Dr. Naidoo, welcome to Max. Classroom Capacity, and thanks for agreeing to have this discussion with me.

Kara: Thanks for the invitation. It will be good to formalize the argument with you about grading student participation in writing as we have spent many hours debating it informally. This might be a new way for us to effectively communicate when we disagree about a topic.

LJN: When do we ever disagree?! But seriously, that's a pretty good idea. Well, anyway, the first thing I want to ask you is whether you believe student participation is beneficial for learning. If participation is *good, what quantity/quality of participation is needed? Does it only benefit the students who participate? Are there downsides to student participation?*

KMN: I believe student participation is beneficial for learning. But first, let's be clear about what you mean by "student participation." It sounds like, from your introduction, you mean specifically verbal participation in whole-group discussions. Verbal participation is one way a student can participate but not the only way. Some benefits of verbal participation in discussions include developing speaking and listening skills, clarifying and refining thinking, and receiving feedback on contributions. Learning happens within a community, so when a student offers her perspective in a classroom discussion or restates in her own words how she understands something, this contribution can support others, as well as the student, in thinking and in learning the course content. However, I think there are downsides to expecting all students to contribute to a discussion in the same way. For example, students are coming into your classroom with different lived experiences that shape how they contribute in a formal academic setting, cultural differences that might discourage some from speaking up, and linguistic differences that may favor native English speakers by creating unequal (and unintended) power structures.

LJN: OK, so big picture, we agree that participation is good for learning, albeit with some troubling inequities involved. On verbal discussions I would add that extraverted students might be unfairly advantaged, and I imagine many biases may influence instructors' decisions of who to call on as well. Yes, I suppose that, in my head, when I think of student participation, my first thought is of class discussions, but I see your point that there are other ways to participate (e.g., engaging in activities that require reading, writing, listening, etc.). Verbal participation may be more easily observed than some other forms of participation. For example, it may be difficult for an instructor to visually distinguish between a student participating by carefully listening as opposed to "spacing out," whereas it's easy to distinguish between a student answering a question as opposed to saying nothing. By extension, I wonder whether verbal participation is more likely to have the beneficial effects on peers that you described compared to other forms of participation.

KMN: I agree with you that it is difficult to evaluate the quality of participation from students. For example, a student might contribute to a verbal whole-class discussion without thinking deeply about the material (talking a lot without saying much), whereas another student may say nothing during a discussion because she is taking time to process information (this happens at different rates and ways for different people), but she is thinking critically and deeply about the material and not quite ready to contribute to a discussion. Having a class discussion on course content can benefit learning, but evaluating student participation in the discussion is highly problematic. You mentioned reading, writing, and listening as other ways to participate. There are also many technologies that enable students to share ideas like Nearpod, PearDeck, Kahoot!, polling features on Zoom, and so on. But I think you are more interested in focusing on verbal whole-group discussions, is that correct?

LJN: Not necessarily—let's get back to verbal whole-group discussions later. I think it's valuable to hash out what we actually mean by "participation," and I don't think we've fully done that yet. You have rightly pointed out that student participation can happen in multiple ways. But, how is participation different from, for example, taking an exam, writing a paper, or other such activities that most instructors probably don't think of as participation? Can we define participation as engagement in the learning process that is distinct from and/or antecedent to learning outcomes? Might we give points or other rewards/sanctions for attendance, not because attendance necessarily means that the student has learned anything but as a way to encourage behaviors likely to lead to positive learning outcomes? I think one of the best ways to learn is to try something, fail, figure out why you failed, develop a new approach, try *again, and repeat. Based on this approach, initial performance on a task actually may be inversely related to final performance. Consequently, it's beneficial for the instructor to create opportunities for students to safely practice and explore before assessing their learning, and to encourage engagement in this process. Rewarding participation is one way to accomplish this. Reactions?*

KMN: Well, my first reaction is, wow, that is a lot of questions! Because students can choose to participate in assessments, or not, I would argue that students sharing their understanding on an exam is a form of participation. I used to teach middle-school and high-school science, and there were plenty of students who chose not to participate in summative assessments, whether it was a project, paper, or exam. I believe all forms of student participation are important. It is useful for instructors to ask themselves, is student participation important in my course and why? I value student participation because it is part of the learning process and helps me to understand what students are thinking so I can modify and adjust my lessons to best support them. Learning is social, emotional, and cognitive, and people actively construct knowledge based on experiences, so creating opportunities for participation, like the cycle you described above (which I loved—try, fail, adjust, repeat) will lead to student learning and development. Participation supports students in successfully meeting learning outcomes, but it should not be evaluated or contribute to a course grade as an external motivator to punish or reward participation. That is not a fair or equitable practice.

LJN: Am I correct in understanding that you don't think that we should distinguish between "participation" and other learning outcomes? In other words, things that instructors might toss into the "participation" bucket in their minds or on their syllabi, like verbally answering questions, attendance, in-class exercises, and so on are fundamentally no different from other class activities like taking exams, writing papers, doing formal presentations, and so forth. By extension then, we should treat whatever might fall into the "participation" bucket in the same way as those other things: If it's a formal learning objective for the class, then we identify it as such and create rubrics for how to evaluate students on it. If it's not a formal learning objective for the class, then we should NOT grade it in order to punish/reward student behaviors that are in/convenient to us or to "motivate" students. Is that more or less your position?

KMN: Correct, I do not think evaluating participation and attendance is appropriate unless these things are specifically listed in the course learning outcomes/objectives. I do believe that participation helps students achieve the course learning outcomes, and it is to their benefit to participate and attend class, but it should not contribute to a student's overall course grade. However, if an instructor does decide to grade participation or attendance because it is a learning objective for the course, then a rubric with clear guidelines and expectations should be shared with students so they understand how they are being evaluated in this area. Maybe even having students self-assess their own participation in each class session using the rubric and specific evidence from the class is a more effective strategy than an instructor subjectively assigning a participation score to students every class. This way a student who is quiet but engaged is not penalized if they participated in ways that were meaningful to them. To me the course grade should reflect the student's level of mastery of the course learning objectives, NOT my subjective evaluation of their participation in class.

LJN: Let's return to the case of verbal whole-group discussion for a second. We both agree that they can be valuable learning exercises. What are some best practices for holding productive verbal whole-group discussions in class?

KMN: An instructor can implement pedagogical strategies to reduce potential barriers and embed scaffolds in order to support a variety of learners in contributing to a class discussion. Creating an opportunity for individuals to think/write/draw about a discussion prompt and use small groups to make sense of content would be an easy first step. It might look something like this: (a) share the discussion prompt(s) in writing and verbally with whole class; (b) allow for individual writing/drawing time to think (maybe 1–5 minutes) about the discussion question(s) (providing a template to organize thoughts like a concept map, sentence starters, etc. would be useful here too); (c) students form small groups to discuss individual ideas, questions, and confusion regarding the discussion prompt(s); and (d) open up the class to a discussion on the prompt(s). This process may help more students contribute to and make sense of a class discussion but does not solve the issues with grading student verbal participation in whole-class discussions.

LJN: These guidelines make a lot of sense. I'm on board with them. Earlier you described problems with grading discussion participation, including power structures that benefit some students over others. Do the procedures you described above mitigate a lot of those issues? Let's consider classes in which effectively contributing to a whole-class discussion IS an important learning outcome, which may be the case in many I-O psychology and business classes given that these may be valuable skills for the workplace. For example, in some employment hiring/promotion scenarios, employers will use "leaderless group discussions" in which applicants discuss an issue while being observed and evaluated as part of how they select applicants to hire/promote. When properly constructed, such assessment-center activities are reliable and valid measures. Isn't evaluating student participation in whole-class discussions basically the same? I understand the potential pitfalls of grading participation, but do you think it can ever be done effectively?

KMN: Mitigate issues, yes. Eliminate issues, no. Sure, effectively contributing to class discussions can be a course learning outcome, and if it is, then it should be evaluated and graded. However, just as with other course outcomes, students would need to be taught this skill and understand what it means to "effectively" contribute to a class discussion, hence the rubric recommendation I mentioned earlier. This rubric specifies to students how they are being evaluated and the expectations for mastery of this outcome. Grading a student on something, whether it is a skill or content, without explicit instruction and practice seems unfair to me. I giggled when I read your example of the hiring scenario. This is exactly what I had to do when I was being interviewed for my current faculty position. I was in a group of job candidates from across disciplines in a fishbowl type of situation where we had a discussion on a prompt we were given. Other faculty and staff evaluated us using a rubric during this process. It is interesting to learn this is standard hiring practice in I-O psychology. Or did you already tell me that when I was hired and I forgot? Anyways, it is always nice to find connections between our two fields.

LJN: Well, because they hired you, perhaps we can consider this one positive example of evaluating participation! Thanks so much for sharing your valuable insights about participation!

Readers, as always, please email me with comments, feedback, or just to say hi! Loren.Naidoo@csun.edu.

2022 PRACTITIONER DEVELOPMENT EVENTS

The SIOP Career and Professional Development for Practitioners Committee is proud to announce four exciting opportunities for practitioners to engage in career and/or professional development as part of the 2022 SIOP annual conference:

PRACTITIONER MENTORING PROGRAM

Ten-month, one-on-one mentoring program for SIOP practitioners focused on long-term career development. Applications are open now for a 2022 virtual program kickoff to be held in March.

SPEED MENTORING

Virtual networking and exploration for early-career practitioners (up to five years post MA/PhD), two 30-min facilitated discussions with experienced practitioners in leading career topics. Sign up when you register for the 2022 SIOP conference! Information can be found here: https://forms.gle/VwuYsthLCp6MT2qf8

CAREER GROWTH EXPLORATION

Virtual networking opportunity. For mid-career practitioners (at least five years post MA/PhD), two 30-min facilitated discussions with experienced practitioners working in organizations, external consulting, sole practice, teaching, and volunteer positions. Sign up when you register for the 2022 SIOP conference! Information can be found here: https://www.cvent.com/d/58qsyd

NLP ADVANCED PROFESSIONAL DEVELOPMENT

Advanced workshop in Natural Language Processing (NLP) using Python for people analytics, held over four half-day modules. Sign up when you register for the 2022 SIOP conference.

MOTIVATIONAL INTERVIEWING ADVANCED PROFESSIONAL DEVELOPMENT

A comprehensive look at Motivational Interviewing: advanced skill development designed to motivate individuals toward change. Held over four two-hour modules.

The Career and Professional Development Practitioner Committee is a group of volunteers associated with the Society for Industrial and Organizational Psychology (SIOP). For more information about what we do and how you can be involved, visit us online at https://www.siop.org/Membership/SIOP-Committees/Committee-Descriptions

Plan Now to Attend the 2022 SIOP Consortia!

Debbie DiazGranados
Consortia Chair

SIOP continues to prioritize creating opportunities for networking and professional development at all career levels of our membership base. The consortia offer programming for students, early career faculty and early career practitioners. This year the master's, doctoral, and early career faculty tracks will be offering fully virtual programs, whereas the early career practitioner track is planning an in-person program. We are excited once again to offer this programming as a place for professional development and networking with colleagues. We hope you consider becoming involved with this event. **This year, for all consortia registrants who are attending SIOP in person, there will also be an in-person reception Wednesday, April 27, at 7pm PDT; please join us!** Be sure to register for the conference AND the consortia. Below are some highlights of this year's planned events.

Calling All Master's Students!

A master's in I-O prepares you to join today's workforce with a better understanding of how people work, how to measure workplace outcomes, and how to use data to make business decisions. With this in mind, the preconference consortium for master's students is designed to be an additional tool in your new toolbox.

You'll pick up best practices for interviewing and salary negotiation, begin to build your invaluable SIOP network through meet-and-greet exercises, and hear from established professionals across an impressive lineup of speakers. This year's program includes presenters from MA I-O degree holders in the *Fortune* 100, the U.S. federal government, and the Big Five consulting firms.

Are you interested in hitting the ground running when you complete your master's degree? The 2022 Master's Consortium is an event specifically curated to drive the professional development and networking for I-O master's students who plan to attend this year's conference. We hope to see you there!

The consortium will be 100% virtual this year, occurring across 2-hour sessions on April 12, 14, 19, and 21. The consortia will also host a live happy hour for those who attend the conference in person. Please visit the SIOP website for more details. See you there!

Register for the consortia while registering for the conference. **Deadline for registration is April 4**. We encourage any students with questions to reach out to the consortium cochairs, **Chris Rosett** (chrosett@amazon.com) and **Brandon Riggs** (briggs@perceptyx.com).

Calling All Late-Stage Doctoral Students!

Registration for the SIOP 2022 Lee Hakel Doctoral Consortium is officially open. The consortium will take place virtually from April 11–22, culminating in an in-person networking event on April 27 at the SIOP conference in Seattle. Come join us for a variety of professional development opportunities including (but not limited to!)

- Collaboratively learning how to thrive in the dissertation process
- Building your professional impact

- Strategizing for the I-O job market and successfully transitioning into your career
- Discussing how to generate impactful research ideas
- Networking with fellow doctoral students and experienced I-O professionals

We welcome students interested in any I-O career path (academia, practice, both), as well as students who are still deciding on their career path. To register for the consortium, students must (a) have reached ABD status (i.e., completed your coursework and comprehensive examination), and (b) have approval from their program chair. Each program can nominate two students.

Register for the conference AND the doctoral consortia through the broader SIOP conference registration portal. **Deadline to register is April 4.** We encourage any students with questions to reach out to the consortium cochairs, **Elliott Larson** (elliott.c.larson@gmail.com) and **Manny Gonzalez** (manuel.gonzalez@shu.edu). We hope to see you there!

Calling All Early Career Faculty! Attend SIOP's Early Career Faculty Consortium!

The Early Career Faculty Consortium invites current and future junior faculty in departments of psychology and management to participate in career-focused activities and sessions. The program will feature an opportunity for networking with junior faculty members from a diverse array of institutions as well as senior faculty presenters who will share their respective research and teaching paths and stories about how they have navigated their academic career. The consortium will take place virtually on April 11, 13, and 14. For those who will be attending the SIOP conference in person, there is an in-person networking event on April 27 at 7pm PDT.

The 2022 SIOP Early Career Faculty Consortium will include Teaching and Mentoring Tips and Tricks with **Jose Cortina** and **Tayla Bauer**; Funding and Data Collection Strategies with **Eden King** and **Beth Campbell**; Generating New Research with **Derek Avery, Kristen Shockley,** and **Louis Tay;** Networking for Successful and Efficient Publishing with **Klodiana Lanaj** and Laurie Barclay; and Q&A with journal editors. Consortia sessions will include speakers who are previous winners of the SIOP Distinguished Teaching Contributions Award, faculty who have recently gone through the tenure/promotion process, and faculty who have had successful mentoring relationships.

Because the success of the Early Career Faculty Consortium comes from interactive sessions with invited speakers, attendees are encouraged to prepare questions prior to attending. Many attendees choose to attend the consortium multiple times to capitalize on new programming and information presented in subsequent years. If you (a) are a PhD student who has successfully proposed their dissertation, (b) are seeking or have accepted an academic position, or (c) are in your first 6 years as a faculty member, then you are eligible to participate. Spots are limited; registration for this consortium is available when registering for the SIOP conference, so register early. **Deadline to register is April 1st.** If you have any questions, please contact Dr. Andrea Hetrick (ahetrick@unm.edu) or Dr. Lauren Locklear (lauren.locklear@ttu.edu). We look forward to seeing you there!

Early Career Practitioner Consortium

Interested in springboarding your career?
Want to connect and get mentoring from successful I-O practitioners?
Looking to learn new I-O-related skills that will set you apart?
Want to build relationships with I-O practitioners also early in their career?

Attend SIOP's Early Career Practitioner Consortium (ECPC)!

Industrial-organizational psychology is a choose-your-own-adventure-styled field offering limitless opportunities. Given the breadth of our field, early career professionals often find themselves navigating the challenging realities of work not covered in many graduate programs. Springboard your career by attending ECPC.

The Early Career Practitioners Consortium is a 1-day career development experience for up-and-coming I-O professionals who work in nonacademic settings. The experience focuses on the career needs and aspirations of professionals with up to 5 years of post-degree (PhD or terminal master's) work experience.

The experience provides attendees with the opportunity to learn and apply relevant I-O skills, discover the career trajectories of I-O practitioners working across various fields, uncover the early career challenges faced by accomplished I-O professionals and how they overcame them, receive guidance and support to succeed at work, and better understand their unique strengths and how to leverage to achieve career goals.

Who Can Attend?

This 1-day career development experience is for current I-O practitioners pursuing nonacademic careers, with no more than 5 years of work experience after their MA or PhD. Participation in this experience is by selection and requires completing an application.

What's the Experience Like?

- Interact with executives like Meta's **Alexis Fink** or Korn Ferry's **Scott Erker**
- Hear from experienced I-O professionals from multiple industries such as tech, government, and consulting
- Learn more about assessments as you gain insight into your unique strengths and opportunities for improvement
- Discuss challenges you face at work and gain clarity on career paths through mentoring circles
- Build relationships with fellow early career practitioners as you work in groups to develop new skills

The ECPC is here to start an ongoing conversation among I-O practitioners through SIOP. It will be held on Wednesday, April 27, in a 100% in-person format. Submit your application today!

For further information: https://www.siop.org/Annual-Conference/Add-On-Events/Consortia

Or contact ECPC Cochairs **Stephanie Murphy** (stephanie.murphy@dell.com) or **Nchopia Nwokoma** (Nchopia.Nwokoma@kornferry.com).

SIOP Award Winners: Meet Joel Lefkowitz Award for Humanistic I-O Psychology: Ishbel McWha-Hermann

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 NEW Joel Lefkowitz Award for Humanistic I-O Psychology: **Ishbel McWha-Hermann**.

Why did you apply (if applicable)?

Winning this award means so much to me because working in the area of humanitarian work psychology and social justice has sometimes felt like swimming against the stream. It has sometimes meant asking challenging questions of our discipline and its fundamental values, and it is on this point that I have been really inspired by the incredible work of Joel Lefkowitz. Joel's work has challenged us as a discipline to consider how humanistic values fit within I-O psychology and has encouraged me to continually strive to consider this perspective. In the current climate of COVID, increasing global movement around racial inequality, and the frightening urgency of climate change, Joel's work feels more and more relevant for our discipline.

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

I am a lecturer in International HRM at the University of Edinburgh Business School in Scotland, UK. I've been here 6 years, prior to which I was a research faculty member at Cornell University's Employment and Disability Institute.

In applying the tools and theories of I-O psychology to social justice at work I tend to focus on two main areas. First, I am fascinated by the topic of fair reward in international aid and development organizations. These organizations are explicitly focused on the social good, and yet paradoxically they often use salary systems that are increasingly criticized as unjust. More generally, they often manage their international and national staff in quite different ways, which is a source of dissatisfaction among employees. In these nonprofit organizations, in particular, it also generates a feeling that how the organizations operate might be undermining their values and the goals they strive to achieve.

I started this work in my PhD where I looked at how paying national and international staff on different salaries impacts relationships between staff, and this has evolved over the past 10 years to look not only at how traditional dual salary systems impact employee outcomes but also how policies can be designed in ways that are fairer.

I am currently lead researcher on Project FAIR (https://www.project-fair.business-school.ed.ac.uk/), where I collaborate with international NGOs to identify evidence-based alternatives to traditional pay systems. Understanding the problems with traditional systems is important, but Project FAIR focuses on how to address the problems.

I facilitate a network of international NGOs (small ones to the really big ones) where we share learning and understanding on how to make pay fairer within the sector. We have developed a series of principles and standards of Fair INGO reward, which many organizations have adapted in their own policies.

More recently this work has extended beyond pay to look at other HR policies and practices. Pay is just one manifestation of inequality, and there are other more hidden ways that inequality is reproduced through organizational practices.

My second area of research is examining the working conditions of marginalized and vulnerable workers. This interest was really ignited during my time at Cornell, where I was working to understand the work experiences of people with disabilities and how to overcome the barriers these employees face. Since moving to Edinburgh my focus shifted to another group of marginalized and vulnerable workers—those on low incomes and the ways in which earning a living wage (rather than the minimum wage) facilitates and enables a better quality of life for people and their families, with ultimately positive spillover for organizations and societies. Most prior research in this area has taken an economic perspective, but I-O psychology has a lot to contribute to an understanding of how earning a decent wage supports and enables employee resilience and engagement, leading to flourishing and sustainability both at work and in life more broadly.

Through all of my work the United Nations Sustainable Development Goals play a key role, and I have advocated widely for the role of I-O psychology in addressing global grand challenges such as poverty reduction. Many I-O psychologists don't immediately see the connection between what we do and global goals like the SDGs, but through addressing gender inequality, decent working conditions, or issues of sustainability and CSR, there are a lot of ways we can align with and contribute to these broader goals.

What do you find exciting about winning this award?

What I find exciting about this award is that it recognizes work that is more applied and often more difficult to publish in academic outlets but which has lots of potential for change for good.

What do you learn that has surprised you? Did you have an "aha" moment? What was it?

Almost 20 years ago when I was an undergraduate student in NZ, I was studying I-O psychology, and I knew it was what I wanted to do as a career. But I was also really interested in poverty reduction and inequality. I never thought I could do both until I happened to meet **Stu Carr**—another SIOP award winner this year! Talking with Stu, and subsequently with many other colleagues within SIOP (**Virginia Schein, Walter Reichman,** Mary O'Neill Berry to name a few), really opened my eyes to how our tools and theories could be applied to global grand challenges and how addressing these challenges is a type of work within which people need to be organized.

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, etc.?

Project FAIR is a collaboration with HR leaders in international NGOs; these leaders are looking to influence change. Project FAIR provides a space and a forum to explore how to change and to share ideas on what change might look like. By sharing these thoughts and experiences on what works and what doesn't work change can occur.

In terms of our discipline, this work provides direct examples of how I-O psychology can be used to address global challenges such as poverty and inequality and how we as a discipline can contribute to decent work.

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

This work is absolutely interdisciplinary: It covers economics, development studies, nonprofit management, and many others. Right from the start of my PhD it was apparent that appreciating these other lenses and drawing out the strengths of the different perspectives was crucial for creating research that can be applied in this particular context.

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

My first ever job was a summer job wrapping presents as a Christmas elf in the local shopping mall (I grew up in New Zealand, so Christmas is during summer!). My kids (currently aged 5 and 7) are very excited that I might know Santa personally.😊

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

It sounds cliche but follow your heart and your passion, for that is where you can have the most impact.

About the author:

Liberty Munson is currently the director of Psychometrics of the Microsoft Certification Program 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 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!

Promoting I-O Psychology to the Community at Large

Clemente Diaz and Jen Wessel
Bridge Builders Committee

Advocating for the science and practice of industrial-organizational psychology to students and educators is critical for raising awareness of the value of I-O psychology. SIOP's Advocacy Registry provides a centralized source for information about SIOP professionals who have experience with and interest in contributing to advocacy efforts. For more information and to JOIN, please visit https://www.siop.org/Membership/Registries/advocacy.

To make advocating I-O psychology to students (high school and college) easier, the SIOP Bridge Builders Committee has developed two PowerPoint presentations (An Introduction to I-O Psych and I-O Psych as a Career). Presentations can be accessed at https://www.siop.org/About-SIOP/Advocacy/Building-Bridges. Additionally, a curated list of free educator and student resources can be found at https://linktr.ee/SIOP_BB.

If you'd like to be more proactive in promoting I-O psychology, below is an opportunity in which you can engage.

Serve as a Future Institute **workshop facilitator** (e.g., job search process, the work environment) and/or **career mentor** to high school and undergraduate students.

- **About Future Institute:** Future Institute was formed to implement a programmatic plan to serve low-income, first-generation, high school graduates from 12 partner high schools throughout the Midwest states. We work to imbue these graduates with the social and life skills they need to advance their education and obtain successful and meaningful careers in their chosen fields.

- **Volunteer form:** https://bit.ly/30zljBG

Announcing the 2022 Finalists for SIOP's $100,000 Visionary Grant

Adrienne Colella
Visionary Circle Steering Committee Chair

One of the four projects described briefly here will soon win a $100,000 grant. Donors to the second cohort of the Foundation's Visionary Circle are voting to select the winner, based on their readings of full proposals, budgets, staff bios, and viewings of brief video presentations. The finalists were selected by the Visionary Circle Steering Committee from a field of 23 Letters of Intent submitted by project directors last summer.

Seven project directors were invited to submit full proposals. The four finalists were chosen because their projects exemplify being visionary, that is, looking to the future of work, bringing I-O psychology into another realm, asking new questions, and/or engaging with other disciplines. The projects also integrate the science and practice of I-O psychology, address problems critical to the future of work, have clear metrics for success, indicate how the project will change or advance praxis in I-O psychology, and have the potential for facilitating subsequent work and/or additional funding.

Here in a randomly selected order are the project titles, key staff members, and abstracts of the four finalists in the second ever Visionary Grant competition. The winning proposal will be announced during the open-to-the-public online (Zoom or Whova) Seattle Conference Kick-Off Event, Tuesday, April 19, noon–1pm PDT/3–4pm EDT.

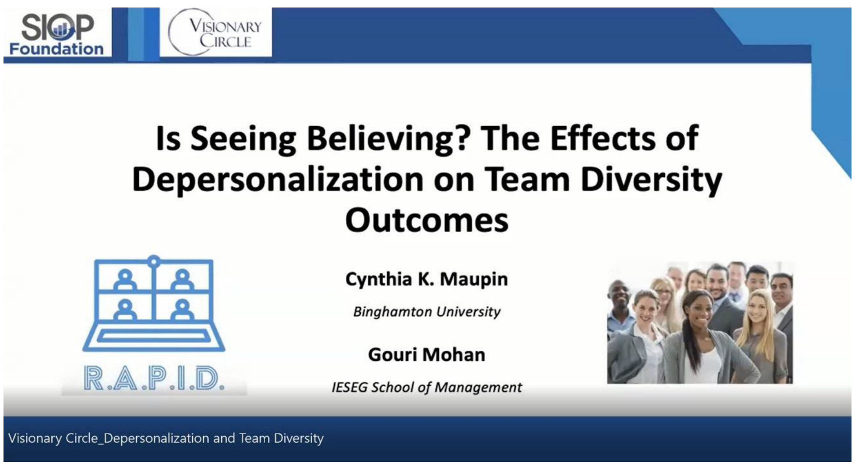
We Are in This Together: When an AI Agent Becomes Your Teammate

Submitted by:
Eleni Georganta, Technical University of Munich
Anna-Sophie Ulfert, Eindhoven University of Technology
Myrthe Tielman, Delft University of Technology
Shanee Honig, Ben-Gurion University of the Negev
Tal Oron Gilad, Ben-Gurion University of the Negev

Can human and artificial intelligence (AI) teammates ever trust each other? More importantly, what is the meaning of trust in teams consisting of human and AI teammates? Although human–AI teams reflect the future of organizations and trust is essential for effective teamwork and human–AI collaboration, these questions remain unanswered. To provide first insights into trust in human–AI teams, we adopt a multidisciplinary and multilevel approach and propose an initial theoretical framework and two experimental studies. Our goal is to investigate how interpersonal trust and team trust develop in human–AI teams. In two experiments, we will explore the impact of (a) AI teammates' trustworthiness, (b) AI trustworthiness reactions, and (c) interpersonal relationships between human and AI teammates on interpersonal trust and team trust. Synthesizing the insights from our project with existing work from industrial and organizational psychology and computer science, we will then present a refined theoretical model of team trust in human–AI teams. Further, we will build a formalized computational framework and present practical guidelines for the design and implementation of trustworthy AI teammates. We hope that providing a theoretical foundation and a practical roadmap can act as a catalyst for further interdisciplinary work on human–AI teamwork.

Is Seeing Believing?
The Effects of Depersonalization on Team Diversity Outcomes

Cynthia Maupin, Binghamton University
Gouri Mohan, IESEG School of Management



This research project introduces RAPID, an online onboarding tool that facilitates team interactions with varying degrees of depersonalization, in order to propel a paradigm shift in the way diversity is viewed and managed in organizations. We integrate innovations from technology-mediated communications, human factors, and organizational psychology to propose that teams that go through depersonalized initial interactions are able to bypass surface-level diversity challenges and capitalize on deep-level diversity gains more quickly and effectively. We develop, test, and validate onboarding of teams via RAPID in three successive stages and study its effects on team performance and team process trajectories over time.

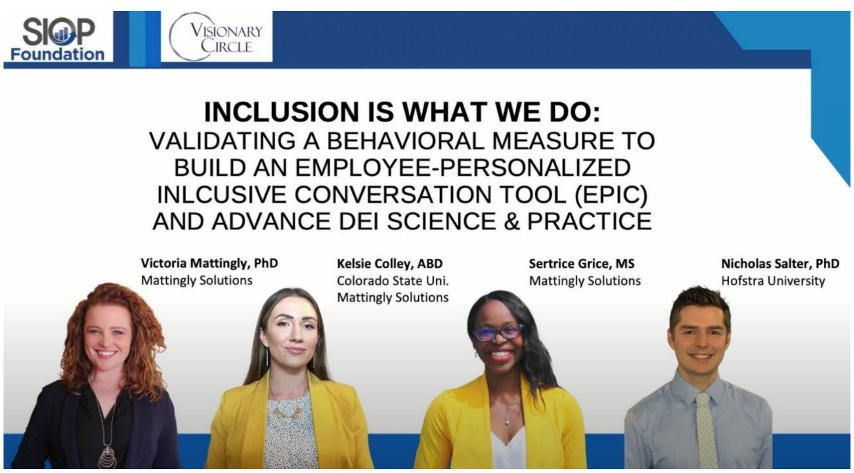
A Climate for Work Automation:
Development and Validation of the Work Automation Inventory (WAI)

Benjamin Schneider, University of Maryland
John Boudreau, University of Southern California

The research develops and validates the Work Automation Index (WAI), a new measure of the psychosocial climate in organizations as they adopt, implement, and use work automation. We also assess work automation engagement as an important correlate of work automation climate. These new measures fill a pivotal void for I-O researchers and practitioners: Researchers can extend work automation evidence and theory to incorporate climate and engagement. Practitioners gain a diagnostic tool to better incorporate human factors into their work helping companies with their work automation adoption, implementation, and use decisions.

Inclusion Is What We Do: Validating a Behavioral Measure to Build an Employee-Personalized Inclusive Conversation (EPIC) Tool and Advance DEI Science and Practice

Victoria Mattingly, Mattingly Solutions
Kelsie Colley, Colorado State University
Setrice Grice, Mattingly Solutions
Nicholas Salter, Hofstra University



Inclusion is an important top trend in today's workplace, but there are a number of issues that make it difficult to measure scientifically as well as difficult to develop and promote in organizations. Our visionary project will develop the Employee-Personalized Inclusive Conversation (EPIC) tool, an empirically validated free and easy-to-use tool that organizations can use to promote inclusion in the workplace. Previous research on inclusion lacks construct clarity, so our project will begin by creating and validating a measure of inclusion. Our measure will be behavioral based so as to make it accessible and usable in applied settings. Finally, previous research on inclusion typically focuses on one person, but the EPIC tool will be dyadic in nature. We envision the EPIC tool as something leaders and followers can jointly use to create and strengthen inclusion in their organization. The EPIC tool will be housed on SIOP's website in order to elevate SIOP as a leader of workplace inclusion science and practice, and it will produce a rich open-access database that can inform further diversity research. The future of work relies on employees of all backgrounds working together and feeling included, and the EPIC tool will help achieve this goal.

The SIOP Foundation mission is to connect donors with I-O professionals to create smarter workplaces. We are grateful for the service of the Visionary Circle Steering Committee, Adrienne Colella (Chair), and **Alex Alonso, Laura Koppes Bryan, Allan Church, Alexis Fink, Rick Jacobs, Juan Madera, Rafi Prager,** and **Jack Wiley.**

Join the third Visionary Circle cohort at https://www.siop.org/Foundation/Visionary-Circle/Visionaries-VC. The next Visionary Grant cycle will culminate at the 2024 SIOP Conference in Chicago.

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Announcing the Wayne Cascio Scientist–Practitioner Award

Milton Hakel
SIOP Foundation President

In 2018, Wayne Cascio and the SIOP Foundation created an Incubator Fund with the goal to create an endowed award honoring SIOP members for career achievement that exemplifies the scientist–practitioner model. That fund has now surpassed the Foundation's $75,000 endowment threshold, standing at $90,000. The Cascio Award is to be presented to SIOP members whose careers exemplify the scientist–practitioner model in I-O psychology.

In 2019 Wayne was among 39 people honored in President Talya Bauer's Scientist–Practitioner Presidential Recognition (SPPR) program. With regard to (a) impact on creating and disseminating applied knowledge, Wayne's first three refereed publications show the eclecticism of his research. He subsequently contributed pioneering articles to utility analysis, performance testing, statistical power analysis, analysis of individual change scores, employee turnover, and many additional topical strands in a record that comprises 12 books (33 if one counts all editions) and 200+ articles and chapters. (b) Wayne's stature within the communities of science and of practice is well shown by his reception of 31 awards (including an honorary doctorate from the University of Geneva, Switzerland, induction into the Australian HR Institute's Hall of Fame, and, by a vote of 90 countries, the World Federation of People Management Association's Lifetime Achievement Award), and it is further documented in numerous visiting positions, consultantships, legal briefs, and professional certifications. (c) Reliance on data gathered in applied settings is clearly evident in Wayne's journal publications, beginning with his earliest articles, and especially shown in those that appeared in the *Journal of Applied Psychology*. (d) With regard to modeling scientist–practitioner behavior and values, his career-long practice of addressing human resources strategy issues is especially noteworthy, deserving to be emulated by I-O psychologists everywhere. This has been not just a matter of publications and his 750+ presentations worldwide (e.g., on responsible restructuring, downsizing, the financial implications of HR initiatives) but also participation and advocacy in professional associations (e.g., SIOP, Academy of Management, SHRM). (e) Disseminating applied knowledge is Wayne's strong suit, and it shows throughout his cumulative record, including media publications (e.g., op eds, the business press, four cover stories in *HRMonthly* [Australia]), 16 SIOP preconference workshops, and his creativity in launching and sustaining the SHRM Foundation's 14 video-based business cases.

What's missing from the preceding paragraph is direct testimony about what led Wayne into our peculiar field of applied science and how he has woven so many disparate strands together to create such global impact. Here is a link to his story—his SIOP presidential biography—online at https://www.siop.org/Portals/84/docs/Presidents/Cascio_Wayne_F.pdf. It will help with understanding why he is held in such high respect and affection.

The SIOP Foundation Trustees are grateful to Wayne for his career-long exemplary leadership of our field and for taking the initiative to create this endowment.

Nominations are now open for the inaugural Wayne Cascio Scientist–Practitioner Award. Nominees will be evaluated on the cumulative impact each has had on both the practice *and* the science of I-O psychology. As is evident in the SPPR paragraph above, many categories of evidence and kinds of accomplishment are relevant in assessing cumulative impact, such as

- introducing innovative approaches that span practice and science;
- providing evidence-based interventions, procedures, and/or metrics in organizations or for employees;
- authoring influential works in peer-reviewed journals *and* in practitioner-oriented outlets (e.g., influencing both I-O and non-I-O audiences through presentations, book chapters, magazines, news media, social media, blogs);
- advocating for the scientist–practitioner model;
- training and mentoring scientist–practitioners;
- in sum, cumulatively shaping the knowledge base in one or more content areas of I-O psychology.

Following approval by SIOP's Executive Board, the call for nominations for the Cascio Award now appears on the Foundation's website. Like the other distinguished achievement and early career awards, the honoree will receive a $1,500 honorarium and a statue that symbolizes the interdependency of practice and science. The first winner of the Cascio Award will be announced at SIOP's Boston conference in 2023. The SIOP Foundation mission is to connect donors with I-O professionals to create smarter workplaces. The trustees welcome your comments, suggestions, and creative imaginings.

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Consider Being Awarded! The SIOP Awards, Scholarships, and Grants Program

Joseph A. Allen
Awards Committee Chair

It was truly a pleasure this year to serve as the SIOP Awards Committee Chair. I worked very closely with the amazing **John Kello**, associate chair, and the exceptional **Gena Cox**, chair-in-training. Additionally, this year **Cindy McCauley** joined the Awards Committee and led on assisting with and revising operations to ensure a smooth and meaningful experience for all the nominees from among SIOP's members. In total, 31 different awards, grants, scholarships, and fellowships comprise the awards program for SIOP. A total of $265,000 was available this awards cycle, and a large team of 29 Awards Subcommittee chairs and 179 subcommittee members volunteered thousands of hours reviewing the 172 nominations we received and identifying the 37 winners. Please check out the details about this year's winners' during the virtual conference opening session, the opening plenary, the *SIOP Salutes* booklet, and on the SIOP website.

None of these outcomes would happen without a massive amount of effort on the part of the Administrative Office at SIOP, the generous donations from members, the leadership of the SIOP Foundation, and countless hours from our many volunteers. I am truly humbled to be the latest in a long line of wonderful SIOP Awards Committee Chairs, and I look forward to John and Gena leading awards into the future.

Recently, there was a groundswell of interest in improving the SIOP Awards Committee operations. Specifically, it was realized that in 2001 there were only eight awards being offered by SIOP. In the next cycle, with the addition of the **Wayne Cascio** Scientist–Practitioner Award, 32 awards will be available for members. However, the structure of the Awards Committee has essentially remained the same, with a trio of chairs, many subcommittee chairs (one for each award), and numerous volunteers. The workload for the chairs became, over time, more than is reasonable to ask of volunteers, and the operations started to be impacted by this workload.

Therefore, with the unparalleled support of Membership Portfolio Officer **Tiffany Poeppelman**, Operations and Strategy Subcommittee Chair **John Scott,** and our esteemed SIOP President **Steven Rogelberg**, the Awards Committee proposed a major change to the structure and process of the awards program. Essentially, we are adding leadership positions within the awards program to assist with the management of the awards. Perhaps more importantly, the 32 awards are being split into two functional groups: (a) recognition awards and (b) scholarships and grants. The idea is that the recognition awards are those awards that acknowledge the outstanding work of members, whereas scholarships and grants are to assist with the education and groundbreaking research being performed. In other words, one is reflecting on achievements, and the other is building our membership into the future.

With these changes, members can expect more opportunities to serve as well as new awards, scholarships, and grants coming available in the near future. The professional manner of administering the awards will continue and will be better than ever. Most importantly, we will see great opportunity for all members at all stages of their careers to be awarded, be supported, and perhaps give back as well through meaningful donations of time and resources.

Now, with all the enthusiasm I can muster, I encourage all SIOP members to consider nominating themselves or others for awards. Also, consider applying for a grant or scholarship. To win an award or receive a scholarship/grant, the application materials must be excellent and in accordance with the criteria for the given award. Even still, many excellent submissions do not win every year because most awards can only have one winner. The best predictor of winning is persistence. That is, if you do not win the award or receive the scholarship/grant the first time, try again the next year, so long as you are eligible.

No, I cannot guarantee that you will win, even with multiple attempts. However, I can promise that the Awards Committee will give your nomination a fair, professional, diligent review. Further, the Awards Committee always follows a rigorous process for removing any conflicts of interest among our subcommittee members. The policy, available in the Awards Committee Operational Procedures on the Governance of SIOP website, is strictly enforced so as to ensure all nominations and applications are appropriately reviewed and bias is minimized.

It is my hope that as you review this year's award winners, you will do three things. First, congratulate the winners when you see them. Let them know how happy we all are at their successes (recognition awards) or their future success (scholarships and grants). Second, pick at least one award, scholarship, or grant to apply or be nominated for and proceed to do it. We need more nominees in nearly every award, so please consider this path! Third, think of those in your network and consider nominating them or encouraging them to apply for an award, scholarship, or grant. Too often, really great people go unrewarded and unheralded because they are also humble (and busy doing their amazing work). For more information, feel free to contact me or visit the awards section of the SIOP website.

Best Practices for Demographic Survey Items

Alexandra I. Zelin and Sertrice Grice

In October 2019, SIOP published its first "Better Practices in Surveying Demographic Information" report and proposed question set, chaired by **Lindsay Dhanani** and coauthored with **Enrica Ruggs** and **Jenna Eagleson**. They were tasked with developing an inclusive demographic question set that can be used by the community and explained why the proposed questions and response choices were presented and phrased a certain way. As they stated in their report

> Collecting demographic information is a ubiquitous practice among scientists and practitioners alike. Surveyors may collect this information from participants to ensure their sample is representative of the population or because they are interested in how psychological phenomena vary as a function of demographic characteristics. Practitioners working within organizations may similarly be interested in gathering this information from employees to monitor the demographic composition of their applicants and/or workforce, to accurately prepare Equal Employment Opportunity reports, or to internally assess the effectiveness of diversity efforts. Regardless of the purpose, it is important to carefully consider the way in which demographic information is collected from participants for several reasons. First, the way demographic data is collected can influence the accuracy of participant responses. For example, describing identities in ways that do not comport with how individuals self-identify might cause participants to choose an option deemed incorrect by the surveyor or to opt out of responding to the question altogether (Bauer et al., 2017; Moody et al., 2013). This can obscure the true demographic composition of the sample or lead to inaccurate conclusions about the effects of demographic group membership.
>
> In addition to reduced accuracy, demographic items can also harm participants if they are not inclusive or use terminology that is unintentionally derogatory. Identities and the way individuals represent them can be complex and survey items often ignore these intricacies by adopting simplistic demographic questions. As an example, many surveys often use binary gender items that only present respondents with the options of "male" or "female." This item would not recognize the many individuals who identify outside of the gender binary, and these participants may feel as though their gender identity is being delegitimized when it is not included as a response option. Having to select a response option that does not accurately reflect one's self-concept or that uses offensive language can also create frustration for participants (Hughes et al., 2016). For these reasons, we believe it is paramount to create demographic surveys that accurately capture the ways individuals personally represent their identities, are inclusive of the full range of identities individuals may hold and are free of potentially offensive terminology. The purpose of this report is to provide specific recommendations for the best practices in measuring and assessing demographic information as well as to highlight limitations with some commonly used demographic items.

However, demographic verbiage is in consistent flux, and after discussions among the authors, members of the Diversity & Inclusion portfolio, and feedback from the SIOP Climate Survey, we determined an update to the "Better Practices in Surveying Demographic Information" was needed. Chaired by Alexandra Zelin and in conjunction with Lindsay, Enrica, Jenna, **Brenton Wiernik, Theresa Hernandez, Sabrina Volpone, Isaac Sabat, Susan D'Mello,** and **Tiffany Poeppelman**, and reviewed by Sertrice Grice of the Institutional Research Committee (IRC), a 2021 update was published. There are two associated documents: The first includes the list of questions to include if asking demographic variables within a survey. The second focuses on the "why" and provides background information on the current state of demographic best practices.

Historically, the IRC would provide both documents to researchers looking to survey SIOP membership. After this update, the Membership Committee and the IRC discussed the value of requiring researchers to use the recommended demographics as a standard across any survey that wants to include demographic items. With the items standardized it would provide consistency, allowing for easier cross-project analyses. However, and most importantly, it would demonstrate recognition of and support for all SIOP members. The motion was brought to the Executive Board in the September 2021 meeting, and the motion passed. As a result, the recommended demographics were added as an appendix to the IRC guidelines, along with the following note that can be found under Section 2 in the guidelines:

> Note: SIOP has provided a pre-approved list of demographic items that can be included in surveys (see Appendix E). Any additional demographic items or changes to these items will require an explanation and are subject to IRC approval.

Overall, we anticipate that these recommendations for demographic best practices can serve as guidance for researchers and practitioners alike, both for SIOP- and non-SIOP-related surveys, data management, and general inclusive practices. As a note, this is a living document that will continue to be updated as changes happen in this space. We encourage you to check the website often to ensure you are using the most up-to-date version.

Resources:
- Recommended Demographic Survey Items
- Better Survey Practices Technical Report
- SIOP Surveys Webpage

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10 Fun Facts About SIOP's Members From 2021!

Membership Analytics Subcommittee

Throughout the year, the SIOP Membership Committee conducts analyses on the data collected through membership surveys and member profiles. This information is used to track membership trends that inform decisions about member benefits, investment areas, and SIOP events. As we look to the next SIOP year (May 2022–April 2023), our analytics goals include supporting SIOP's strategic initiatives, including recommendations around succession planning as well as better understanding our member engagement to create a society that embraces all of our members.

To keep sharing insights, we need your help! Please be sure your membership profile is up to date and encourage your friends—especially those who are new to SIOP or students—to complete their membership profiles. Filling out your profile helps us make data-driven member-related decisions and also helps members connect with each other (e.g., based on location or areas of expertise).

Filling out Your 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

As we look back on our findings from last year, we wanted to share 10 fun facts we collected based on membership data in 2021:

Interested in reading more fun facts? Check out our *TIP* article from 2020!

Have SIOP membership data requests for your committee or research efforts? Submit your request here, and be sure to review our latest Membership Data Governance Policy.

Talking About Reproducibility in ReproducibiliTea

Haley R. Cobb and Candice L. Thomas
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As members of the I-O psychology community, we are constantly learning, whether in class, in the lab, at our jobs, with podcasts and Twitter pages, or through conversations with our colleagues and peers. One important topic we are learning about is *open science*. Open science has been called "disruptive" (Vicente-Saez & Martinez-Fuentes, 2018, p. 428), an "irreversible paradigm shift" (Friesike et al., 2015, p. 598), and "a turbulent yet exciting" change (Arabito & Pitrelli, 2015, p. 1). Practicing open science oneself involves learning and adopting new skills (Arabito & Pitrelli, 2015), and the technologies that make open science possible are ever evolving (Scheliga & Friesike, 2014). Thus, it is important that graduate students and early career researchers in particular are well versed in open science principles and practices.

Open science is "shared and developed through collaborative networks" (Vicente-Saez & Martinez-Fuentes, 2018, p. 434) and is characterized by open access to and sharing of data, preregistration of hypotheses and study methodology, replication, reproducibility, and removing paywalls and increasing free access to information (including published, peer-reviewed articles; Banks et al., 2019). It is a direct challenge to the reproducibility crisis (e.g., Maxwell et al., 2015), which has resulted in part from incentives that favored new and exciting (read: *statistically significant*) findings (e.g., Nosek et al., 2012). By making study materials (e.g., data, methodology, hypotheses) more openly available, transparency, replicability, and self-correction in the psychological sciences, including I-O psychology, should be strengthened (e.g., Resnik & Shamoo, 2016; Vazire & Holcombe, 2020).

As the I-O community grows to value the benefits of open science, it is crucial that I-O psychologists and students of I-O psychology are equipped to adequately engage in open science practices. For students and early career researchers who are interested in being part of a community and engaging in discourse on open science, ReproducibiliTea might be an appropriate group to join.

I Know About Reproducibility, But What Is ReproducibiliTea?

ReproducibiliTea (https://reproducibilitea.org/) is a grassroots, global community of students and early career researchers that aims to discuss and learn about open science. As a formal member of the ReproducibiliTea community, individuals can create their own journal clubs, which are local groups, usually within one's university, that meet regularly to read articles, share materials, and ideate on open science topics. These topics can be philosophical (e.g., What does publication bias mean for the psychological sciences? Ferguson & Heene, 2012), cover the reasons why open science is needed (e.g., Why does replication even matter? Maxwell et al., 2015), or skill building (e.g., What are best practices for data sharing? Meyer, 2018).

Although researchers can independently read these articles without a journal club, the conversations, resource sharing, and community building of an open-science-focused journal club provides an easy springboard for enacting open science in your own work and translating general open science principles into I-O psychology research. It can be especially helpful for students and early career researchers who value the structure and community afforded to them. Through our local chapter, we have both access to a global community (whose aim is to improve the psychological sciences) and a personalized structure that allows us to learn within our own community about open science as it relates to our specific research and education. Here, we will share our experiences in creating and participating in a local chapter of ReproducibiliTea and provide some tips on how you can create or get involved in your own local open science community.

The Saint Louis Area Journal Club

The first author organized the development of a ReproducibiliTea journal club in St. Louis, MO, in January 2021, and the group's first meeting occurred in February 2021. We reflect on our experiences during the first year of this new journal club, and, stemming from our personal experiences, we offer some advice for starting your own journal club or getting involved with the ReproducibiliTea community.

The First Year

Our local chapter of ReproducibiliTea (the St. Louis Area Journal Club) was founded by the first author in the spring of 2021. In addition to membership with this global community, we have helped foster our own internal community with our journal club. The first author created a reading list for the first year's gatherings after reviewing reading lists from other journal clubs and messaging with ReproducibiliTea members. Because most of the individuals in our journal club would likely be within I-O psychology, the reading list was geared toward this field of study. However, the journal club was accessible to anyone at Saint Louis University who wanted to join. The reading list covered myriad topics, including an introduction to open science (e.g., Ferguson & Heene, 2012), researcher degrees of freedom (e.g., Wicherts et al., 2016), and questionable research practices (e.g., Flake & Fried, 2020). We also invited a guest speaker, Dr. Julia Strand, to discuss her experience with transparency, the Society for the Improvement of Psychological Science (SIPS), and open science generally. (She has a great popular press article on handling an error in her own published work; Strand, 2020).

Creating an Inclusive Community

As we mentioned, the journal club we are part of is composed mainly of people within our I-O program (e.g., students, faculty), but we are not exclusive. We believe that we have much to learn from other students and early career researchers, and we have active participants from other programs (e.g., experimental psychology). Thus, we aimed to capture open science broadly to be inclusive of members from other disciplines, and the readings and discussions typically focused on open science in general.

However, our discussions do capture experiences pertinent to I-O psychology. Many of our discussions focus on conducting research that aligns with open science practices, and we read articles published in I-O-focused journals (e.g., Banks et al., 2019). Thus, each of us is well versed in open science practices and how they pertain to research in I-O. Furthermore, many of our journal club members who are in I-O psychology are not interested in academic careers and plan to pursue applied careers. These journal club members force us to think about and find resources on how open science can benefit practitioners, such as finding articles that are open access or preprints (e.g., Vazire & Holcombe, 2020) and understanding validity implications that arise from open science (e.g., Vazire et al., 2020). Overall, regardless of a journal club member's path in academia or the applied world, we have a safe space to be curious and ask questions about open science, thus facilitating our learning and education.

Next Steps

For the authors of this article and members of the St. Louis Area Journal Club, we are starting our second year of our journal club meetings. (Readers can access last year's materials here: https://osf.io/n5438/.) Many of the readings from 2021 were geared towards getting us to think about open science, learning the fundamentals, and considering how open science impacts all parts of the research process. Our aim for 2022 is to help journal club members learn more actionable steps for open science, such as learning new tools and technologies, creating mock registered reports, and sharing resources in an online repository. With last year's journal club as a foundation to our knowledge of open science, we hope to gain more tangible, practical skills to facilitate our involvement in open science. We also hope that our group will continue to grow, perhaps to include faculty members from other programs or undergraduate students.

Tips for Growing Your Own Local Open Science Community

ReproducibiliTea is accessible to anyone interested in building or being part of the open science community. We have found that having the local chapter helps us to tailor our journal club to our needs, which includes content, scheduling, and safety precautions during the ongoing pandemic. Perhaps most importantly, having the local journal club facilitates a sense of camaraderie and learning about other members' interests outside of formal class time.

Start or Join a Local Chapter of ReproducibiliTea

To start the local journal club, the organizer of the group coordinates with ReproducibiliTea to create an OSF page specific to their journal club. (To see the St. Louis Area Journal Club's OSF page: https://osf.io/n5438/). As there are journal clubs all over the world, started by graduate students and early career researchers across disciplines, OSF pages for many journal clubs are available (https://osf.io/cfby7/). Members of this community, therefore, have access to resources, advice on how to create a structure for journal clubs, and opportunities to interact with people interested in open science all over the world. (We even have a Slack channel!) ReproducibiliTea offers other ways to learn about open science, including joining an existing journal club or independently reading from a selected list of sources.

Know Your Audience

As I-O psychology students, researchers, and practitioners, it can be helpful to tailor the readings and conversations specifically to I-O. For example, we found it helpful to read Banks et al. (2019) and Bergh and Oswald (2020), as this helped us keep up with trends within our field. These readings are also encompassing enough to be relevant to our non-I-O journal club members. Our group also consisted of students who were interested in applied jobs and not just academic research. Although the authors of this paper focus on research, several students in the group expressed that they would find more benefit if we could also discuss applied I-O and open science. This point also helped us to realize that conversations on open science and I-O might benefit other members of SIOP, and we were galvanized to write this article, as well as create an alternative session for this year's SIOP conference covering education and open science. Thus, understanding the needs of our journal club members allowed us to tailor the readings and conversations to I-O while still being inclusive of members from other disciplines and with various career ambitions. We encourage anyone interested in starting their own journal club to consider the interests of all journal club members and to be as inclusive and accessible as possible.

Accessibility and Extracurriculars

Accessibility is important to us. We know time is a valued resource, and not everyone was able to attend sessions live via Zoom. To make the group more accessible, we started a Slack channel for our own local journal club, which anyone who is interested in can join. We share various resources, articles, questions, and announcements with this Slack channel, and this helps us keep in touch in-between meetings. Another extracurricular activity we provided was the meeting with our guest speaker, Dr. Julia Strand. Journal club members were encouraged to watch a recorded lecture where Dr. Strand discusses transparency in detail (Strand, 2021); this allowed our members to learn about Dr. Strand's experience before attending the meeting (which was formatted as a Q&A) or as a replacement if they could not attend the meeting. Thus, we suggest supplementing the journal club meetings with activities beyond the readings to help further create a sense of community, including for members who are unable to attend meetings.

Conclusion

Open science isn't going anywhere. Learning about open science, including how to do open science, is important for I-O psychology students and early career researchers in particular, and we have found that being part of the ReproducibiliTea community has benefited us in numerous ways. We have gained two communities: a global community and a local community, both of which are invested in open science and making the psychological science, including I-O psychology, more robust, transparent, and accessible. We encourage the readers of this article to consider creating informal practices to learn about open science, including joining the ReproducibiliTea community and starting your own local journal club.

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If You Build It (Right), They Will Come: Building a Sustainable Local I-O Group

Bill Handschin, Maryalice Citera, and Denis Ochieng
Local I-O Group Relations Committee

The Local I-O Group Committee's November Leadership Forum focused on building sustainable local organizations that offer value to their membership. Participants in this forum represented the leadership of local I-O groups at various stages of development, from nascent organizations just starting to old and established organizations updating and refreshing their approach. All were interested in providing opportunities for I-O psychologists to congregate, share information about new developments in the field, build and grow personal relationships, and connect more effectively with their community. During the leadership forum, participants shared their experiences in breakout groups discussing what they are currently doing, what works, and the challenges they are facing. Two main topics emerged from the conversation: building sustainable organizations and creating value for local group members.

Building a Sustainable Organization

The discussion primarily focused on building sustainable local groups, using underlying mechanisms and structures that help support and maintain the organization through its evolution, including changes in leadership, environmental disruptions (like COVID-19), and membership recruitment and retention. In terms of building a sustainable organization, the following themes emerged: bylaws, leadership and the leadership pipeline, preserving organizational knowledge and records, communication and marketing, and the fee structure. When building a sustainable organization, structure should flow from purpose and reflect the needs of the membership of the local group. Hence, our second theme is creating value for members.

Bylaws

Bylaws establish consistency in how the organization is run. Bylaws describe the structure of the organization (the composition of the board of directors) and rules and procedures to be followed. Bylaws define the purpose of the group, how often the group meets, and the nature of these meetings. Bylaws help identify who is and who is not a member, who the organization is designed to serve, and what qualifications are necessary for membership.

Local groups differ in terms of membership models. Membership may be restricted to SIOP members, or membership could be defined broadly—including members with a variety of different degrees, practices, or disciplines (HR or OD, for example). Broader membership requirements offer a potentially larger membership base and a greater diversity of perspectives. Too much diversity, however, may make it hard to serve the needs of group members. For example, continuing education might be a goal for licensed I-O psychologists but less important for others. Bylaws should establish criteria (degrees, work experience, etc.) for membership and the mechanism for becoming a member.

Established groups reported having more detailed bylaws. Nascent groups were less likely to have written bylaws and to have embraced flexibility. Bylaws can help the organization become more consistent over time, and they will be required if the organization applies for not-for-profit status or opens a bank account.

Leadership and the Leadership Pipeline

Bylaws establish the leadership structure and the process of becoming a leader. A stable means of providing leadership for the group is essential for the continuity and sustainability of the group. With a single leader, the burden of operating the organization falls on that one person's shoulders. Even with a dedicated core group supporting the leader, it is hard to push action and the organization risks an early demise due to burnout of the leader. When there are very few "hands," completion of the work is dependent on those few hands. Leadership concentrated in a few hands may be necessary initially, but it creates problems when key people leave the organization. Having more members in leadership means that tasks can be delegated and the demands of running the organization spread among several members.

Several leadership pipeline models were discussed. A basic decision is the mechanism for selecting leaders: nomination, appointment, or election. Key to this would be the roles that need to be filled. Some suggested roles include president, vice president, treasurer, secretary, alumni/graduate student/undergraduate student coordinator, social media coordinator, IT support, website design and maintenance, and a person who schedules meetings and programs.

There are a variety of processes that organizations can use to maintain a leadership pipeline. Some organizations fill the pipeline by asking for a 2- to 4-year commitment. For example, individuals can be selected in advance as "elect," giving them time (6 months to a year) to learn the office that they will be holding the following year. In a different model, individuals are selected first to secretary, then move to treasurer, then vice president, then president, spending a year at each position. These and other methods of creating a leadership pipeline allow for continuity in the organization and ensure that organizational knowledge is retained, and that each office holder learns their role before they assume the responsibilities and duties of that role. Leadership succession planning is a must, and there needs to be a pipeline of trained replacements.

Preserving Organizational Knowledge and Records

The primary concern discussed was the preservation of organizational knowledge and systems to make that knowledge available to all who have a need for that information. Documenting everything and establishing a stable and accessible storage system is key. If information is held in the head of one person, the organization is vulnerable to losing that information. When leadership roles get passed on, there should be a mechanism for passing on the knowledge and organizational "memory." One suggested system: a physical box of documents that can be handed off from one leader to the next. Another option is the use of Google Doc folders that serve as an archive for the information. Sensitive parts of the archive can be restricted to a limited group of individuals with a need to know by giving them security access. Critical pieces of information included items like ownership of the domain name for the organization's website, processes and procedures, and the rationale for past decisions. The structure should allow for the orderly passing of information to the next generation to help maintain the continuity of the organization.

Communication and Marketing

Communication between leadership and membership is critical. Organizations need to market their programs and disseminate information about upcoming events. Membership outreach, flyers, connecting with graduate programs, posting to social media, and reaching out directly to potentially interested practitioners can help to maintain engagement of current members and support recruitment of new members. Wild Apricot software was recommended as one tool for growing and retaining membership. It is useful for processing membership fees and for communicating with membership.
An active website (and perhaps presence on social media) will make your organization more visible. WordPress was identified as one tool to establish a web presence. Typical information available on a website are a description of the organization, identification of the officers, identification of sponsoring companies, posting of the bylaws, announcement of programs (and perhaps recordings of programs for

later viewing), job postings, and a blog (which can provide online exposure for students). Absent updated information and modes of communication, membership will lose contact, then interest.

Fee Structure

Running a sustainable local group usually costs money unless the organization can find in-kind donors of meeting space and other services. Costs are associated with communication and marketing, maintaining a web presence, and running and presenting programs, if the organization chooses to engage in those activities. There is a necessary balance between keeping fees at a level to support the organization's activities and the level individuals are willing to invest to maintain their membership. For example, hosting a meeting can involve costs for the speaker, the venue, materials, AV support, and food and beverages. Venues vary in cost. Meetings held in hotel spaces often have a higher price tag than those held on a college campus.

Experience of more established organizations suggests that collecting an annual membership fee may be easier for both the organization and the members than collecting per-event fees. Annual fees generate a more predictable and stable revenue stream for the organization. Facilitating how members pay their fees will encourage the retention of members. One suggestion was an automatic membership renewal system, with opting out as an option rather than opting in, making it easier for members to continue membership. Fees per event may still be useful for the occasional visitor. The fee structure may include reduced fees for students. Ultimately, fees must be perceived as proportional to the value received.

Adding Value for Members

Membership Engagement

Networking and programming are the primary reasons most members give for joining local I-O groups. Involving members in the running of the organization is another way to increase engagement. Board membership is a plus on résumés, especially for students. Members establish ownership in the organization through their volunteer efforts. Here are some additional ideas that may help deliver value, increasing the likelihood that your members will stay active and engaged:

Networking

Networking is one of the most important reasons members give for joining. Experienced members want to visit with old friends, whereas those newer in the field want to develop contacts. Networking works better if you encourage interactions with and among new members as well as old friends. Younger members are often reluctant to initiate conversations with older members. It is important to find ways to break down these barriers to making new connections. Drawing members from a diverse background also adds to the value of the networking experience. Creating a group identity members can coalesce around will also help.

Programming

Programming is a key part of maintaining member engagement and retaining members. In a new organization, go for quick wins, like a prominent speaker addressing a current hot topic. This is also good advice for restarting and revitalizing programming each year. Do not let the programming get stale by repeating similar topics or avoiding controversial topics. Keeping the programming fresh and including controversial topics for open discussion will keep the interest and engagement of the members. Programming offers members the opportunity to stay current and to interact with experts in the field. Members in the group often have expertise and knowledge to share. Workshops that offer professional development (like training on R) are popular, quickly fill a classroom, and offer value to experienced practitioners as well as to students. Mentoring programs have been enthusiastically received, especially by students and less-experienced members.

The format of the program presentation is also important. In the last 2 years, local I-O groups have had an opportunity to experiment with virtual and hybrid formats, supplanting the in-person format that was typical previously. Virtual presentations can keep the costs down, eliminating the need to rent space or to provide food or refreshments. They can help in maintaining or reducing membership fees by keeping budgeting and spending at the right level. For in-person meetings, finding affordable, usable space is the issue. Hotel venues are pleasant and offer food and refreshment, but they tend to be expensive. University sponsors may be able to provide a location at a cheaper rate than commercial venues, as might other public venues. In fact, at least one local group started as a seminar in the school's I-O program, later developing into a local group that included professionals working in the field along with students.

Virtual meetings also present new ways to connect. Virtual meetings can attract members who are geographically dispersed, who would otherwise not make the trip to attend. Speakers may be available virtually who could not otherwise participate. With no transportation expenses, speakers may present for free or for a more modest fee. Networking can be encouraged if the first half hour of the meeting is designated for that purpose. Random breakout rooms create smaller, more intimate spaces (three to five members) that allow more uniform participation and engage more members. It is also important to note that Zoom fatigue can cause attendance to plummet. Groups have used hybrid meetings, with some members meeting in person and others joining in virtually. Varying the types of programming offered (for example, a half-day or full-day workshop) might make it easier for members to attend and for planners to coordinate instead of offering only short programs. Programming is one of the deliverables of the organization.

Continuing Education

About 20% of SIOP members are licensed, and hence are required to participate in continuing education (CE) to maintain their licenses. It is important to note that approval of the local licensing board is required for CE credits (or units; CEUs). If the CEUs are approved locally, they might not be accepted by licensing boards in other locations. Getting APA or SIOP sponsorship would probably alleviate the portability problem, although they might also impose additional requirements to meet specific objectives. For those requiring CEUs, the opportunity to earn them in a local group adds value to local-group membership and may alone justify the cost of the membership fee.

Afterword

We invite you to visit the SIOP Local I-O Groups Committee's Toolbox (which includes accumulated wisdom to help build a local I-O group, such as a bylaws template, a list of existing local I-O groups and leaders with contact information, additional resources for leaders, and an event calendar of committee activities) on the SIOP website. The link is:
https://www.siop.org/Portals/84/Local%20Group%20Toolkit%20Dec%202020.pdf

United Nations Sustainable Development Goals Make an Appearance at SIOP's Annual Conference

Lauren Moran, Jenna McChesney, Irina Kuzmich, and Gonzalo Munoz




In 2015, the United Nations Member States adopted the 2030 Agenda for Sustainable Development, which outlined the 17 Sustainable Development Goals (SDGs) for developing and developed countries to work toward together. These goals include ending poverty, achieving gender equality, ensuring the availability and sustainability of clean water and sanitation systems, and more. By working to address multiple global issues at once, the SDGs acknowledge how they are often interconnected and that the achievement of one can mean the alleviation of another. To date, the UN recognizes 5,503 actions that have been taken toward the fulfillment of the SDGs. However, with a deadline of 2030, there is much work that still needs to be done.

Though some I-O psychologists may not have considered the connections between their work and the SDGs, there is great potential for I-O to influence the UN's SDG efforts. In fact, as an NGO with special consultative status to the United Nations Economic and Social Council (ECOSOC), SIOP has already been doing its part to contribute toward the achievement of these goals. According to **Julie Olson-Buchanan,** chair and main representative of the SIOP UN Committee, "The SDGs are a compelling way to frame or structure our discipline's prosocial work. I-O psychology has a great deal to contribute to advancing the UN's mandate, and by focusing on meeting these ambitious goals our field can make a difference for the greater good." Although the field of I-O psychology does not traditionally categorize its research and practice in terms of the areas identified in the SDGs, much of the work done by I-O psychologists relate to the SDGs in some way.

> **I-O psychology has a great deal to contribute to advancing the UN's mandate, and by focusing on meeting these ambitious goals our field can make a difference for the greater good.**

In fact, last year, we (a team of interns serving on the SIOP UN Committee) compiled a list of 2021 SIOP Annual Conference sessions relating to the SDGs. The goal of this project was twofold: (a) to see how many sessions could be linked to one or more SDGs and (b) to create a conference guide for conference attendees with specific interests in one or more of the SDGs. If a conference goer was most interested in learning more about research and practice related to Gender Equality (SDG #5), the committee wanted to be able to recommend a list of related conference sessions for them to attend.

To do this, our team scoured SIOP's conference website and read each session's abstract to determine whether it related to an SDG, and if so which one. In the end, SIOP distributed an interactive flier with lists of sessions related to one or more SDGs online for conference goers to explore prior to the conference. The number of sessions related to the SDGs was also recorded. Out of the 750 sessions at last year's conference, more than 250 related to one or more SDGs! That's over a third of all the sessions!

Although our team anticipated that several sessions would be related in some way, we did not expect to be able to identify so many. But perhaps the number of sessions the team found shouldn't come as a surprise. Caring about human welfare is central to I-O psychology and its mission. If you read SIOP's mission statement, you'll notice "enhancing human well-being" is listed first and foremost.

Out of the 750 sessions at last year's conference, more than 250 related to one or more SDGs!

Some sessions were easily categorized under one SDG. For example, **Jo Alanis,** a graduate student from Michigan State University, presented a research poster at the 2021 annual conference titled, "Intersectionality of Immigrant Status and National Origin in Hiring Outcomes." Through this research, Alanis explored whether job applicants' immigrant status influences hiring outcomes and found that immigrant candidates were rated lower on job suitability ratings than nonimmigrant candidates. Her research was categorized as furthering SDG #10 (Reduced Inequalities). Our team of interns agreed that better understanding how those with immigrant status are included or excluded from the workforce directly relates to Target 10.2, which is to "empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status" by 2030.

Other sessions were a bit trickier to categorize under just one SDG. Oftentimes, we found ourselves spending more time discussing *which* SDG a particular session related to the most rather than *if* a session related to the SDGs at all. For example, in her 2021 poster session titled "Is This Training for Her? Effects of Gendered Language on Entrepreneurial Training," **Liz Tracy,** a doctoral candidate from North Carolina State University, tested whether people perceive agentic qualities as more important than communal qualities for success in an entrepreneurial training program and whether that perception can be altered by advertising the program in more communal terms. Although this session also arguably relates to SDG target 10.2, our team felt it most aligned with SDG #5 (Gender Equality) due to the emphasis placed on gender in the abstract and title. However, arguments could also be made for it being categorized under SDG #8 (Access to Decent Work) and Target 8.6, which is to "substantially reduce the proportion of youth not in employment, education or training" by 2030.

The difficulty in choosing one single SDG for each session illustrates something important about the SDGs: These goals are highly interconnected. As stated on the UN SDG website, "ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth—all while tackling climate change and working to preserve our oceans and forests." Similarly, when we, as I-O psychologists, work toward improving worker well-being and performance, our work often goes hand in hand with strategies that improve health, reduce inequality, and increase access to quality education and decent work for all.

Based on the categorization of last year's conference sessions, our team identified nine SDGs that appear to be most relevant to the SIOP community. They are SDGs 1, 3, 4, 5, 8, 10, 12, 16, and 17.

Of the SDGs pictured above, the ones that were particularly well represented at last year's conference include (in order) Reduced Inequalities (SDG #10), Good Health and Wellbeing (SDG #3), and Access to Decent Work (SDG #8). You can click here to see which sessions were categorized under each. The number of sessions related to these SDGs not only illustrates how I-O psychology *can* be leveraged to help further the goals of the UN but how I-O psychology *is* being leveraged to do this already.

We interns are eager to repeat this categorization project for the 2022 SIOP Conference. In January of 2022, we reached out to the 2022 Annual Conference Chair and asked for this year's program in advance. Though the full program was not yet available, our team was able to secure a list of titles for most accepted submissions, including panel discussions, symposia, alternative presentations, master tutorials, community of interest sessions, IGNITE! sessions, and Friday seminars.

Although descriptions for the sessions were not included, our team conducted a preliminary review of the titles to broadly identify which SDGs are represented this coming year. We found that many of the same SDGs identified last year were applicable to this year's sessions. SDG #10 (Reducing Inequality) was again by far the most represented, and SDG #5 (Gender Equality) appears to have significant representation as well. Additionally, a large number of sessions mapped onto SDG #3 (Good Health and Well-being) and SDG #4 (Quality Education). Finally, as would be expected, many sessions were related to SDG #8 (Decent Work for All). Many of the sessions relate to more than just one of these SDGs. For example, it is expected that the 2022 session titled "Bringing Together Maternity Experiences in the Workplace From Pre- to Postnatal" will be related to both Good Health and Well-Being (SDG #3) and Gender Equality (SDG #5). A preview of a couple of 2022 sessions related to each of these five SDGs are listed below.

Preview of 2022 Annual Conference Sessions That Relate to the SDGs

3 GOOD HEALTH AND WELL-BEING

- Bringing Together Maternity Experiences in the Workplace From Pre- to Postnatal
- Damaging Downtime: Attitudes and Behaviors That Affect Recovery, Sleep, and Health

4 QUALITY EDUCATION

- Experiential Learning in Graduate Programs: A 360-Degree SME Perspectives
- Virtual Leadership Development Done Right: Best Practices and Lessons Learned

5 GENDER EQUALITY

- Bringing Together Maternity Experiences in the Workplace from Pre- to Postnatal
- The Current State of Women in Leadership: A Story of Barriers and Bias

- Transforming the Workplace: The Future of Flexible Work
- Working on Purpose: Discussing Meaning and Purpose in the Workplace

- Beyond SCOTUS' Bostock Decision: What's Next for LGBTQ+ Protections in the Workplace?
- Facilitators of Positive Work Experience for Employees With Disabilities

The sessions listed above are meant to serve as only a preview to some of the 2022 sessions related to the SDGs. A complete matrix will be created and shared after the full program is published online. The committee plans to share the completed matrix by mid-April, prior to the beginning of the conference. Keep an eye out for it on Twitter, LinkedIn, and through I-O discussion lists. If you believe that your session aligns with one of the SDG Goals, please reach out to one of us to ensure it is featured in this year's matrix.

If you're interested in learning more about how I-O psychologists' work and research can be used to further the United Nations SDGs, consider checking out the committee's website. This is not the first time the SIOP UN Committee's work shows how SIOP members' work relates to the SDGs. For example, the committee has worked with other SIOP members to create annotated bibliographies to organize and disseminate I-O expertise on each SDG.

Julie Olson-Buchanan also shared that the most influential work she has witnessed has been the connections created between those interested in the UN's efforts. "I think SIOP has made the biggest impact on SDG #17 [Partnerships for the Goals] by focusing on partnerships and building bridges with other societies and related fields to collectively make a difference." In addition to connecting individual I-O psychologists with prosocial work, the SIOP UN Committee partners with organizations across the UN system, such as UNESCO, the Psychology Coalition of NGOs Accredited at the United Nations, and UNICEF. To learn more about the committee, the work they do, and ways you can get involved, check out the SIOP UN website and past *TIP* articles.

Call for Nominations: Nominate the Next Professional Practice Series Editor!

SIOP is now soliciting nominations for the position of editor of the Professional Practice Series. The new series editor will be selected by the Publications Board and approved by the Executive Board. The selected series editor will begin working with Incumbent Editor **Elaine Pulakos** beginning **December 2022** and will assume duty beginning **April 1, 2023.** The series editor must be a SIOP Fellow or Member. Any SIOP Fellow or Member can nominate individuals for the editorship. Self-nominations are also welcome. SIOP is committed to diversity, and to that end we encourage nominations involving historically underrepresented groups and international members.

Professional Practice Series Description

The series is designed to provide industrial-organizational psychologists, organizational scientists and practitioners, human resource professionals, managers, executives, and those interested in organizational behavior and performance with volumes that are insightful, current, informative, and relevant to best organizational practice. The series volumes are guided by five tenets designed to enhance future organizational practice:

1. Focus on practice but grounded in science;
2. Translate organizational science into practice by generating guidelines, principles, and lessons learned that can shape and guide practice;
3. Showcase the application of industrial-organizational psychology to solve problems;
4. Document and demonstrate best industrial and organizational practices;
5. Stimulate research needed to guide future organizational practice.

The series volumes seek to inform those interested in practice with guidance, insights, and advice on how to apply the concepts, findings, methods, and tools derived from research in industrial-organizational psychology to solve organizational and human resource related problems.

Each volume is focused on one important theme or element of I-O practice and is usually composed of 10–15 separately authored chapters related to the overall theme of the volume. The chapter authors are solicited and selected by the volume editor(s) in consultation with the series editor and the series editorial board. The final selection of authors and the editorial quality of the chapters is the responsibility of the volume editor(s), who may seek consultation with the series editor as they see fit. The intent is to publish approximately one new volume each year.

Position Description

The series editor is appointed to a 5-year term and is responsible for managing the production of series volumes, including identifying and soliciting volume editors and ideas, and assisting volume editors with identifying chapter authors and ensuring chapter quality, as needed. The series editor is assisted by a series editorial board, which is assembled by the series editor in consultation with the SIOP Publication Board.

Requirements for Series Editor

It is highly desirable that series editors be experienced practitioners. Practitioners would include I-O psychologists in academic or applied research organization positions for whom applied practice is a substantial component of their position. That is, university faculty who devote virtually all of their time to teaching, research, and service would typically *not* be recruited as a series editor, unless their academic appointment was recent and they had substantial practice experience in a previous position. Beyond being expert in particular areas of practice, the series editor should have a broad perspective of I-O psychology, including both its scientific base and the full spectrum of policy and practice applications. Finally, the series editor should have excellent time-management and organization skills, and should be quite responsive on email.

Information for Nominees

On average the series editor devotes approximately half a day per week to editorial responsibilities, although the actual time spent in any given week is highly variable. The most time-intensive aspects of the series editor position are the identification and recruitment of the individual volume editors and the provision of feedback to volume editors regarding volume proposals and chapter authors. The series editor is supported by the Professional Practice Series editorial board, which usually consists of 5–7 members and assists in developing ideas for volumes, recruiting volume editors, and overseeing the development of volume proposals. Potential volume editors can be solicited and recruited in many ways (e.g., issuing a call for ideas and proposals for a volume), and it is the series editor's responsibility to use all available means. The editorial quality of a specific volume is the primary responsibility of the volume editor, with advice and consultation from the series editor and committee.

Other demands include helping to advertise and market the series (e.g., suggesting advertising copy, potentially writing articles or contributing to brief videos to publicize the series) and meeting with editorial board members, volume editors, SIOP's publications officer, and the series publisher's representatives at SIOP and/or virtually.

Nomination and Application Information

If you are interested in serving as series editor, or if you know someone who might, please submit your nomination via email by **August 22, 2022** to **Reeshad Dalal** (rdalal@gmu.edu) with email subject line "**PPS Editor Nomination**." Only those individuals nominated by this date will be able to submit application materials. If you are nominating another person, please check with that person *beforehand* to ensure that they are able and willing to serve if selected. Nominations need only be a brief letter announcing the person's intention to apply. Additionally, it is possible that we will choose two coeditors rather than a single editor—and therefore each nomination should explicitly indicate whether or not the person would be willing to be paired with a coeditor.

Subsequently, all nominated individuals should submit their application package by **September 26, 2022** to **Reeshad Dalal** (rdalal@gmu.edu) with email subject line "**PPS Editor Application**." Each application package should include electronic versions of a current CV, three letters of recommendation from SIOP Fellows or Members, and a statement describing a vision for the series. Letters of recommendation should not exceed two (2) double-spaced pages in length, describe the candidate's qualifications for the position, and be submitted along with the rest of the application in the same email (as opposed to in separate emails). The vision statement should not exceed three (3) double-spaced pages in length and should describe plans to address issues such as maintenance or enhancement of the quality of the publication, expansion of its visibility, and increasing of its sales. Where appropriate, planned changes for the operation of the publication should also be described.

SIOP Publications Board
Reeshad Dalal (Series Editor Selection Committee Chair)
Angelo DeNisi
Alexis Fink
Satoris Howes
Steve Kozlowski
Kevin Murphy
Elaine Pulakos

Call for Nominations: Nominate the Next Organizational Frontiers Series Editor!

SIOP is now soliciting nominations for the position of editor of the Organizational Frontiers Series. The editor will be selected by the Publications Board and approved by the Executive Board. The selected series editor will begin working with Incumbent Coeditors **Kevin Murphy and Angelo DeNisi** beginning **December 2022** and will assume duty beginning **April 1, 2023.**

The series editor must be a SIOP Fellow or Member. Any SIOP Fellow or Member can nominate individuals for the editorship. Self-nominations are also welcome. SIOP is committed to diversity, and to that end we encourage nominations involving historically underrepresented groups and international members.

Organizational Frontiers Series Description

Launched in 1983 to make scientific contributions to the field, this series publishes books on cutting-edge theory and research derived from practice in organizational and industrial psychology, and related disciplines. The goal of the series is to inform and stimulate research for SIOP members (students, practitioners, and researchers) and people in related disciplines including other subdisciplines of psychology, organizational behavior, human resource management, and labor and employment relations. The series is designed to provide I-O psychologists, organizational scientists and practitioners, human resource professionals, managers, executives, and those interested in organizational behavior and performance with volumes that are insightful, current, informative, and relevant in the conduct of research and practice in the organizational sciences.

Each volume is focused on one important theme or element of I-O research and is usually composed of 10–15 separately authored chapters related to the overall theme of the volume. The chapter authors are solicited and selected by the volume editor(s) in consultation with the series editor and the series editorial board. The final selection of authors and the editorial quality of the chapters is the responsibility of the volume editor(s) who may seek consultation with the series editor as they see fit. The intent is to publish approximately one new volume each year.

Position Description

The series editor is appointed to a 5-year term and is responsible for managing the production of series volumes, including identifying and soliciting volume editors and ideas, and assisting volume editors with identifying chapter authors and ensuring chapter quality, as needed. The series editor is assisted by a series editorial board, which is assembled by the series editor in consultation with the SIOP Publication Board.

Requirements for Series Editor

It is highly desirable that series editors be experienced researchers who work in academic or applied research positions for whom the conduct and application of research in the organizational sciences is a substantial component of their position. The series editor should also have a broad perspective of I-O psychology, including both its scientific base and the full spectrum of policy and practice applications. Finally, the series editor should have excellent time-management and organization skills, and should be quite responsive on email.

Information for Nominees

On average, the series editor devotes approximately half a day per week to editorial responsibilities, although the actual time spent in any given week is highly variable. The most time-intensive aspects of the series editor position are the identification and recruitment of the individual volume editors and the provision of feedback to volume editors regarding volume proposals and chapter authors. The series editor is supported by the Organizational Frontiers Series editorial board, which usually consists of 5–7 members and assists in developing ideas for volumes, recruiting volume editors, and overseeing the development of volume proposals. Potential volume editors can be solicited and recruited in many ways (e.g., issuing a call for ideas and proposals for a volume), and it is the series editor's responsibility to use all available means. The editorial quality of a specific volume is the primary responsibility of the volume editor, with advice and consultation from the series editor and committee.

Other demands include helping to advertise and market the series (e.g., suggesting advertising copy, potentially writing articles or contributing to brief videos to publicize the series) and meeting with editorial board members, volume editors, SIOP's publications officer, and the series publisher's representatives at SIOP and/or virtually.

Nomination and Application Information

If you are interested in serving as series editor, or if you know someone who might, please submit your nomination via email by **August 22, 2022,** to **Reeshad Dalal** (rdalal@gmu.edu) with email subject line "**OFS Editor Nomination**." Only those individuals nominated by this date will be able to submit application materials. If you are nominating another person, please check with that person *beforehand* to ensure that they are able and willing to serve if selected. Nominations need only be a brief letter announcing the person's intention to apply. Additionally, it is possible that we will choose two coeditors rather than a single editor—and therefore each nomination should explicitly indicate whether or not the person would be willing to be paired with a coeditor.

Subsequently, all nominated individuals should submit their application package by **September 26, 2022,** to **Reeshad Dalal** (rdalal@gmu.edu) with email subject line "**OFS Editor Application**." Each application package should include electronic versions of a current CV, three letters of recommendation from SIOP Fellows or Members, and a statement describing a vision for the series. Letters of recommendation should not exceed two (2) double-spaced pages in length, should describe the candidate's qualifications for the position, and should be submitted along with the rest of the application in the same email (as opposed to in separate emails). The vision statement should not exceed three (3) double-spaced pages in length and should describe plans to address issues such as maintenance or enhancement of the quality of the publication, expansion of its visibility, and increasing of its sales. Where appropriate, planned changes for the operation of the publication should also be described.

SIOP Publications Board
Reeshad Dalal (Series Editor Selection Committee Chair)
Angelo DeNisi
Alexis Fink
Satoris Howes
Steve Kozlowski
Kevin Murphy
Elaine Pulakos

Membership Milestones

Jayne Tegge
Volunteer and Member Services Manager

Gold Star Member (50+ year member!)
Victor Vroom

New Sterling Circle Members (25+ year member)
Terri Shapiro Susan McFarlin Len White

Welcome these New Professional Members

Jannina Aristy	Vaclav Linkov
Larry Baider	Rena Lunzer
Deanna Ball	William Luse
Jiang Bian	Kena Mayberry
Tiffani Chen	Merri McCann
Karisol Chévere	Jenny Morton Eagen
Shabreena Danz Lopez	Saisha Nanda
Melissa Doman, MA	Weiwen Nie
Michael Donaldson	Jennifer Posa
Noam Farago	Mattia Prosperi
Nicole Francavilla	Corin Ramos
Dalia Gonzalez	Natalie Reinfeld
Monica Greene	Bianca Reyes
Lisa Grefe	Brooklyn Reyes
Christina Guthier	Perri Richman
Jake Harter	Apurva Sanaria
Edwyna Hill	Rachel Saunders
Margaret Horner	Sarah Schillen
Kristen Ingalz	Madison Shatzer
Michelle Kalbeitzer	Alyssa Siegel
Susan Kamin	Lehan Stemmet
Isaak Kifle	Rachel Stewart Johnson
Laura Kokinda	Shannon Welsh
Leslie Leutbecher	Joseph Westlin
Christopher Linke	Brendon Woody

Members in the Media

Amber Stark
Marketing and Communications Manager

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 December 12, 2021, through March 6, 2022. We share them on our social media and in this column, which you can use to find potential collaborators, spark ideas for research, and keep up with your fellow I-O colleagues.

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 email them to astark@siop.org.

Neurodiversity

Ludmila Praslova on neurodiversity discrimination: https://hbr.org/2021/12/autism-doesnt-hold-people-back-at-work-discrimination-does

Ludmila Praslova on myths about neurodivergent people: https://www.fastcompany.com/90706149/neurodivergent-people-make-great-leaders-not-just-employees

Mental Health, Burnout, and Worker Well-Being

Malissa Clark on how to overcome workaholism: https://www.msn.com/en-us/lifestyle/career/im-determined-to-be-less-of-a-workaholic-this-year-heres-how-an-expert-suggested-i-do-less/ar-AAT7ZJd

Melissa Doman on why downtime is necessary: https://www.realsimple.com/work-life/benefits-of-down-time

Ludmila Praslova on moral injury: https://www.fastcompany.com/90712671/feeling-distressed-at-work-it-might-be-more-than-burnout

Melissa Doman on talking about mental health at work: https://www.buzzfeed.com/meganeliscomb/dos-donts-talking-mental-health-at-work?origin=web-hf

Melissa Doman on perks to keep employees happy: https://www.msn.com/en-us/money/careers/this-big-tech-company-surprises-and-delights-employees-to-keep-them-happy/ar-AAUBJNE

Melissa Doman on how to ensure employees feel supported in a tumultuous time: https://www.inc.com/rebecca-deczynski/ukraine-crisis-supporting-employee-mental-health.html

Teleworking and Technology

José María Peiró on teleworking and technology parks: https://asapland.com/technology-parks-in-spain-facing-the-possibility-that-the-teleworking-trend-does-not-reverse/72411/

Elora Voyles on the invisible barrier holding remote workers back: https://www.advisorpedia.com/inclusion-initiative/the-zoom-ceiling-is-the-new-glass-ceiling/

Elora Voyles on how the "Zoom ceiling" might hurt your chance of promotion:
https://www.fastcompany.com/90715455/how-the-zoom-ceiling-might-hurt-your-chance-of-promotion

Steven Hunt on how technology is continually transforming work:
https://podcast.makeshift.ca/episode/from-9-5-to-shift-work-how-technology-is-continually-transforming-work-

Nigel Guenole on whether HR can adapt to the paradoxes of artificial intelligence:
https://onlinelibrary.wiley.com/doi/full/10.1111/1748-8583.12433

Diversity, Equity, and Inclusion

Kizzy Parks and **Bernardo Ferdman** on the fastest growing field where psychologists are sought after: equity, diversity, and inclusion: https://www.apa.org/monitor/2022/01/special-rise-psychologists

Enrica Ruggs on the impacts of pro-LGBT business policies: https://www.discovermagazine.com/the-sciences/coming-out-at-work-may-impact-productivity

The Postpandemic Workplace

Anthony Klotz on the three trends that will dominate work in 2022: https://www.cnbc.com/2022/01/14/the-great-resignation-expert-shares-the-biggest-work-trends-of-2022.html

Michael Leiter and **Christina Maslach** on remote work:
https://www.forbes.com/sites/bryanrobinson/2022/02/01/remote-work-is-here-to-stay-and-will-increase-into-2023-experts-say/?sh=3ea459c920a6

Reeshad Dalal on life after the great resignation: https://www.dailypress.com/business/vp-ib-great-resignation-0103-20211229-gt34tguslncltk4a5k7l2dmta4-story.html

Miscellaneous

Steven Rogelberg on the science of meetings:
https://www.businesswire.com/news/home/20211220005087/en/Meetings-Too-Often-Stifle-Creativity-and-Inclusion-Reports-Worldwide-Survey

Adam C. Bandelli on workplace relationships: https://digitizingpolaris.com/workplace-relationships-can-be-game-changers-for-leaders-e1874ec79a0c

Tristan Casey on making safety training "stickier":
https://www.safetyandhealthmagazine.com/articles/22123-on-research-making-safety-training-stickier

Hannes Zacher on the effects of action planning after employee surveys:
https://econtent.hogrefe.com/doi/10.1027/1866-5888/a000285

Ludmila Praslova and **Gena Cox** on the belief that work and being a worker is at the core of someone's identity: https://www.cnbc.com/2022/01/26/work-is-the-most-important-way-of-proving-your-worth-in-the-us-says-professor.html

IOtas

Jenny Baker
Sr. Manager, Publications & Events

Awards

William F. Rothenbach, a SIOP member since 1978, recently received two important awards. In November 2021 he received a Distinguished Alumni Award from his undergraduate school, Edinboro University (Edinboro, PA). In January 2022 he was honored with a Distinguished Alumni Award from his high school, North Allegheny High School (Wexford, PA). Bill recently retired after 45 years in corporate human resources executive positions but is now founder and president of Harbor Lights Human Resources Consulting, LLC in Baltimore, MD.

Matt C. Howard, University of South Alabama, was awarded the APS Rising Star designation, presented to outstanding APS members in the earliest stages of their research career post-PhD. Drawing its name from an *Observer* editorial series that featured exemplars of the exciting work being done by the field's newest researchers, this designation recognizes researchers whose innovative work has already advanced the field and signals great potential for their continued contributions.

Books

Kendall E. Williams has just published *Visions, Values, and Corporate Hypocrisy*, which calls for greater transparency, accountability, and integrity within the business discourse, starting with leaders whose actions ultimately shape the culture and success of organizations.

Send notifications about yourself or your colleagues to Jenny Baker at jbaker@siop.org.