**What Does it Mean to Be on Team SIOP?**

**Tara Behrend**

I have a younger brother. When we were kids, I fought with him all the time. He was smaller than me, and skinny, and easy to trick. I saw nothing wrong with using my advantages to torment him. In fact, in my mind, I was doing him a favor—toughening him up so he could face the world. This logic, however, did not apply to any unfortunate neighbor kid who tried to pick on my brother. I would bloody the nose of anyone who looked at him sideways. As the saying goes, nobody picks on my brother but me.

Is SIOP like my brother? Must I torment the thing I love in order to make it stronger? Criticism is a foundation of academic progress, and so in that respect, yes, I must always question the things others take for granted if I am to be a responsible academic. As *TIP* editor, I must also publish articles that I disagree with, and that others disagree with, so that they might advance our collective progress

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I am fond (too fond?) of saying that if nobody disagrees with you, it's a bad sign—it means your opinion is too boring or too obvious to engage with. In the last issue of *TIP*, I was proud to publish an article by Ones et al., titled "Has I-O Psychology Lost its Way?" The article generated an incredible amount of discussion, online and in person at the conference. If you disagree with the authors, I want to hear from you. Offer your critique. Part of being a good team member is by voicing your opinion when it matters.

Another aspect of being a good team member is educating yourself about the team. This issue of *TIP* has a number of articles that are meant to explain how SIOP committees work and how you can get involved. The most common complaint I hear from SIOP members is a lack of understanding about how decisions get made and who is involved as an "insider." The good news is that anyone can become an "insider" by volunteering as one. Read the articles by **Bharati Belwalkar** and colleagues, **Kisha Jones, Stephanie Klein**, and the GREAT committee (for a few examples) to learn about how SIOP works.

This issue also has a special section featuring conference reflections from a wide range of SIOP members: self-proclaimed "old-timers," first-time attendees, practitioners, and students. You'll see that they are being good Team SIOP members by reflecting honestly about what worked for them and what didn't.

Finally you will read about a few ways that SIOP interfaces with the world. Barbara Ruland, in her inaugural *Members in the Media* column, shows us how we can engage with the public through the media. A pair of articles explains the Alliance for Organizational Psychology. The rest of the issue has many more informative and inspiring articles to motivate the members of Team SIOP.

I close with another installment of the occasional feature, *Ask the Editor*. Send your questions to behrend@gwu.edu, and thanks for reading.

**Q: My advisor has been wearing the same outfit for the past 20 years. What should I do?**
A: You should compliment your advisor's sartorial wisdom, and be grateful for it too. All the effort they are not spending on choosing an outfit is going into reading drafts of your thesis instead. *The New York Times* agrees with me. They also claim, however, that wearing shorts with black tube socks is acceptable, and I'm afraid that they are way off base on that one.

**Q: I am displeased with *TIP*. Some of the articles are not personally relevant to me.**

A:  I'm as shocked as you are! Perhaps, though, you are thinking too narrowly about what counts as "relevant to your interests." Learning something new is its own reward, and you might be pleased to discover the ways these ideas turn out to be helpful after all.

**Q: What is this rash?**
A: Please go to a doctor.

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**The President's Message**
**Fred Oswald**

Are you reading this while fueled from the SIOP 2017 conference in Orlando? What an event—one with record-breaking attendance! The opening plenary of the conference began with an inspiring welcome by **Mort McPhail**, who reviewed many key accomplishments by SIOP that happened during his presidential term. He then recognized our esteemed SIOP award winners and fellows, and gave a memorable send off to Dave Nershi, whose retirement after 12 years as executive director of SIOP is marked by his exceptional professionalism and dedication to the field. Being a certified wine specialist, Dave received a large package on stage, containing a bottle of wine from every SIOP past president who served during his tenure. What a great start to a well-earned retirement! SIOP will miss Dave just as much as we appreciate Jeff Hughes taking the reins as our new executive director. Jeff and the SIOP Administrative Office were deeply immersed in all the action of the SIOP conference from beginning to end, keeping the wheels turning in ways that seemed effortless to those who attended.

The SIOP conference theme track was the Future of I-O. Chaired by **Tracy Kantrowicz**, the Theme Track Committee put together sessions covering the rich history of the field of I-O psychology (chaired by **Richard Landers** and **Ted Kinney**); how I-O psychologists contribute to and collaborate with other disciplines (chaired by **Valentina Bruk-Lee** and **Samantha Taylor**); and the nature and future of work, given the powerful forces of automation and globalization that have taken hold (chaired by **Lynda Zugec** and Richard Landers). We concluded the conference with a blast-off closing speaker, astronaut Stan Love, who provided the audience with several incidents that are *truly* critical to avoid when planning a successful trip to Mars. As Stan dryly reminded us: Make a mistake in space, and "you'll spend the rest of your life trying to fix it."

Sincere thanks to our colleagues who made this conference so memorable from start to finish: **Daisy Chang** (Conference Chair), **Zack Horn** (Program Chair) and all the SIOP conference committee members who worked tirelessly on our behalf. They also worked creatively, introducing exciting innovations into the conference, including (a) a mobile app (Whova) to navigate the conference agenda with ease; (b) a Shaken and Stirred format (15 thought leaders, each speaking for 2 minutes), chaired by **Jennifer Weiss** and **Arti Shyasmunder** and attended by over 700 people(!); and (c) a Reproducible Research track to support robust and reliable research in I-O psychology. Regarding this latter point, consider taking steps that make your research *and* practice more accessible and useful to others by posting your writing, materials, and program scripts online (see [www.siop.org/rr](www.siop.org/rr) and the 2016 *TIP* article by Nicklin, Gibson, & Grand, [http://www.siop.org/tip/july16/nicklin.aspx](http://www.siop.org/tip/july16/nicklin.aspx)). This not only serves to promote the good work that we do as I-O psychologists, it makes you a visible "thought leader" in our field! Related to this point, **Steven Rogelberg** has recently chaired a blue-ribbon Robust and Reliable Research task force, where his committee of researchers and practitioners are generating recommendations on what I-O psychologists can do to improve their research practices. Stay tuned for a forthcoming *IOP* journal article on this front.

If you were unable to attend this year's conference, SIOP will host an even better one just for you! The 33rd Annual Conference is April 19-21 in Chicago, IL. It's not too early to block these dates off in your calendar now and begin dreaming about I-O psychology in the Windy City.

Immediately following the Orlando conference, the SIOP Executive Board (EB) meeting covered many important activities and developments that are moving SIOP forward. Here is a select sample of them:

First, in line with my "Team SIOP" presidential theme (see below), we are increasing the frequency of our communications: additional calls that supplement the in-person EB meetings, additional communication channels between SIOP committees, and weekly touch-base meetings between myself and the Administrative Office. These enhancements are intended to build upon our shared understanding and coordination of our collaborative activities.

Second, thanks to the efforts of **Sandra Davis** (chair) and the LEC Committee, the 13th Annual Leading Edge Consortium, "Innovations in Executive Coaching: Deepening Your Expertise in a Dynamic World," is shaping up to be a fantastic event, including new preconsortium workshops and innovative TED-style talks. It will be held October 20-21 at the Hilton Minneapolis, and for more information, you can go to http://www.siop.org/lec/2017/.

Third, in the realm of SIOP publications, it is worth noting that the number of downloads from our *IOP* journal have skyrocketed, from 17,809 downloads in 2015, up to 42,813 today, due to your excellent contributions and the stalwart efforts of **John Scott** (Editor) and **Mark Poteet** (Practitioners Forum Editor) who are leading the charge. Clearly, our work is worth reading! Also, **Deborah Rupp** (Publications Officer) has arranged a contract with Oxford University Press for a translational science series, with **Steve Kozlowski** as the inaugural editor.

Fourth, the Strategic Planning and Research Committee (SPARC), chaired by **Lois Tetrick**, will be investigating the nature of today's I-O master's programs. Their increased presence surely diversifies the marketplace of ideas and values that SIOP members hold; it will likely expand the nature of services SIOP offers to meet the practice and research needs of our members; and it promises to influence the content and sensitivities reflected in SIOP's future education and training guidelines. I therefore view this SPARC initiative as extremely important to advancing SIOP and I-O psychology in an informed and strategic manner, and SPARC's efforts will be shared with you in future SIOP communications.

Fifth, the Professional Practice Committee has offered a new webinar on HR analytics by **Jeremy Kasle**. Check out this and other useful practice-based webinars, organized by **Ben Porr**, at http://www.siop.org/webinar.aspx. They are also on YouTube, so they are more widely accessible (e.g., share them with a friend).

As you can see, so many incredible people dedicate their time and talents on behalf of SIOP. If you are not one of these people yet, please volunteer! Surf on over to http://my.siop.org/Membership/Committees/Volunteer-for-Committee. We would be excited to have you contribute to Team SIOP. Team SIOP is my presidential theme, because essentially and perennially, SIOP has dealt with critical issues surrounding the identity of I-O psychologists (i.e., who are we?) and their impact on work and society at large (i.e., what are we doing?). Team SIOP is a theme that combines both issues, as teams provide collective identity and are set out to accomplish big things. To that end, I will engage Team SIOP to (a) identify, develop, and make good use our existing talent (e.g., through our registries), (b) promote our existing partnerships that have produced excellent work to advance the science and practice of work (many of which we likely do not know of, yet would benefit from learning from), and (c) develop new partnerships with new researchers, practitioners, and disciplines from outside of I-O psychology who have yet to benefit from our expertise. Together, Team SIOP is growing itself by making efforts on all three of these fronts, which I will report on in future issues of *TIP*.

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## The Bridge: Connecting Science and Practice

Column Editors: Craig Wallace, Oklahoma State University; Lynda Zugec, The Workforce Consultants; and Mark L. Poteet, Organizational Research & Solutions, Inc.

“The Bridge: Connecting Science and Practice” is a *TIP* column that seeks to help facilitate additional learning and knowledge transfer in order 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, etc., that may benefit from additional research. In this issue, we review and consider the case for using working memory in practice!

## The Case for Using Working Memory in Practice

By Bryan D. Edwards, Ana M. Franco Watkins, Samuel T. McAbee, and Luis Faura

The reliance on cognitive ability (or general mental ability) for selection, placement, and training underlies one of the oldest and deepest research practices in the history of I-O psychology. It is generally accepted among I-O psychologists that cognitive ability is the strongest predictor of learning and task performance. However, many of our cognitive psychologist colleagues make a strong case that *working memory capacity* is the strongest predictor of learning and performance. Indeed, working memory training programs such as lumocity, cogmed, and jungle memory are quite popular. As such, the purpose of the present article is to span a bridge between both cognitive and I-O psychology as well as between science and practice by encouraging the use of working memory as a predictor for training and job performance.

### The Case for Working Memory

In nearly 40 years of research, cognitive psychology has established that working memory is a strong predictor of human learning and task performance (Baddeley & Hitch, 1974; Daneman & Carpenter, 1980; Engle, 2002). Despite the link between working memory, learning, and performance in the cognitive psychology literature, working memory has been ignored in I-O psychology research and practice. However, there are several reasons to expect that individual differences in working memory capacity are relevant to learning and task performance in work settings.

Working memory allows individuals to attend, manipulate, and store information while simultaneously ignoring irrelevant or distracting information. Working memory capacity is typically measured using complex span tasks, in which test takers juggle two competing tasks: processing information while keeping other information actively in mind to be recalled or used later (Conway et al., 2005; Engle, 2002). Working memory is essential for acquiring and integrating information. Individual differences in working memory capacity predict performance across tasks at various levels of complexity, from simple tasks such as following directions and note taking, to more complex tasks that involve reasoning and problem solving (Engle, Kane, & Tuholski, 1999), multitasking (Hambrick, Oswald, Darowski, Rench, & Brou, 2010), learning (Lewandowsky, 2011), and decision making (Franco-Watkins, Davis, & Johnson, 2016). Critically, the mechanisms underlying learning and performance in the above areas are essential for successful training and performance at work. With such strong evidence, why would working memory *not* predict training and job performance? Bosco, Allen, and Singh (2015) revealed that working memory was at least as strong a predictor of performance as general mental ability and, in some cases, was a stronger predictor.

There are three primary reasons why working memory should be at least as strong a predictor of learning and task performance as cognitive ability. First, working memory is important for learning and task performance because it is responsible for rehearsal and storage of new information into long-term memory (e.g., declarative and procedural knowledge). Indeed, many contemporary cognitive researchers view working memory as the key explanatory mechanism for individual differences in cognitive ability through the number of items held in memory (e.g., Halford, Cowan, & Andrews, 2007) and controlled attention (e.g., Cowan et al., 2005; Engle, 2002). Second, working memory coordinates different elements from long-term memory and the environment to be used for the task at hand (Baddeley, 2000). Many reasoning, problem-solving, or decision-making tasks require the integration of new or preexisting knowledge to perform a given task. Third, individual differences in working memory reflect controlled attention that allows people to maintain information in an active state in the face of ongoing processing and/or distraction (Engle, 2002). This ability to keep goal or task-relevant information active while ignoring task-irrelevant information is important for the development of action plans, goal setting, goal management, and monitoring, and for maintaining multiple concurrent and sometimes competing goals in active attention. For example, in a complex task situation where the goal is to develop a financial plan that requires numerous calculations, the person must maintain the information relevant to the primary task (e.g., budgeting, planning) while ignoring the other distractions (e.g., notifications from smart phone apps, ideas relevant to other projects, coworkers' conversations). Thus, working memory is adaptive because it allows individuals to keep task-relevant information active and accessible while completing complex cognitive tasks (Conway et al., 2005).

One final potential advantage of working memory relative to general mental ability is that measures of working memory capacity might also display less adverse impact than cognitive ability assessments (Bosco et al., 2015). Indeed, Bosco et al. (2015) found adverse impact ratios for Black–White differences in working memory that were approximately half of the ratios for cognitive ability.

## Case Study: Working Memory in a Distribution Setting

The authors are currently involved in the use of generating short, applied versions of working memory (e.g., Oswald, McAbee, Redick, & Hambrick, 2015) and collecting data for selection. In one example we administered a measure of personality, cognitive ability, and working memory to a sample of employees at a distribution center and matched the scores to archival measures of performance. Working memory was positively related to performance ($r = .23$) as was cognitive ability ($r = .32$), and both predicted unique variance in job performance. This particular distribution center had a relatively large Hispanic population, which allowed us to compare subgroup differences on the Spanish and English versions of the working memory operation span and ability measures. We did not record ethnicity in our data collection but participants were allowed to select the Spanish or English versions of the working memory and ability assessments. Although scores on the English version were higher than the Spanish version on both measures, the standardized subgroup differences on ability were more than double the subgroup differences on the working memory measure. Furthermore, the correlation between working memory and performance was $r = .20$ for the sample of Spanish-speaking participants and $r = .11$ for the English-speaking participants.

## Suggestions for Implementation

For practitioners wanting to use working memory for selection or training, it is important to recognize that working memory requires remembering information in the face of distractions. Although measures that require respondents only to memorize letters, numbers, or objects do assess (short term) memory, the ability to process information in the presence of a distractor task (but free from outside distractions) is core to assessing working memory capacity. Figure 1 demonstrates a typical working memory assessment (operation span). In Step 1, the letter "G" is presented and must be retained in working memory. The distractor task is the math problem in Step 2. Respondents must get the math correct to verify that the distraction is operating. A second letter is presented in Step 3. Then, both the "G" and the "H" must be recalled in Step 4 by selecting the letters from among 12 letters in the order in which they were presented earlier.

To translate research-based working memory measures for use in selection, a few issues need to be considered. First, the stimuli in laboratory tasks are typically words, letters, or positions on a grid (see Conway et al., 2005, for a review), however, alternate forms for more general use have begun to sprout up (see Hicks, Foster, & Engle, 2016). Thus, the stimuli used in typical tasks can be revised to be more work-related and more face valid. Likewise, the distraction task does not need to be math problems. Any distraction task that has a processing component and a way to verify that the respondent did pay attention to the distractor would work. Second, working memory measures used in research are often overly lengthy and time consuming. Thus, there is a need to create shorter assessments for use in applied settings (see Oswald et al., 2015) that adequately capture working memory. Third, in the absence of proctoring, some working memory measures are susceptible to cheating. For instance, test takers can simply write down the order of the letters presented in the operation span task without having to recall them from memory. Although these practical concerns must be addressed, we are optimistic that working memory will become a more common approach to measuring 21st century skills.

## Calling Potential Contributors to "The Bridge: Connecting Science and Practice"

As outlined in Poteet, Zugec, and Wallace (2016), the *TIP* Editorial Board and Professional Practice Committee continue to have oversight and review responsibility for this column. We invite interested potential contributors to contact us directly with ideas for columns. If you are interested in contributing, please contact either Lynda (lynda.zugec@theworkforceconsultants.com) or Craig at (craig.wallace@okstate.edu).

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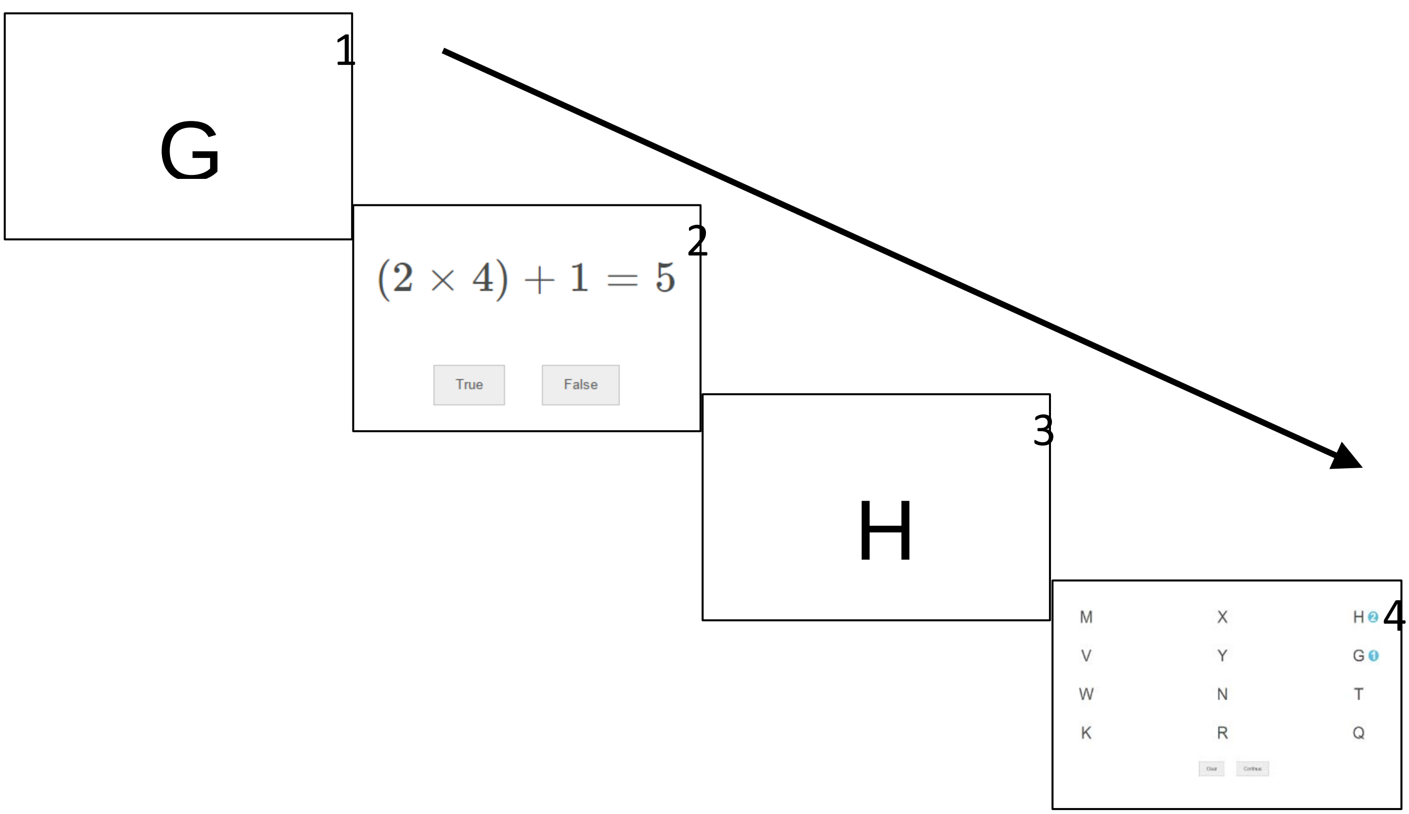

**Happy 50th Anniversary ADEA!**

**Rich Tonowski**
**U.S. Equal Employment Opportunity Commission**

*The opinions expressed in this article are those of the author and not necessarily those of any government agency. The article should not be construed as legal advice.*

This year marks the 50th anniversary of the Age Discrimination in Employment Act (ADEA). Let's celebrate with a discussion of its provisions and some recent developments in the courts.

## Statute and Case Law Highlights

This law has several interesting contrasts with other EEO statutes, particularly Title VII:

- No one is born into the protected class; but all who live long enough can be included, starting at age 40 years.
- "Reverse discrimination" against those under 40 is lawful.
- Age is a continuous variable allowing for more possible analyses than, say, a male-female dichotomy.
- Discrimination against older members of the 40+ group in favor of younger members is unlawful, e.g., favoring a 45-year-old over a 55-year-old. There is some controversy about how this principle is applied to adverse impact analyses, to be explored below.
- The courts recognize that some abilities may diminish with advancing age (Grossman, Cane, and Saad, 2007). But mandatory retirement rules are very much restricted.
- Adverse impact was not firmly established as a viable theory of discrimination under ADEA until the U.S Supreme Court did so in *Smith* (2005). The Eleventh Circuit (*Villarreal*, 2015) subsequently ruled that adverse impact applies only to employees, not to applicants, as a matter of law. But a district court in the Ninth Circuit reached a different conclusion (*Rabin*, 2017). At issue is whether impact applies to "employees" or to "individuals"; the language is ambiguous and both decisions cite to the same text in the statute. The *Rabin* court noted that in such cases the guidance of the enforcing agency is helpful, and EEOC goes with "individual."
- The law recognizes a "reasonable factor other than age" (RFOA) defense that works differently from the "job related" and "consistent with business necessity" defense in Title VII. A factor that is correlated with age (but not a subterfuge for using age) such as cost considerations could be supported by RFOA. The employer has the burden (*Meacham*, 2008) to prove that the non-age reason for the employment action was "reasonable." The less discriminatory alternative issue in Title VII, identified with "business necessity" in *Smith*, is not operative for age[i].
- "Mixed motive" is not a viable discrimination theory; age discrimination must be the "but for" cause of the adverse action (*Gross*, 2009).

See Gutman, Koppes, and Vodanovich (2011) for an overall discussion of ADEA, including how the law has evolved over the years with amendments and court decisions.

Recently the U.S. Court of Appeals for the Third Circuit rendered an opinion in *Karlo* (2017) that touches on adverse impact statistical analyses for age discrimination. The major thrust was a discussion regarding discrimination against "older, older" people in favor of younger people who are still members of the protected class. For example, the employer could have a practice that favored people under age 50 but whacked those 50 and above. The 40–49 folks are in the protected class. The courts have distinguished between age discrimination and "over 40" discrimination; ADEA is based on age.

This writer and others (e.g., Dunleavy and Morris, 2017, p. 9) took it as generally accepted practice that there could be dichotomies such as in the example above, not just under 40 versus 40 and above. The law is more complex. Whether the case is treatment or impact, and the location of the court, can matter.

Karlo and other plaintiffs were employed by Pittsburgh Glass Works (PGW), which manufactures automotive glass. There was a need for several reductions in force (RIFs) because of deteriorated sales during the Great Recession. Plaintiffs initially secured conditional certification for a collective action[ii] for additional plaintiffs at least 50 years old when terminated. The case was then transferred to another district judge. On a motion from PGW the court decertified the collective action because the additional plaintiffs had claims factually dissimilar from the original plaintiffs. PGW then moved to exclude the plaintiffs' two expert witnesses, Drs. **Michael Campion** and Anthony Greenwald. The motions were granted. Finally, PGW moved for summary judgment. The court granted this, noting that a 50-and-older group was not allowed under the ADEA and the exclusion of plaintiffs' expert for adverse impact meant that this claim collapsed.[iii] Plaintiffs appealed the exclusion of their experts and summary judgment for PGW.

Both sides were backed by heavy-hitter organizations that filed amicus curiae (Latin, "friend of the court") briefs: EEOC for the plaintiffs, and the U.S. Chamber of Commerce and the Equal Employment Advisory Council (an employer association) for the defendant.

The central question for the appellate court was whether subgroups of the 40-and-over protected class were allowed, here the 50-and-over group, for adverse impact analysis. In the court's view, this could be answered in the affirmative based on the plain text of the statute, specifically the focus on age as the protected trait (and not membership in a protected class) and the rights of individuals[iv] (in contrast to the protected class as a whole). The Supreme Court's decision in *O'Connor* (1996) clarified that ADEA proscribes age discrimination, not over-40 discrimination. Although that was a treatment case, the underlying issue for either treatment or impact regarding the nature of age is the same. The conclusion is reinforced by *Teal* (1982), which stands for protection against discrimination accruing to the individual. Discrimination against some members of the protected group while favoring others is still discrimination.

The court's position is at variance with that of other circuits regarding *impact* cases. The Second (*Lowe*, 1997) and Eighth (*EEOC* v. *McDonnell Douglas*, 1999) do not allow for age groups other than at the 40 year breakpoint. The Sixth allows various groups for treatment (*Barnes*, 1990) but in a nonprecedential opinion, not for impact. Some lower courts in other circuits have been more flexible (Paetzold and Willborn, 2016). The issue seems to be the concern that formation of subgroups within the protected class is subject to manipulation; having multiple subgroups could impose on employers a potentially impossible task of ensuring parity for every subgroup that might be proposed. The *Karlo* court found arguments in the other circuits unpersuasive. Should a plaintiff try to gerrymander an age category specific to that person's benefits, the courts can deal with it. The possibility of gerrymandering is no reason to negate the protection for older workers, even those older within the protected class.

The *Karlo* court recognized that age is a continuous variable, unlike the categories of race or sex. "On account of that difference, the statistical techniques common to Title VII cases are not perfectly transferrable to ADEA cases. If, for example, the comparison group in *Teal* omitted some black employees who took the written test, the statistics would have failed to address whether there was a disparate impact 'because of … race.' . . . But with the ADEA, by contrast, a comparison group that omits employees in their forties is fully capable of demonstrating disparate impact 'because of … age'"(*Karlo*, p. 24, statute citations omitted).

The court's statement is a bit confusing. What's under discussion is not statistical methodology but how groups are formed for analysis. "Comparison group" appears to refer to the plaintiffs' age group. In the case where the plaintiff group was those 50 and above, "those in their forties" were not omitted from the analysis. They were included in the under 50 group.

A more fundamental question is whether we should be concerned about age or individuals (their proportions in the outcomes), or both. Presumably both kinds of analyses are relevant.

**Statistical Analyses**

So what might be transferrable or not regarding statistics? The court made frequent reference to Paetzold and Willborn's (2016) book, so that will figure in this discussion.

*Categorical analysis*. Although Paetzold and Willborn deplore the use of categories with a continuous variable such as age, the dichotomies that serve us well with other protected classes seem to be standard procedure here. But dealing with a continuous variable invites arbitrary categorization within the protected class, chosen by the expert to produce what the client wants. What makes sense will depend on circumstances. Here, 50 and above was good. The court discounted the possibility of the octogenarians claiming discrimination because the folks in their seventies were allegedly favored. There likely would not be statistical power with the few people involved to get statistical significance. A generalization would be that that a floor age is workable if supported by the circumstances of the case, that is, the plaintiff group is at least *x* years and includes everyone *x* and over. A lower *x* implies more inclusiveness of the 40-and-above class. A higher *x* implies less statistical power, which is the brake on gerrymandering an extreme age category. Using both a floor and ceiling (e.g., no less than 50 and no greater than 52) likely invites scrutiny. Using just a ceiling seems a bit strange; to the extent that the older workers above the ceiling were favored, it may be hard to make a case.

Ironically, detecting rather than contriving age bands that drive statistical significance would seem to demand an examination of categories. For example, there is a statistically significant disparity in outcomes between the under-40 and 40-and-above people. But closer examination reveals that statistical significance is driven by disparity in the 50–54 band. The question could be whether it is plausible that discrimination affects just that band.

One possible analysis would be to run a chi square test across "reasonable" categories, such as 5-year bands. This could be accompanied by a test for linear trend to see if being older implies more likelihood of adverse action. Paetzold and Willborn (2016) mention the Cochran-Armitage test.

Age is not the only consideration open to categorization. For example, there may be an organization-wide RIF carried out according to centrally determined procedures. Plaintiffs may be inclined to note that commonality of procedure and include all employees in an organization-wide analysis. The employer might be more inclined to point out that the RIF was conducted by unit, in which the employees, decision makers, and need for reduction varied. This would argue for unit-based analyses with smaller numbers and thus less power to detect a true difference. Paetzold and Willborn (2016) note that a Mantel–Haenszel approach (stratification by unit, but with an overall statistical test) might be useful. There is also a Fisher method for analyzing across strata with continuous variables.

*Continuous variable analysis*. The most obvious analysis is to look at the mean age of those adversely impacted versus that of folks not impacted. The mean age of those whacked in a RIF might far above that of those who stayed. But watch out for outliers. If one of the employees was Methuselah (lived 969 years; Genesis 5:21-27) toward the end of his career, results might be skewed. Something similar might happen with less extremely aged, but more numerous, employees.

Likely no practitioner would do an analysis of people outside the plaintiff group for an impact case. However, with a "pattern or practice" treatment case that implies that discrimination was the standard operating procedure, it might be useful to show statistically that there was an age effect throughout the organization. For example, a RIF was conducted across all organizational units; layoffs were based on seniority; greater seniority is correlated with greater age; no new employees were hired; but the retained workforce comes out younger as measured by average age[v]. That would be the plaintiff's analysis; the defendant might want to show that, assuming there were any age issues, they were limited and not standard operating procedure.

Paetzold and Willborn (2016) suggest the Wilcoxon rank test to avoid the need for arbitrary categorization. Use of ranks may also avoid the Methuselah problem. They also mention the Kolmogorov-Smirnoff test for differences between age distributions.

Logistic regression provides a method for examining the effect of age as well as other independent variables (continuous or categorical) on a dichotomous outcome. Biddle (2011) indicated that an analysis of independent variables other than the protected class generally serves no purpose for the plaintiff; the burden is just to establish the numerical disparity, not to explain it. Regression with age has the problem of the under-40 group (or other comparator) contributing to the regression weights; see Paetzold and Willborn (2016) for suggestions on recoding for more interpretable results.

Finally there is survival analysis and its relations. This is a variant on the regression theme notable for dealing with "censored" data, that is, people coming and going so that not all who are in the study have been there for the identical time period.

## Age and the Peter Principle

The popularized Peter Principle holds that employees rise to their level of incompetence, that is, not so incompetent as to be removed but not promotable. This implies that less-than-stellar employees grow older as they stagnate in their positions. The application to age cases was discussed by Grossman et al. (2007). At the heart of the argument is that persons of different ages in (or applying to) the same jobs and units are not necessarily similarly situated.

Siskin and Schmidt (2017) noted that, for promotion, the usual regression analysis examines whether group differences remain after all factors that influence the likelihood of promotion are appropriately controlled for. The key assumption is that all group members defined as similarly situated are on average equally likely to possess the same omitted variable values. That assumption may not hold with age. An individual who has a high degree of competency (omitted variable) may be promoted more rapidly, and thus seem to be favored for being younger, than the less talented who ascend the corporate ladder more slowly. A curvilinear relationship between age and promotability may exist.

To the extent that these long-tenure employees are also not performing as well as the younger rising stars that are passing through the same units on their way to better things, there can be impact if the organization decides that it must shed its less productive people.

This view can be taken in contrast to theories involving stereotyping and implicit bias (mentioned below). Whether performance assessment is accurate or ratings are a "tainted variable" reflecting bias against older workers can make all the difference.

### Other Issues

The *Karlo* court upheld decertification of the collective action and addressed three other matters regarding the testimony of plaintiffs' experts.

*Statistical correction*. Campion had examined three age subgroups in addition to the 50 and above subgroup to show that RIFs increased with increased age. Was this a "hypothesis driven" demonstration of what was in the data or "data snooping" that required adjustment (such as the Bonferroni method) to the significance level because multiple tests could capitalize on chance? The district court erred in applying a merit (persuasiveness) standard when the standard for exclusion allows for less-than-perfect analyses; persuasiveness is determined at trial. This is being remanded to the district court for further consideration, so further this writer sayeth naught.

*"More reasonable" alternatives*. Campion provided testimony on 20 more reasonable RIF practices, given the research literature and testimony of other witnesses in this case. This stays excluded because it is not necessary. RFOA means that the issue is whether PGW's procedure was reasonable not if there were possibly more reasonable alternatives. This is in line with what the Supreme Court held in *Smith*. But as in Note 1, the degree of impact might factor into a consideration of reasonableness.

*Implicit bias*. Greenwald offered testimony based on his research with the Implicit Association Test and review of testimony of some PGW officials regarding implicit bias against older workers. This stays excluded. The district court held that population-wide testimony was not relevant to this specific case, and the employer's state of mind was irrelevant in an impact case. The appellate court agreed, adding that the plaintiffs had no obligation to prove any psychological mechanism just to establish a disparity. The court further added, "That is not to say, however, that implicit-bias testimony is never admissible. Courts may, at their discretion, determine that such testimony elucidates the kind of headwind disparate-impact liability is meant to redress" (p. 53).

### Implications for I-O

The *Karlo* court's opinion, supplemented with the references to the Paetzold and Willborn treatise, afford practitioners with a nice review of impact issues under ADEA. The this case should, however, put us all on notice to be careful about what circuit we are working in and what discrimination theory are we trying to avoid, support, or defend against.

The court touched on two issues, violation of statistical assumptions and implicit bias that could be subjects of lengthy discussion. As professionals, we should be fostering that discussion among ourselves.

Esoteric statistical methods might be necessary due to circumstances but being a methodological pioneer can have its drawbacks. One lesson from the Paetzold and Willborn discussions is that courts may exclude stuff that juries would find difficult to understand, however elegant it is. But that should not deter being proactive in application of advanced analytic methods and workforce modeling (Grossman, Cane, & Saad, 2007).

Gutman, Koppes, and Vodanovich (2011, p. 307) noted that, "In general, case law has consistently supported RIFs that are organized and well thought out." A description of PGW's procedure was provided by the *Karlo* court: broad discretion in whom to terminate, no training on the RIF procedure, no written guidelines or policies, no impact analyses, and no documentation why any individual was RIFed. We can draw the inference.

## Notes

[i] But see EEOC's regulations on RFOA (EEOC, n.d). Being reasonable can include consideration of impact.

[ii] ADEA has collective actions rather than class actions because the law incorporated enforcement provisions from the Fair Labor Standards Act. Such collective actions require initially unnamed plaintiffs to opt into the suit, rather than having a class action representing all persons similarly situated unless they opt out.

[iii] Other claims were disparate treatment and retaliation. The treatment claim was tossed by the district court and subsequently dropped by plaintiffs for the appeal. The court denied summary judgment for the retaliation claims, meaning these can go to trial.

[iv] The plaintiffs were employees and so whether adverse impact applies to applicants (whether the ADEA applies differently to "employees" in contrast to "individuals") did not arise.

[v] Tinkham (2010) discusses a situation where average age could decrease for nondiscriminatory reasons because accurate performance evaluations used in a RIF favored younger workers. The example here is based only on seniority.

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## Crash Course in I-O Technology

**Richard N. Landers**
**Old Dominion University**

### A Crash Course on the Internet

This issue, we'll be taking a step back to explore something you probably don't think about a whole lot: How does the Internet work? In my experience, I-Os tend to treat the Internet a lot like they treat their car: a tool to get from A to B. When something goes wrong, and it always eventually will, you don't usually bother figure out why, you just call your tow truck to drag it over to someone who will do that for you. In the case of the Internet, you might call your IT person or your Internet service provider if your access becomes slower than you expect it to be or goes out, but otherwise, you tend to ignore little problems. When's the last time you called someone because you couldn't use a webpage the way you thought you should be able to? Never, that's when.

The problem with ignoring the complexities of how the Internet functions is that these days, the quality of our data depends upon the functionality of and interactions between many different Internet subsystems that we don't usually understand. That has a variety of subtle—and sometimes not-so-subtle—impacts. For example, did you know that it's literally impossible to design a web page that looks the same no matter who views it? I mean "literally" literally—it really is *impossible*. That has significant implications for both science and practice in I-O psychology. In science, you can never be sure that an Internet-delivered experiment or survey looks the same to one person as it does to another. In practice, you can never truly be sure that one job candidate's assessment looks the same as another's. But why? Just how bad can those differences be? Well, that's why understanding how the Internet works is so important, and there are many such insights you'll begin to collect once you start paying attention. Understanding how the Internet works is also a foundational skill on which a lot of others more specific skillsets are built that are becoming increasingly relevant to I-O psychology research and practice. For example, if you want to scrape web pages for observational data, capturing Internet behaviors in a naturalistic study, you'd better be sure you understand what a web page is before you try. If you want to be able to instruct meaningful changes to your IT team in terms of how webpages are displayed, you'd better be able to speak their language or you will never end up with the changes you want. So, in both my graduate-level data science course and in the professional workshops I teach, a basic primer on "what is the Internet" almost always comes early. This article will be a bit shorter than those treatments, but I still think you'll find it useful. It'll also allow me to cover a few slightly deeper topics in a couple of future articles I'm planning for this column.

## The Physical Internet

So, what is the Internet? Physically speaking, the Internet is a huge number of computers (current estimate: [70 billion by 2020]) that are interconnected via some sort of data transfer conduit: copper wire, fiber optic cabling, wireless radio, or satellite transmitter/receiver. At any Internet-accessible computer, you are a part of that system by either a network card that is physically connected to a wire or to a wireless network radio that talks to an access point that is physically connected to a wire. Thus, in a sense, the Internet is a spider web of copper and fiber optic wiring that is literally worldwide. Any computer yours can talk to via the Internet , you could physically follow the wireless access points and physical wires starting at your computer and end up at that computer. Computers talk to each other across this spider web using an agreed upon set of standardized rules called *transmission control protocol and Internet protocol (TCP/IP)*. Each segment of that network has a theoretical maximum capacity and speed, based on the thickness of and material used in the wires involved, as well as the processing speed of the computers on either end. With current infrastructure, requests can traverse the United States in less than a quarter of a second. Since the information itself travels at the speed of light in its medium (e.g., the speed of data transfer in fiber optic cabling is the speed of the light traveling through the type of glass or plastic used in that cabling), the slowdown from instantaneous is mostly caused by the computers in the middle of the path from requestor to requestee.

## Request Routing and Encryption

When your web browser sends a request for a webpage, your request is first transferred to your local access point (in this context, called a *node*), which is asked to forward your request to the next closest node to your request's destination. This node might be an actual computer or it could be a computing device, such as an Internet router. These requests are sent using TCP/IP rules, which specify how information is formatted to be transmitted and received over the Internet , but also with a second layer of rules on top called *hypertext transfer protocol (HTTP)* that contain additional rules for how to transmit webpages and related documents over TCP/IP. Each node then repeats this process until your request gets to where it's supposed to go, at which point the response to your request is sent back using the same route in reverse. For example, from my home, any request I send to access http://www.siop.org goes through over 30 separate nodes (i.e., computers) before it gets there. This *route* is generally the fastest possible path between all those computers, and the segments in that journey are called *hops*. Importantly, the computer at the end of each hop gets the full text sent with my request. So, any text or files I submit using a form on a webpage gets received in full by each of those computers along the way.

That leads to two important points in terms of network security:

1. Intercepting requests at a node and sending back misleading information is a common way to hack called a *man-in-the-middle attack*.
2. The only way to avoid sending readable copies of your data to all the nodes you need to pass through is to encrypt your data first.

Encryption can be explained with a simple example. Say you wanted to send the message, "*TIP* is amazing!" to your friend but you didn't want anyone else to read it, so you invented the incredibly clever encryption technique of shifting all letters forward one position, making your message "UJQ jt bnbAjoh@". You send instructions on how to decrypt ahead of time to the person you're trying to send your message to, and then later you hand your note to the person sitting next to you and ask them to pass it person-to-person to your intended target. None of the people passing the note can read it, but the person you're sending it to can, because they have the decryption instructions. This is how *HTTPS* works (sometimes called "secure HTTP" or "secure browsing") except that the encryption system is quite a lot more complicated and thus harder to crack. HTTPS is particularly important to e-commerce, because, for example, it's relatively trivial for someone operating a node to write some code that grabs anything passing through that looks like a credit card number.

The way HTTPS works also means that if you don't have the right decryption instructions (called a *certificate*), you can't use HTTPS with a computer expecting you to follow those instructions. This is what leads to those "security certificate error!" messages you see in your web browser from time to time. Without a valid certificate, you are dropped down to regular unencrypted HTTP, so anyone in the middle could still theoretically snoop on what you're doing. They probably won't, most of the time, because usually no one cares what you do on the Internet , but not always. To facilitate HTTPS connections, your web browser will verify the certificates it receives with a recognized, third-party, trusted *certificate authority*. This is why you sometimes get errors about a certain HTTPS website being untrusted; there's a problem with its certificate based upon what was expected when you asked the certificate authority for verification.

How does your computer figure out where each request is going in the first place? Every device attached to the Internet has its own address using IP notation (as a reminder, IP is part of TCP/IP). There are two major versions of IP in use today: IPv4, which looks something like 123.123.123.123 and IPv6, which looks something like aaaa:bbbb:cccc:dddd:eeee:ffff:1111:2222. IPv6 is a successor to IPv4, designed because we ran out of numbers to use in IPv4. Each of those 4 numbers in an IPv4 address can take a value from 0 to 255, so there were only a total of about 4.2 billion possible addresses. IPv6 uses hexadecimal (0 to 16, represented as 0 to 9 and then a to f) and has 8 positions, creating 3.4 x 10^38 possible addresses, which is the equivalent of 48 billion addresses for each atom in the human body. So, we won't be running out again any time soon.

When you send a request to a domain name, like http://www.siop.org, you are first sending a request to a *domain name server* (also called a *nameserver*) that translates "www.siop.org" into an IP address. Nameservers are managed and operated by Internet service providers, like Verizon or AT&T. The IP address retrieved from the nameserver represents the physical address of the computer your request is trying to find. The domain name itself is just for human readability—they don't mean anything special, and you can register your own .com domain name for less than $20 per year.

Among domain names, only the last two pieces generally have unique IP addresses. For example, http://mysite.siop.org and http://special.siop.org and http://special.mysite.siop.org are all most likely the same physical computer. Because many people don't realize this, hackers often use dressed up domain names to pretend to be other sites. For example, a hacker might send a link to http://www.siop.org.hack.me/ to fool you into thinking you were going to siop.org, whereas in reality, you were going to hack.me. The information after the / only specifies what folder and file you will access plus, optionally, a few special instructions.

## Servers

Is there anything special about this computer you're requesting webpages from? Not really. Most *servers*, called servers simply because they service requests like the one I was just describing, are computers just like your desktop. These days, they typically run Linux or Windows. You can turn your own computer into a server just by installing some software to serve something. Commercial servers are usually a bit better at this than your desktop would be though, because they are designed for the sole purpose of serving. That mostly just means a fast CPU, a lot of memory, and no or limited graphics capabilities. Advanced data centers (another word for "lots of computers working together in a single building") spread out some of the processing requirements by spreading the load to multiple computers. For example, your web request might be one of 10,000 per minute being processed, so the initial computer receiving the request will forward it to other computers to spread the workload. This sort of approach goes by many names, but a common one is *cluster computing*.

So, what does that server do when it gets your request? That's easy—it looks up the file you asked for on its hard drive or in memory and sends it back to you. For typical Internet traffic, the first request received is for a *hypertext markup language (HTML)* file, which is computer code that explains to your web browser (i.e., Chrome, Edge, Safari) the structure and formatting of the webpage you asked for using the rules specified in the current HTML standards. Your web browser will read that file and harvest all the resources needed to display it to you, like images, videos, external code, and adware requests. New requests will be sent for all those resources; most of those requests typically go to the original server and a minority will go to other servers.

Because there's a physical computer on the other end of your request, that computer can be overwhelmed with such requests. This is in fact the approach taken in another type of hacking called a *denial-of-service (DOS) attack*. In this sort of hack, a computer hammers a server with an enormous number of requests without processing any replies. This causes the server's CPU usage to spike, creating a backlog of fake requests, and ultimately preventing it from serving any other, legitimate requests. However, DOS attacks are relatively easy to defend against, because once you realize all the requests are coming from a single IP address, you can simply refuse to answer any requests from that IP address. This led to the development of *distributed-denial-of-service (DDOS) attacks*, which take advantage of networks of hacked computers, often called *botnets*. DDOS attacks are often used to ransom servers; pay up or we won't let anyone use your webpage. In 2016, DDOS attacks affected numerous websites including those of five Russian banks, the Rio Olympics, the US presidential campaigns, and Dyn. Dyn was particularly noteworthy because Dyn is a domain name server; the sustained DDOS attack on Dyn, the largest in history to that point, caused many other websites to become inaccessible, including Etsy, Spotify and Twitter. Such attacks are likely to continue to get worse, which is why cybersecurity has suddenly become so important to the world economy.

### Rendering a Webpage in a Browser

As your web browser collects resources—and there are many potential delays as this happens—it tries to visually build the webpage, a process called *rendering*. Put that image there, this block of text here, format this area in bold, and so on. At this point, everything is static. Your web browser has sent some requests for documents, and once it received those documents, it began to construct a visual representation of the webpage. Importantly, the web browser has *complete* control of this. Whatever you send it, a person can use their web browser to turn on and off anything on the page. This sort of inline modification of what you see in relation to what you were supposed to see is how many browser plugins function, such as *ad blockers*. Even though the HTML is written so that web browsers will by default send requests for advertisements, these requests are blocked by the ad blocking plugin.

What if you don't want your webpage to be static? Most commonly, this is where a programming language called *JavaScript* (JS) comes in. JS adds interactivity to webpages. If your buttons animate when you hover your mouse over them, if you see data being added in real time, if you can change things without the entire webpage being reloaded, in most cases, these days, it is JS at work. An extension of JS called *asynchronous JS and XML (AJAX)* furthermore allows JS to communicate with databases. If you want your webpage to be able to grab data and redisplay it without having to reload the entire page all over again, that's AJAX at work. You can find a prime example of AJAX on SIOP's current implementation of JobNet.

**Why You Can't Ever Be Sure Webpages Look the Same Across Computers**

Here's a good place to return to our original problem. Can you guess why it's impossible to design a webpage so that it looks the same to everyone? The short answer is that it's up to the web browser software to decide how to render the webpage, yet every web browser has little quirks that change how they display webpages and ever user has different plugins and addons installed that change even that. In the days of the early web, back in the late 1990s and early 2000s, the quirks were a nightmare for web designers. Netscape Navigator could render webpages *completely differently* from MS Internet Explorer, so many web designers would build parallel versions of every website intended for different web browsers. These days, most web browsers will render the same HTML *essentially* the same, assuming no plugins are installed or user settings specified that change it. But there can still be slight differences, most especially in relation to fonts and spacing.

A big challenge is JS. Unlike the raw HTML that's sent by the server, JS is *client-side code*. This means that it's ultimately interpreted and executed by the person's web browser. This has several important implications:

1. People looking at your webpage can see your raw code. You can't hide things in JS code. For example, if your selection assessment provides real-time feedback, and possibly even if it doesn't, a job candidate may be able to reverse engineer the JS to figure out what the correct answers are.
2. Execution times may differ, such that you can't *really* trust reaction time data using JS. If a webpage renders faster on one computer than another, those times will differ for reasons completely unrelated to trait or state individual differences. Trusting online reaction time data will always be a judgment of "good enough."
3. JS can be turned off entirely, so you can never assume people have it turned on. For pages that require JS functionality, developers need to implement a test that only allows people to proceed if JS is turned on and functioning properly.

**Putting It All Together**

With all that background, let's look at all of it at once. Going to the address https://siop.org/tip/jan17/crash.aspx implies your web browser will engage in the following exchange:

1. **YOUR BROWSER:** Sends a request to your domain name server (provided by your Internet service provider) to figure out the IP address of siop.org
2. **DNS SERVER**: *Resolves* the IP address and sends it back to you
3. **YOUR BROWSER**: Sends a request to siop.org asking for its certificate.
4. **SIOP.ORG SERVER**: Sends back its certificate.
5. **YOUR BROWSER**: Sends a request to the certificate authority to verify the content of the certificate.
6. **CERTIFICATE AUTHORITY SERVER**: Sends back confirmation that the certificate is legitimate.

7. **YOUR BROWSER**: Sends an acknowledgment to siop.org that all future communication will be encrypted and asks for the contents of /tip/jan17/crash.aspx
8. **SIOP.ORG SERVER**: Confirms that encryption will be used, and then goes into the tip folder, then into the jan17 folder, grabs crash.aspx and sends it back encrypted
9. **YOUR BROWSER**: Interprets crash.aspx as an HTML file, harvesting all the other resources we'll need. Send requests back to siop.org for each image on that page. Also send requests to any other servers needed, starting back at step 1.
10. **SIOP.ORG SERVER**: Sends back additional requested files.
11. **OTHER SERVERS**: Sends back requested files, managing encryption as requested (or not).
12. **YOUR BROWSER**: Renders all of the information it gathers as it gathers it. Also executes any JS as soon as it gets it. For any future AJAX requests, start this process over from Step 1.

All of this happens behind the scenes without you realizing it, in a matter of seconds. That's just how user friendly the web has become. But it means that every one of these steps has the potential to introduce both unintentional error and enable hacking, if not executed properly.

**Let's See It in Action**

We can easily peek a bit under the hood of the Internet with tools provided (for free) by Google Chrome. If you don't have Chrome already, download it here and then try each Internet browsing of the following to get a sense of the sorts of things going on behind the scenes of Internet browsing:

1. Go to http://rlanders.net, right-click on any text you see, and select *Inspect*. (You can do this on any webpage, but some of the examples below will be easier to see on that page.)
2. A panel will open. You can see the HTML code in the Elements tab. Try hovering your mouse over each element, and it will highlight where that piece of the HTML file is being rendered. Try to reverse-engineer some of the code—you'll find that in many cases, it's easier than you think.
3. Next, click on the Console tab. This is where JS is being executed. Type the following, press Enter, and see what happens: **alert("Hello world!")**
4. Next, click on the Sources tab. This is a list of all the requests that were sent when you requested this webpage. Drill down to see the raw content of any file that was requested.
5. Next, click on the Network tab. This won't have anything on it yet, so click the Refresh button (or on a PC, press F5). You will be shown a timeline depicting how long each request took. Web developers use this to identify bottlenecks that are slowing down their websites.
6. Finally, click on the Performance tab and press Refresh again. This will build a profile that shows everything your web browser did on your behalf, over time. This will show not only how long it takes to process each request (which is what the Network tab showed you) but also how long each individual object on the webpage took to render and how much time was spent on each and in what order. In the case of JS, it'll even show you how long each part of the code took to execute.
7. **Bonus points 1:** If you're on Windows, press Windows Key + R to bring up the Run dialog. Then type: **tracert siop.org**. You'll see the full route of any request you send to siop.org as well as three estimates per hop on the amount of time it takes for requests from your computer to get to that hop. If you're getting slow Internet speeds, this is an effective way to figure out where the problem is. Is it your router (first hop), your Internet service provider (look for hops with the name of your Internet provider, like Verizon or AT&T), the website you're trying to access (the last hop), or somewhere in between? Importantly, sometimes speed estimates (called *pings*) are blocked by particular hops, so you may just see asterisks for those hops instead.

8. **Bonus points 2:** In Chrome, install the "Web Developer" extension, which will add an icon that looks like a gear to your add-on bar. In those menus, there's an option to *Disable JavaScript*. Click that, and then browse the web. You will find that a lot of things have changed, and almost nothing is interactive anymore.

## So Who Should Learn About the Internet?

These days? Everyone! The Internet is so fundamental to everything that we do as researchers and practitioners that you are doing yourself a grave disservice if you don't try to at least lightly familiarize yourself with how it works. Plus at some point, you'll say something that makes your IT person stare at you with *that look*—you know the one—the one that says, "I can't believe I'm forced to help people like *you*."

## To Learn More

For each of the aspects of the Internet you've just read about, you could easily fall down a rabbit hole of detail. Each of these concepts was carefully engineered to create the Internet we have today, so each is enormously complex once you get into it. But for I-Os, you probably won't need more *depth* than this unless you plan to start web programming (e.g., I have used JavaScript in Qualtrics to build interactive experiments that are not possible using the vanilla tools provided). If you do want to try your hand at web programming, I'd recommend a sequence of free courses on Codecademy:

1. HTTP and CSS: https://www.codecademy.com/learn/learn-html-css (basic web design)
2. JavaScript: https://www.codecademy.com/learn/learn-javascript (basic client-side web programming)
3. jQuery: https://www.codecademy.com/learn/jquery (advanced client-side web programming)
4. PHP: https://www.codecademy.com/learn/php (basic server-side programming)

An advantage to courses like those on Codecademy is real-time feedback; you code in your web browser, and your work is scored algorithmically less than a second after you submit it. As all I-Os know these days, there's nothing better for changing your behavior than relevant, immediate feedback.
Even if you won't be programming yourself, I left out a lot of valuable information in this overview. So, if you'd like to know more, and especially if you're personally responsible for communicating between I-O and IT in your organization, you will want more "big picture" instruction, staying around the level of depth covered here. For that purpose, you might consider starting with this MOOC on Coursera.

## Conclusion

That's it for the fifth edition of *Crash Course*! If you have any questions, suggestions, or recommendations about the Internet or *Crash Course*, I'd love to hear from you (rnlanders@odu.edu; @rnlanders).

**I-Opener: Fantastic Graduate-School Expenses and How to Afford Them**

**Steven Toaddy**
**Louisiana Tech University**

Though there are myriad wonderful resources (see the end of this column for a partial list) available through SIOP and through other sources that offer advice to graduate students on everything from how to seek out graduate programs to how to make the most of attending SIOP's annual conference to, indeed, how to enact money-saving tips specific to graduate study, I can't locate any[1] that accomplish the modest objective that I have for this issue of the I-Opener: to identify *specific*, *temporally-constrained* categories of expenses that graduate students face in our field.[2] Here's why I'm doing this:

1. Costs of attending graduate school are not distributed evenly across one's tenure in a program; knowing when costly periods are likely to crop up can help one plan for them.
2. Costs of attending graduate school begin well before matriculation and extend to well after the last class is completed; a realistic understanding of this will, again, help in planning at both ends of the experience.
3. Having financial-planning tips and tricks is great, but knowing *why* such planning is prudent may help motivate students to enact it.

As a bonus, I'll share some of the tips that my SMEs provided to deal with these tough financial periods of life (though, again, there are other resources that hit on the same type of content). Note that this is not a report on a rigorous survey of graduate-student expenditures[3]—we're working on that, though.

**What and When Are the Costs?**

Individual paths may vary—one may be attending SIOP annual conferences during one's middle-undergraduate days, and of course one can return to graduate study well after completing one's undergraduate degree—but modally, the process of graduate school can be divided into four epochs:

**Year -1: Preparation, application, and interviewing.** How does one go from undergraduate student to graduate student in I-O psychology? Those of us on the other side of this process (perhaps by some variant of the anthropic principle/survivorship bias), those who often find themselves helping potential I-O graduate students decide whether to pursue study in our field, may struggle to recall the confusion and inefficiency and pain that this process entails—and the costs, as **Harrison Wojcik**, graduate student at Depaul University, and Sean M. Nobel, PhD student at North Carolina State University help us explore:

- *GRE prep: $150*. Tip: Bleh. A whole column could be written on this one. I suppose one could try to borrow a prep book from someone who has gone before.
- *GRE and score sending: $525*.
- *Application fees: around $40/school (so perhaps $200-$350).* Tip: Only apply for the schools that you actually intend to attend. For real. There are worse things than not getting into graduate school, like spending years in a place that you can't stand.
- *Transcripts: around $40/school (so perhaps $45-$175).*
- *Interview clothing:* between $50 and $700.[4]
- *Campus visit(s):* between $250 and $1,010 each, some of which may be reimbursed. Tip: Ask for reimbursement, know what you need to do to be reimbursed, and stay on top of the process.

This is true during graduate school as well; keep an eye out for sources of funding. Ask people about them.

**Year -0.1 to 0.1: Movement and matriculation.** How far you are from your graduate school, what living arrangements you have before you move, and whether you have one or more roommates will substantially affect the cost of the time immediately prior to the first days of class. Some costs that you may accrue immediately prior to starting your first term of graduate study—listed courtesy of an anonymous current graduate student—include:

- *Relocation expenses: $500-$3,000*. Don't forget security deposits, costs for connecting utilities, and the like. This varies so much by location and living situation that basically throwing the "hey think of this" advice at you is the best that we can do.
- *Monthly rent and utilities*: anywhere from $400/month to beyond $1,000/month. Tip: Roommates, yo. Also you won't see the inside of your home much given all of the grad schooling that you'll be receiving, so this may not be the best place to dump disposable income.
- *Tuition and fees:* anywhere from $700/term to upwards of $10,000/term depending on financial aid and in- or out-of-state status. Schools and other resources often provide pretty comprehensive data on the total cost of attendance, so once you figure out into which category you'll fall for tuition costs, there should be few surprises here.
- *Textbooks*: $125/term. Tip: Borrow these from students who have gone before you. Ask the professor for a reading list and buy online/used in advance of the term. This takes particular effort at the very start of graduate school; you may not have solid connections to existing students or faculty that you'd need to make a cost-saving move, so, you know, get to know them.
- *Changing over your license and voting registration*: around $100 but a substantial investment of time. Tip: Know well in advance what you should and must do to fulfill the obligations of your program with regards to residency. As **Scott Hines** of Louisiana Tech University points out, in-state tuition may be based on the completion of paperwork at your institution and on other residency-relevant actions such as establishing your legal residence in the state of your graduate program.

**Years 1 through lots: Steady-state performance.** Okay, now you're getting into a groove. Good! Harrison and the same anonymous student gave us some more information regarding regular costs of each year of attendance beyond, of course, continued tuition, fees, rent, textbooks, and the like:

- *SIOP student membership*: $50/year. Typically due in April.
- *SIOP (and/or other) conference registration and attendance:* around $700 if you get creative. One typically needs to shell out the registration and reservation (hotel and flight) costs well in advance of the April meeting: Think December or January of the previous year. Tip: Get creative indeed: room with others, plan your airport parking and rides and taxis and such to minimize expenditures. Staying in the conference hotel may be a great idea but it is exPENsive.
- *Cost of owning a vehicle:* around $800/year. Tip: Plan for the unexpected here. It's not just insurance and fuel and payments but also having funds available for unexpected necessary repairs.
- *Professional (school) clothing:* $500.[5]

**Year lots: Dissertation, graduation, and career launch.** You are getting ready to finish your graduate program! Fantastic! **Sonia Oakley**, PhD, and **Natalie Wright**, assessment manager at the College for Financial Planning, have some insights regarding the costs that you can expect:

- *Research costs*: $1,300 to $3,000 for dissertation data. Of course you may end up spending nothing on your dissertation, but if you do, the MTurk fees stack up quickly – bear this in mind. There are grants and awards that may help cover these costs, but both the anonymous respondent and Sonia mentioned having paid out of pocket for this.
- *Graduation-related expenses:* $25 and (way) up. Your school may require substantial graduation and dissertation-printing fees, but even the most frugal student will encounter some end-of-enrollment costs, and those who want to wear regalia, walk, send graduation announcements, and hold a party are looking at thousands of dollars of expenses.
- *Interview clothing*: $50 to $400[6]
- *Interview travel:* $700/organization. Granted this should be reimbursed fully by the interviewing organization, but reimbursement often means carrying a balance for months. Plan!
- *Relocation expenses.* Again. This time your employer may (help) cover them, but perhaps not.
- *Loan repayment*. If you take even *incredibly* modest amounts of loans, expect repayment of at least $50/month to begin soon after graduation. Plan!

Here it is especially important to point out that, depending on how one swings employment (looking at you, academics), one may look forward to 3 months without income between the end of one's graduate training and the start of one's job. Plan!

**Oh and also.** Depending on how/whether you live your life during graduate school, there are so many other categories that may apply during any and all of the above epochs, including:

- *Having a pet*: $1,600/year.
- *Being a member of a family* (travel, gifts).
- *Self-care.* Read that however you want – movie nights, dating, pedicures, counseling, medication. Speaking of which,
- *Medical insurance.* You'll want this. Good luck.
- *Dating and/or marriage.* People actually do this during graduate school! They have children too! Way stronger than I am, those folks.
- *Eating food.* Sounds important, right?
- *Laundry*. You got all of that fancy interview/student clothing: Wash it!
- *Taxes*. Death isn't here for you yet, but taxes certainly are! Remember them, and remember that they're collected on some scholarships, grants, fellowships, and other pennies-from-heaven income sources.

## How on EARTH Do I Survive This?

Incredibly, many of us do. See the resources below for more advice, but here are some tidbits that the contributors named above provided:

- *Have an emergency fund.* Money comes in sporadically and expenses crop up unexpectedly; saving for a rainy (or injurious) day is worth it. Relatedly,

- *Live well within your means.* Cook at home, make things count twice (like do a cooking date with your partner instead of going out), and keep an eye on sporadic and unreasonable expenses like bar tabs. Don't be penny wise and pound foolish. Speaking of which,
- *Graduate school is an investment of time*. Don't squander it, even on being frugal. If you are paying a thousand dollars to attend a conference, don't save $50 by staying in a hotel across town that will prevent you from being able to attend the conference reasonably. Don't go crazy on coupon clipping if doing so eats up more time than it is worth. Go graduate and get a job. This applies to the location of your home as well. A 2-hour commute each day is likely not worth the $100/month you save on rent—let alone the price of operating your vehicle.
- *Anticipate rises and falls in income*. You may get your first paycheck one or more months after you start your assistantship, and you may get no money at all over the summer. Plan!
- *Check on the funding situation at any program to which you intend to apply.* If there isn't a realistic firing solution for attendance, don't bother applying. There are creative ways to fund a graduate education, so exhaust all of these before you give up your dreams, but don't throw money down the drain if you can't afford to attend a given program.
- *You're going to be in this with other folks, so work together with them.* Share and ask others to share cost-saving tips specific to your graduate environment.

**Despair Not**

Graduate school is worth it (we'll have better data on this soon, but some of the below resources will help you see why I say so). That said, it is expensive, and having enough money at each of a variety of stages will be crucial to your financial success while studying. There are, of course, other resources on which you may be able to call—family support, savings, loans, summer income, and so on—but regardless, be attentive to when you'll need to spend money on what—including the things that you can't predict—and you'll be in good shape.[7]

**Additional Readings/Resources**

- This whole YouTube video is great, and see esp. 1:22:06 for discussion of tuition, scholarships, TAs, internships, cost of living, federal loans, salary when graduating, and the need to be aware of cost of attendance.
- More tips for balancing finances in I-O graduate school.
- General I-O graduate-student resources, including program rankings with cost-of-attendance and financial-support information.
- **Richard Landers'** great I-O Grad School Series is a must-read resource for any aspiring graduate student in our field.
- This video, this column, and the first episode of this podcast are helpful in optimizing your SIOP annual conference experience.
- This and this and this are all great (though not particularly I-O centric) reports on various aspects of finances, debt, and graduate study in psychology.

1 And, by what I assume is the commutative property of Googling, no one else possibly could either #arrogance
2 Thanks to Rin Mouton for her help in shaping this topic and for help developing the "Oh and also" list.
3 For instance, all of my respondents are or were PhD students – YMMV as a Master's student. I suspect that you get the picture, though.
4 I personally have an axe to grind here, but I'm reporting what others said as opposed to what I think should be the case.

5 Because the wrappings of your meat shell are super important to your development as an I-O Psychologist.
6 Dress to impress stave off the judgment of others! Sorry, I'd stop with all of the clothing complaints but, you know, I don't want to.
7 P.S. Don't wreck your credit. Wrecking your credit puts you in bad shape. Don't do that. Plan!

## Max. Classroom Capacity: On Teaching in Fully Online and Hybrid Formats

**Loren J. Naidoo**
**Baruch College and the Graduate Center, CUNY**

Welcome readers! A little more than a year ago I wrote a column on preparing to teach an online class. At that time I was about to teach a fully online section of psychology research methods for the first time. That class has come and gone, and I've also just finished teaching a hybrid format statistics class, also for the first time. I'd like to share with you some of my experiences as a new online/hybrid instructor as a follow up to the column from last year. My goal is to provide some further food for thought for those of you considering teaching fully online or hybrid format classes.

But before I get into the messy details, let me quickly recap what the research literature seems to say about online/hybrid teaching: The flexibility of asynchronous online classes that lets students learn on their own time more than compensates for the detrimental effects of a lack of face time with students, and hybrid formats tend to offer the best combination of flexibility and face-time. Further, about a quarter of university students have taken at least one online class.

Here are some things that I have learned.

### 1. The Structure of the Class Requires a Lot of Thought and Planning

My colleague **Erin Eatough** was on the money a year ago when she noted that the most important consideration in planning on online class is how the structure of the class can be designed to support your educational goals and students' successful management of the self-regulation challenges inherent in online classes. I structured my class such that each week students first had to watch a video lecture and complete an associated online quiz on that material by Wednesday. Then students had one or two assignments to complete by Sunday. I kept this basic structure in place for each week to provide students with consistent expectations for their behavior so that they could develop effective habits for the class. Having a clear schedule with weekly deliverables also allowed me to track students' engagement in the class and quickly identify any those who were not meeting their responsibilities.

Some issues for you to think about are how you are going to present critical information (readings, discussion, lecture, video resources, podcasts), how you will track student engagement in the class (tracking of video views, discussion board posts, e-mailed questions), how you will assess student learning and at what intervals (e.g., online quizzing, discussion board posts, assignments), and what technology is needed to produce (e.g., Camtasia, Officemix) and post materials (e.g., Blackboard, Canvas).

### 2. Recording a Video Lecture Is Very Different From Presenting in a Classroom

I like to think I'm a pretty engaging instructor. This is feedback I get a lot from students (e.g., "He's annoyingly energetic and enthusiastic, especially for a 9 AM class"). I really enjoy being in class, interacting with students, asking questions, answering questions, and so on. It's a joy to observe students "aha moments" when you know you've had an impact. On the flip side, every semester I get a few questions from students that make me change my understanding of a theory or think of a new research idea. I love it. I didn't realize how much my own teaching style (and, possibly, effectiveness) relies on interacting with students until I sat alone in my office to record my first video lecture and then spent the next hour watching and editing it. Yikes—I didn't know I could be that boring! I really struggled to find that same level of enthusiasm and energy in the absence of real-time student input, and frankly, it wasn't nearly as much fun for me. However, others may prefer the predictability and control of recording lectures. I try to do as little editing and as few "second takes" as possible, but others may relish in this kind of work. Maybe recording lectures is to presenting in class like classical music is to jazz—both are good, just different. Anyway, having only done it poorly, I'm not sure I have great advice on how to create a great video lecture. In the future I will try to be more scripted and to build in more stories, examples, and multimedia. It's important to note that not every instructor chooses to record video lectures. Some prefer simply to use readings, existing media, and discussion (or other combinations) and do not themselves present any material. I'm far too conventional to contemplate doing that but it's an option!

The other challenge for me was the absence of real time feedback on how clear, comprehensible, and interesting my presentation was. When you're in front of students it's usually pretty obvious when you're being unclear, confusing, or boring, and over time you learn what works and what doesn't. I found it very difficult to get that kind of feedback in an online class. Which brings me to the next point.

### 3. It's Difficult to Teach a Class Online That You've Never Taught in Person

I think when you've taught a class more than once and you have developed a sense of how to effectively deliver your message, the lack of immediate and candid feedback on your presentation is less important. However, when you're teaching the class for the first time (as I was), this lack of feedback can be crippling. This is particularly problematic given the massive investment in time to record, edit, render (rendering alone can entail several hours of waiting), and upload video lectures—you want to get this right the first time! By the way, along the same lines, if you are recording videos that you wish to reuse, try not to mention students' names or specific dates or anything that might be confusing to the *next* set of students to watch the videos. It sounds obvious, but it's surprisingly difficult to avoid and a pain to edit out after the fact!

### 4. It Can Be a Challenge to Get to Know Your Students

I don't think this is necessarily so, and experienced online instructors probably develop different ways to get to know their students. I found that this was a challenge. There were some practices I initiated to try to develop rapport with students at the beginning of the semester. I asked everyone to add a headshot photo to their course website profile and to complete a survey with various self-report measures of psychological characteristics. They completed an introductory blog post in which I asked them to talk about why they chose to take this class in an online format and what about the class that they are most excited and anxious about. Not surprisingly, almost every student preferred the online format for scheduling flexibility, often because this was their last required class before graduation, they were working full time, and/or had children. Many expressed anxiety about the workload or the responsibility of keeping track of the class online. I responded to each student who expressed concerns that I thought I could help address.

I think this was a good start, but it was difficult to maintain momentum throughout the semester. To maintain students' scheduling flexibility, my goal was to require no synchronous meetings with students. However, the next time I teach this class I will require periodic synchronous meetings using Skype or something similar, at least in the early parts of the semester, to try to build a sense of community and make sure students are on track.

**5. The Technology You Choose Matters**

There are many options available for recording a video lectures and choosing one that works for you is important. In terms of software, I use Camtasia for recording, editing, and rendering video. There are many other options (e.g., Adobe Premiere, Final Cut), but I really like Camtasia's combination of power, flexibility and intuitive design. It takes a little time to learn but on the whole it's very easy to use. In terms of hardware, I think it's worth investing in a good mic (I use a Tascam DR-40 recorder/mic) to get clear, noise-free audio. A good webcam is also worth considering if you need one (e.g., for some reason Dell built their webcam into the bottom left corner of my laptop screen).

For my fully online class I used a blogging site developed by my university as the primary interface with students. Others may prefer Blackboard, Canvas, or similar platforms. I posted videos to Vimeo.com so as to avoid size limits with Youtube. In addition, Youtube has some automatic copyright detection that can prevent the use of short clips from copyrighted works that would otherwise fit under fair use rules. However, in my hybrid class I posted videos to Youtube and embedded them in Blackboard, which worked fine. I'm not a big fan of Blackboard as a general rule. I find it cumbersome, clunky and counterintuitive. However, I do like the feature which allows you to track when students access a video. One thing to think about is what level of privacy you would like to set on your videos. I was quite conservative, choosing private, password-protected videos. Others may prefer for their work to be freely available to as many people as possible.

One area I am looking to improve upon is the support of collaboration between students. I had my fully online research methods class design and conduct three empirical group-based research projects. For these, I asked students to brainstorm design ideas on a shared Google document. The objective was for me to be able to check in and offer feedback and guidance during the design process. Google docs takes some getting used to, and I found that the interface really slowed me down. In addition, Google docs works best as an asynchronous collaboration tool, and I did not require any formal synchronous meetings among students or with me. Some students used various means of communicating with each other in real time, including phone, Skype, and probably other ways I haven't heard of. Other groups worked only asynchronously. Blackboard collaborate provides one option for synchronous communication. Others include Webex, Skype, Facetime, Whatsapp, and so forth. Notwithstanding the software issue, I think I failed to provide enough structured time for synchronous conversation with students, and next time I will do more of this.

**6. Hybrid Teaching Can Be Fantastic**

In my admittedly limited experience I found that hybrid format can mitigate against many of the challenges and disadvantages of fully online format. First, you can separate instructional aspects that require hands-on or face-to-face contact from those that do not and implement the former in class meetings while relegating the latter to online instruction. For example, in my applied statistics class, I had online video lectures that focused on the statistical theory and uses of each analysis, while class time was spent applying this knowledge to the analysis of actual data sets and to discuss areas of confusion, questions, and so forth. Similarly, in a hybrid format introduction to I-O psychology class, you might prepare video lectures that present key theories, with class time reserved for exercises, discussion, Q&A, and so on.

In sum, the fully online format presents certain challenges, requires careful thinking about how to structure your class in light of your educational goals and requires you to invest in learning about and learning to use software appropriate for your needs. Converting a course you've taught before to fully online is probably better than developing a new class from scratch. One way to do this is to convert the class to hybrid format first, carefully developing materials over time until you are able to offer the class fully online.

I hope this gives you some ideas and a sense of the issues that may be important to consider when making the switch to online or hybrid instruction. Please e-mail me if your experiences have differed or if you have any questions or comments!

## SIOP in Washington: Advocating for I-O in Federal Public Policy

**Jill Bradley-Geist and Bill Ruch**

*Since July 2013, SIOP and Lewis-Burke Associates LLC have collaborated to make I-O science and research accessible to federal and congressional policy makers. SIOP has embedded a foundational government relations infrastructure within the organization, enabling SIOP to develop an authoritative voice as a stakeholder in science policy in Washington, D.C. and to promote SIOP as a vital resource for evidence-based decision making.*

***FY 2017 Omnibus Appropriations Bill Signed into Law***

The House and Senate Appropriations Committees concluded negotiations on an omnibus appropriations bill (H.R. 244) to fund federal government agencies for the remaining 5 months of fiscal year (FY) 2017. President Trump signed the bill into law on Friday, May 5. Despite the cuts proposed by the Trump Administration, the final bill provides increases to federal investments in many of the research, education, and healthcare programs important to research universities and nonprofit research institutions.

The delayed conclusion of the FY 2017 appropriations process 7 months into the fiscal year was brought about by the Trump Administration's insistence on putting its stamp on federal spending. In the end, however, the Administration relented on its top priorities, such as money for a border wall and increased defense spending, to avoid a government shutdown. The bill includes funding for 11 of 12 annual appropriations bills (the bill funding the Department of Veterans Affairs and military construction projects for FY 2017 passed in December) and upholds the overall discretionary $1.07 trillion spending cap for FY 2017 agreed to in the Bipartisan Budget Act of 2015 for both defense and nondefense spending. The bill also provides $93.5 billion in Overseas Contingency Operations funding for global combat operations and improved military readiness and $8.2 billion in disaster funding to address recovery efforts from fires, floods, and other extreme weather events. This funding is not subject to the spending caps and allows Congress to fund increases in defense and emergency disaster spending without making cuts to nondefense programs.

Even with only a $3 billion increase in total discretionary funding for FY 2017 compared to FY 2016, many research and education agencies that enjoy bipartisan support have increases in funding:

- The National Institutes of Health (NIH) would receive $34 billion, an increase of $2 billion, or 6.2%, above the FY 2016 enacted level.
- The Pell Grant program would be expanded to accommodate year-round funding for students while most other student aid investments would be flat funded.
- The Department of Energy (DOE) Office of Science would receive $5.39 billion, an increase of $42 million, or 0.7%, above the FY 2016 enacted level.
- The DOE Advanced Research Projects Agency-Energy (ARPA-E) would receive $306 million, an increase of $15 million, or 5.1%, above the FY 2016 enacted level.
- The National Science Foundation (NSF) would receive $7.472 billion, an increase of $9 million, or 0.1%, above the FY 2016 enacted level.
- The National Aeronautics and Space Administration (NASA) would receive $19.7 billion, an increase of $368 million, or 1.9%, above the FY 2016 enacted level, including an increase of $176 million for science programs.
- Although Department of Defense (DOD) basic research account would receive $2.3 billion, or a 1.4 percent decrease over last year, applied research and advanced technology development would be increased by 5.4 percent and 8.4 percent respectively.
- The U.S. Department of Agriculture (USDA) National Institute of Food and Agriculture (NIFA) would receive $1.36 billion, an increase of approximately 2.72% above the FY 2016 level. Within NIFA, the Agriculture and Food Research Initiative (AFRI) would receive $375 million, an increase of $25 million above the current enacted level.
- The Institute of Education Sciences within the Department of Education would be funded at $605 million, a cut of 2.1% below the FY 2016 level.

This spending bill provides certainty for federal agencies ahead of what is likely to be a protracted legislative process to decide FY 2018 funding priorities for the country. In contrast to the increases that are provided under the FY 2017 omnibus, the FY 2018 Trump Administration budget blueprint released in March proposed cutting nondefense programs by $54 billion to pay for $54 billion in defense increases. These cuts include reductions to or eliminations of research and higher education priorities such as the National Institutes of Health, Department of Energy, National Endowment for the Humanities, environmental agencies, and federal student aid. With this uncertainty ahead for FY 2018 funding and the potential for an extended continuing resolution, Congress has sought to provide strong FY 2017 funding with the omnibus bill to meet agency needs.

Lewis-Burke Associates LLC analyzed the FY 2017 omnibus and provided an analysis of federal funding for research, education, and healthcare available here**.**

**SIOP Submits FY 2018 Appropriations Testimony on National Science Foundation Funding**

On April 14, SIOP submitted written testimony to the House and Senate Appropriations Subcommittees on Commerce, Justice, and Science, urging the Subcommittees to appropriate $8 billion for the National Science Foundation (NSF), in fiscal year (FY) 2018. The testimony also conveys the importance and applications of social and behavioral science research funded through the Foundation. SIOP's testimony will be incorporated into the Congressional Record to highlight the importance of NSF during funding deliberations in the House and Senate.

NSF collectively funds approximately 60% of the federal social science research portfolio. These projects are largely overseen by the Foundation's Directorate for Social, Behavioral, and Economic Sciences (SBE), which sponsors several projects that support SIOP researchers and practitioners. Given NSF's role as the primary conduit for federally sponsored social science research, Lewis-Burke, on behalf of SIOP, has pursued a comprehensive outreach strategy intended to meaningfully raise the profile of I-O research at NSF, directly advocate for federal support for social science, and position I-O researchers to capitalize on NSF funding opportunities.

**SIOP Participates in Coalition for National Science Funding Capitol Hill Exhibition**

On May 16, SIOP member **Katina Sawyer**, assistant professor at Villanova University's Department of Psychology, represented the Society at the 23rd annual Coalition for National Science Funding (CNSF) Capitol Hill Exhibition in Washington, D.C.

***Katina Sawyer at CNSF 2017***

The exhibition is an opportunity for CNSF members to display and discuss National Science Foundation (NSF)-funded research directly with members of Congress, federal agency officials, and other policymakers, and allows the research community to highlight the importance of continued investment in NSF and basic research. SIOP's booth at the exhibition featured ongoing research conducted by Dr. Sawyer, examining the role that male corporate leaders can have in promoting gender inclusivity at the organizational level, subsequently improving business performance. The booth was very popular with attendees, and Dr. Sawyer was on hand to answer questions and discuss the importance of federal investments in I-O-driven social and behavioral science research.

The booth attracted a number of visitors from federal agencies and congressional offices. Visitors to the SIOP booth from NSF included Director France Córdova, along with Dr. Fay Lomax Cook, assistant director for the Social, Behavioral, and Economic Sciences Directorate (SBE), who oversees the agency's social science research portfolio and sponsors many projects that support SIOP researchers and practitioners; Dr. Suzi Iacono, head of the Office of Integrative Activities, as well as various other program officials from directorates throughout the agency. The NSF representatives were excited to hear Dr. Sawyer explain her findings and eager to direct her to additional opportunities at NSF that support projects focused on broadening participation and representation in STEM. In addition, Dr. Sawyer's research topic provoked interest and engaging conversations with a wide array of congressional staff, including personnel from the offices of Reps. Ben Ray Lujan (D-NM-3), Ed Perlmutter (D-CO-7), Derek Kilmer (D-WA-6), Denny Heck (D-WA-10), G. K. Butterfield (D-NC-1), and several others. Many of the staff members were interested in learning more about how I-O psychology could be applied to a pressing workforce concern, several of whom took copies of Dr. Sawyer's presentation and exchanged contact information for future engagement.

SIOP joined CNSF in the fall of 2014 and participated in the past two exhibitions. CNSF is an alliance of over 140 organizations that support the goal of increasing the national investment in NSF research and education programs. Participation in the CNSF Exhibition complements SIOP's ongoing NSF outreach strategy, which has included submitting written testimony to the House and Senate Appropriations Committees advocating for NSF funding, as well as continuous efforts to build and maintain relationships with congressional and federal agency officials. Through SIOP's government relations activities, like the CNSF Exhibition, the Society is able to highlight the value of I-O research to federal agency program managers and policymakers and promote SIOP as a prominent and credible stakeholder in the science community's government relations priorities.

**SIOP Members Spotlight: Editorial on Immigration Policy**

*In our current* TIP *feature of SIOP members engaging in government advocacy work,* ***Sarah Lyons-Padilla*** *and Michele Gelfand present an editorial discussing immigration policy as related to their research. To tell us about your own advocacy-related work, please contact current Government Relations Advocacy Team committee chair, Jill Bradley-Geist:* jill.bradley-geist@uccs.edu*.*

*The following is an editorial from Sarah Lyons-Padilla and Michele J. Gelfand, stating their personal concerns and advocacy efforts.*

After the Paris terrorist attacks in late 2015, a backlash against Muslim immigrants spread throughout the United States. Then-Presidential candidate Donald Trump proposed implementing a ban on Muslims from entering the country "until we figure out what's going on." As academics who study the risk factors for radicalization among American Muslims, we were alarmed at this ill-conceived response. Our own data, which had recently been accepted at the new journal, Behavioral Science and Policy showed that such displays of Islamophobia could actually generate the psychological conditions that give way to support for extremism. We felt compelled to share these research insights with policymakers, all of whom were searching for solutions to the problem of violent extremism, and many of whom were going about it the wrong way.

A few days after the attacks, we published an article in *The Conversation*, an outlet for academics to write about their research. This article got picked up by *Quartz*, *The Washington Post*, and other news publications. In the meantime, we reached out to the Society for the Psychological Study of Social Issues (SPSSI), a Washington DC-based organization of psychologists who share an interest in policy-relevant research. They invited us to present our research to approximately 100 congressional staffers on Capitol Hill. We also met with our own senators and representatives from Maryland and California, respectively. In these meetings, we discussed the policy implications of our research and distributed a fact sheet we had authored on the psychology of homegrown radicalization. Although we were encouraged to see more and more policymakers recognize the counterproductive effects of anti-Muslim rhetoric, President Trump's promise of a Muslim ban came to fruition in the first weeks of his presidency. In response, we published an op-ed on our research in *The New York Times*. We couldn't have done this without the support of the *Behavioral Science and Policy* staff, who are committed to spreading the journal's research with broader audiences long after the original publication.

For researchers who want to become involved in advocacy work, we can offer three recommendations. First, write about your research in outlets like *The Conversation*. The editorial staff leave the academics in control of the writing, meaning you don't have to worry about inaccurate representations of your work. The editors do a great job of helping you frame your research for broader audiences, and many of their pieces get picked up by other widely read news outlets. Second, consider submitting your research to *Behavioral Science and Policy*, an open-access journal that caters to academics and practitioners alike. It reflects the SIOP science–practitioner model! Finally, look for advocacy opportunities through SIOP or related organizations like SPSSI. You can contribute to a policy statement, a fact sheet, or participate in one of their periodic policy workshops.

## Learning About Learning: Trends in Workplace Training 2: Trend Harder

### Tom Whelan and Amy Duvernet

In the last installment of Learning About Learning, we talked about the trends in corporate L&D and how I-Os can help investigate whether or not these trends live up to their hype. Now, we're looking at the other side of the coin: the trends in I-O concerning training. As we've stated before, sometimes the "hottest new thing" in L&D is an approach to learning that I-Os have been researching for a decade or more. Other times, the latest and greatest fashions in L&D don't even make a blip on the I-O radar. So, let's explore what training has looked like recently from the I-O side of the fence.

### Prevalence of Training Across Our Field

Training is clearly core to the I-O capability set and part of what we present to the world as our domain of expertise. The description of what we're all about on the SIOP media page states that our field:

> tries to understand and measure human behavior to improve employees' satisfaction in their work, employers' ability to select and promote the best people, and to generally make the workplace better for the men and women who work there. They do this by creating tests and by designing products such as *training courses*, selection procedures and surveys. (emphasis added, obviously)

So, it may surprise you that training has been mentioned infrequently in the lists of annual workplace trends released by SIOP's Visibility Committee since late 2013 (SIOP Top Ten Workplace Trends, 2014, 2015, 2016, 2017). For example, this year's list suggests that I-O psychologists can design and implement training programs that address the need for increased focus on employee health and wellness (trend #10), as well as the growing importance of diversity and inclusion (trend #8). Similarly, the 2016 lists relates trends #2 and #9 (building healthy, diverse workforces and trends in technology changing the way work is done) to training. Although accommodating workforce changes represents a theme in the list of training trends that we identified from the applied L&D side in our last column, the only other major overlap from SIOP trends list were mobile assessment (2015, trend #1) and gamification (2014, trend #5). It's worth noting that training is simply mentioned in all the above trends—it's never the main theme.

This is not to suggest that the lists of SIOP annual trends has been neglectful of training, but our field could be assuming that, "yeah, we do that," without pursuing it in actuality. Because when it comes to designing training courses, as mentioned in the SIOP media page, the world of L&D tends to hire for instructional designers and program coordinators with an adult education background, not necessarily I-Os. So, is what we're doing with training the equivalent of having some great pie we're able to make from scratch that we seldom tell anyone else about and never bring to any dinner parties?

To support the argument that we don't advertise our expertise in training, let's take a look at what's trending in I-O by looking at the patterns of what our field has been bringing to recent SIOP conferences. We know, thanks to a recent *TIP* article, that SIOP conference sessions and the SIOP trends tend not to overlap each other (Thornton, Poeppelman, Sinar, Armstrong, & Blacksmith, 2016). Because we established above that training does not feature in the SIOP trends, the litmus test here will be past SIOP sessions listing training as a content area from 10 years of programs from the annual SIOP conference (SIOP Program Explorer 2008-2016; Horn, 2017). These data showed that:

- 168 sessions identified "training" as the primary content area

    - 130 were posters
    - 24 were symposia/forums
    - 11 were panel discussions
    - 3 were roundtables
    - The most popular secondary content areas were motivation/rewards/compensation (18), groups/teams (12), testing/assessment (7), human factors/ergonomics (7), and personality (6).
- 133 sessions identified "training" as the secondary content area
    - 100 were posters
    - 17 were symposia/forums
    - 9 were panel discussions
    - 5 were roundtables
    - 2 debates/alternative sessions
    - The most popular primary content areas were groups/teams (23), inclusion/diversity (16), coaching/leadership development (11), careers/mentoring/socialization/onboarding/retirement (10), teaching I-O psychology/professional development (8), and technology (8).

You might be thinking, "well, 168 sessions seems like a good number, what's the big deal?" For context, the top three most popular primary content areas for SIOP sessions over the same span of time were leadership (629 sessions), testing/assessment (620 sessions), and inclusion/diversity (448 sessions). Basically, training is not a frequent topic at our conference—except for the 2011 conference in Chicago, there haven't been more than 25 training-related sessions at any given SIOP conference since 2008. Moreover, the 2017 conference continued this trend. With just 16 accepted sessions listing training as a primary content area*, the following depicts the breakdown for each session type for SIOP 2017:

- 12 posters out of 23 submissions,
- 2 symposia/forums out of 7 submissions,
- 1 community of interest out of 1 submission; and,
- 1 panel discussion out of 4 submissions.

These 2017 numbers above represent a 46% acceptance rate for training related sessions, which doesn't seem all that bad until you contrast with the overall acceptance rate of about 67% (Horn, 2017).

"But that's just the SIOP conference," you might think, "and that can't be your *only* yardstick." That's completely fair, and we agree. So, consider this: among the recent collection of centennial reviews published in *Journal of Applied Psychology*, Bell, Tannenbaum, Ford, Noe and Kraiger (2017) identified and summarized 458 articles related to training and development published in the journal since its inception. We know from McNeal, Stoeger, and Kreun (2017) that there have been just north of 9,500 articles published in *JAP* in the last 100 years. So, that means training represents roughly 5% of everything published in *JAP* over the last century. For another *JAP* barometer, in the topic frequency analysis by Kozlowski, Chen, and Salas (2017), they noted a total of 794 articles with training, learning, or employee development as keywords. This represents 8% of everything published in *JAP*. Granted, when contrasted with other topics in *JAP* such as cross-cultural research (102 articles, 1%; Gelfand, Aycan, Erez, & Leung, 2017) and work design research (366 articles, 4%; Parker, Morgeson, & Johns, 2017), training compares favorably. For other topics such as discrimination research (508 articles, 5%; Colella, Hebl, & King, 2017), however, the comparison is not as sunny given the centrality of training to the definition of I-O. (We should mention that for the first 40 years of *JAP*, 21-40% of the articles in each decade were book reviews, per Kozlowski et al.)

**Training Topic Trends**

So, we've established that I-O could stand to increase our focus on training as a topic of interest. But for those of us who are already directing our attention that way, to what, specifically, are we attending? Over the past decade, SIOP conference training sessions have focused on a variety of topic areas including the impact of technology, evaluation techniques, design features (e.g., the effect of games or post-training feedback), the influence of instructors, specific training topics (e.g., ethics, diversity), the impact of context, antecedents of training transfer, and industry-specific training (e.g., healthcare). However, the impact of individual learner differences has been the focus of the greatest number of sessions, as well as sessions that modeled the interaction of individual differences and other training-related constructs.

The themes summarized in Bell et al.'s (2017) review of *JAP* training articles mirror many of these conference topic areas, with training themes including training criteria, trainee characteristics, training design, and context of training. However, the extent to which these peer-reviewed research studies reflect I-O practice within the training arena is unclear. Across past years' SIOP conferences, the overwhelming majority of training-related sessions came from submitters who were affiliated with universities rather than consulting firms or other practitioner institutions. Likewise, none of the 2017 sessions were geared specifically to practitioners and instead listed the intended audience as either mixed or academic. Although a handful of sessions focused on providing practical recommendations for applied audiences, these types of sessions were few and far between. In other words, our scientist–practitioner model seemingly leans heavily to the scientist side when it comes to workplace training.

Yet, one SIOP 2017 session points to the importance of training to both applied and academic SIOP members. As we mentioned in our previous column, **Tara Behrend** and our own **Amy DuVernet** hosted a community of interest session at this year's conference dedicated to trends in training. This open discussion allowed us to engage with all segments of SIOP membership on learning and development issues, and attendees were asked to suggest topics for discussion and then break into groups to discuss those topics as part of the session. Topics included: the intersection of learning and technology (e.g., microlearning, gamification, simulation, virtual/augmented reality), workplace changes and their impact on learning (e.g., shift towards informal learning), communicating the value of I-O in learning (e.g., overcoming apparent gaps in pedagogical perspectives), and evaluating training (e.g., identifying appropriate metrics, communicating the value of evaluation to stakeholders). The discussion groups came together to provide examples, share challenges, and offer suggestions. The popularity of the session was a stark contrast to the number of actual SIOP presentations listing training as a primary topic area.

**Addressing the Gap Between I-O Focus and L&D Practice**

So, where does that leave us? We don't want to say that our field is willfully giving training short shrift, but it *really* does look like I-O is giving training the cold shoulder. But why could that be? Are we under the impression that there's nothing new to be researched in the world of training that despite the pervasive influx of technology into the job tasks of most workers over the past 2 decades, we know pretty much all there is to know and the well has run dry? Is training simply passé? If it isn't already obvious, we don't think this is the case; in fact, we think there's plenty of territory yet to be claimed. Part of why we're seeing "training" trail off in our conference and in one of our flagship journals may have to do with the way most I-Os frame the topic in our heads. In their introductory review of 100 years of research in *JAP*, Kozlowski et al. (2017) noted that:

> throughout the century, research on training and development has remained fairly high (around 100 articles per decade between 1967 and 2006) until the last decade, where research has dropped by about 50%. One possibility is that, in the past 10 years, more research has focused on informal and continuous learning, which have been picked up in research on newcomer socialization, mentoring, and work adjustment (research that has witnessed a steady increase over the past 30 years). (p. 244-246)

This suggests the *meaning* of training in I-O might be undergoing a shift as its manifestations evolve within organizations. Accordingly, I-O is simultaneously experiencing an alignment problem with L&D. Why would we think so? Most of the training outsourcing market deals with training content, *not* training evaluation. Yes, I-Os are the undisputed heavyweights of organizational assessment but comparatively few of us ever deal with instructional design and managing corporate learning curricula. As a result, those on the corporate side *might have no idea who we are, because they think we don't have the skill sets they need to solve their training problems.* Further, a generic instance of organizational training can be relatively low stakes compared to most selection efforts. To the extent that our services can be pricey, some organizations may balk at leveraging I-O expertise in training in favor of tasking us with higher stakes selection responsibilities. All of this gets compounded by the fact that, as noted above, I-O seems to be experiencing definitional problems with our training research.

Shrinking the current gap between I-O and L&D will not be an instant or easy process, but we feel it is a process that starts from I-O reestablishing itself in the practical training research domain (even if we need to start using a different word than "training"). From our last column, we identified that L&D practitioners appear to be most interested in meeting learners' needs, managing their expectations, introducing them to new technologies, and offering several modalities for learning. I-O already has much to say about these topics, but if we're not focusing on the changing role of training *inside* I-O and continuing to conduct and publicize our work, how will those outside in the L&D world ever hear anything we're saying about employee learning? As such, we feel our field needs to reignite an internal dialogue that brings together our best and brightest I-Os working in L&D to share our expertise, drive innovation in our research, and shake the tree of the organizations and employees we're ultimately trying to help.

To help kick start that conversation, we've created a LinkedIn group targeted specifically toward I-Os working or interested in L&D. Our hope is that this group results in collaborative relationships, improves communication about what I-O can bring to L&D, and connects future SIOP presenters who can collaborate on session submissions for the upcoming 2018 conference in Chicago. So, we'll leave you with this challenge—take a moment to join the group here, introduce yourself, and share some information about how your job role or research interests intersect with L&D.

* Special thanks to Larry Nader, **Zack Horn,** and **Tracy Kantrowitz** for providing SIOP 2017 submission data

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## Moving I-O Psychology Forward Together

**Jessica Sorenson, Grace Ewles, and Thomas Sasso**
**University of Guelph**

Throughout our tenure as *TIP* columnists, we have written each of our columns with the aim of critically discussing a number of topics relevant to the graduate student experience and the field of industrial-organizational psychology. For our final column we wish to take a more reflective approach. We aim to synthesize and contextualize our previous columns and provide recommendations to further support the development of graduate education in I-O. To accomplish this, we have broken our column into three parts: first, a reflection to highlight the learnings and themes that have emerged across our columns. This is followed by contextualizing these themes within broader discussions happening in *TIP* and across other forums, as well as the identification of future directions. We conclude our column with recommendations and key takeaways to support change. By doing so, we aim to summarize our learnings and inform the future direction of our field, with a particular emphasis on the importance of holistic learning and development.

**A Reflection on the Holistic Graduate Student Experience**

In looking back on the issues raised in our past columns, we are left with three questions for I-O graduate students, faculty, and administrators to reflect upon. (a) How might we unify our field to address the current dichotomization of I-O? (b) In what ways can we leverage new educational opportunities to broaden the experiences of future graduate students in I-O psychology? (c) How might we imbed compassion within our education systems in order to prioritize the well-being of students?

First, how do we go about unifying our field? Throughout our tenure, we have recognized the increasing tensions between subgroups in I-O as a result of dichotomization: academic/applied, MA/MBA/PhD, social good/profit, scientist/practitioner, industrial/organizational. As a field, we need to move beyond false dichotomies in our work and educational systems in order to address the nature of contemporary graduate education and adequately prepare graduate students for the future. At the heart of this issue, we need to stop thinking about our field as industrial or organizational psychology. More and more we are coming to realize that challenges facing workplaces require joint perspectives of both I and O. Rather than distinguishing between the two facets, can we move away from programs and courses being defined by this categorization and instead appreciate our interdisciplinary foundation? Similarly, unquestioned assumptions associated with value of one degree or another (e.g., PhD vs. MA or MBA) does little to support our understanding of the knowledge, skills, or capabilities of the person who holds either degree. Ultimately, solutions to real world problems will require the combination of skills, perspectives, and expertise from varying backgrounds.

To support this change, individuals must challenge dialogues that artificially reinforce the separation of research and practice or applied versus academic. Such dichotomies limit rather than expand discussions in our field. Our research pursuits should be informed by real world topics and in partnership with practitioners who can tether us to workplace realities. In turn, practitioners must continue to engage with the multisource data of academia to formulate evidence-based approaches to their work. By considering both sides of the coin perhaps in time we can move closer towards our lofty goal of embodying the scientistpractitioner model.

Our second point of reflection is based on the need to broaden the horizons of graduate education beyond traditional limitations. Graduate students today will benefit greatly from breaking free from institutional and regional boundaries by exploring topics from a global perspective. As a field, we must move into more innovative platforms, with greater knowledge mobilization and translation, which will help break down the ivory tower and democratize knowledge. Individuals must think about different forms of knowledge within our field such that we do not prioritize traditional methods that represent only a small segment of experience as truth. Rather, to support the growth of our field, we must be willing to explore alternative forms of data collection and dissemination, allowing I-O researchers to transcend traditional empirical boundaries. Similarly, we must expand our networks, both within and beyond SIOP. Our discipline will be more likely to grow if we create opportunities for collaboration and integration among individuals with diverse perspectives. By doing this we will, at the very least, promote greater understanding and transference of the skills learned in graduate school to different situations and events.

Our final reflection from our columns is that being a graduate student is tough. Students face many competing challenges, including coursework, research, teaching responsibilities, and practical development just to name a few. At times it is impressive that we can continue to function without caffeine. In addition to these demands, we struggle to maintain the financial resources to pursue our education. As a result, we have competing goals that require different actions and processes in order to succeed, often at the expense of our own well-being. Showing compassion to ourselves, and one another, will be important in evaluating the nature of how these challenges are created, sustained, and what they are meant to achieve. This is particularly true for individuals in graduate school with marginalized identities who experience additional barriers to success. By emphasizing compassion, we provide an opportunity for individuals, programs, and our field at large to develop a culture of support for students, a component of success often forgotten.

**We're Not Alone: A Movement for the Progression of I-O**

Thankfully we're not the only ones discussing these issues; rather, our thought process is reflective of larger conversations. Not only does the dichotomy of our language (e.g., I-O, research-practice) have a long history, but a recent *TIP* article goes as far as to ask whether or not I-O psychology has lost its way (see Ones, Kaiser, Chamorro-Premuzic, & Svensson, 2017). Our discussion of unity is directly epitomized by this article, highlighting academia's loss of influence by turning away from practical issues. Despite the acknowledged impact of the research–practice gap, little has been done to develop sustainable approaches to unify and support a diverse range of practice-based research. For example, whereas several SIOP talks offer a reflective (assumingly somewhat critical) lens, only a small subset of these sessions aim to openly tackle the issues brought up in our columns (e.g., The I-O of the Future: Identifying and Closing Skill Gaps by Reinecke et al., 2017, Theme Track: Shaping the Future of I-O Through Multidisciplinary Approaches Lee et al., 2017). We can only hope that these discussions continue at SIOP, in the pages of *TIP*, on Twitter, in classrooms, and at coffee shops, thereby allowing the community to move forward in a unified manner, as suggested by **Fred Oswald**'s presidential theme hashtag, #TeamSIOP.

Additionally, Ones et al.'s (2017) discussion regarding our loss of influence further speaks to our point regarding the necessity of broadening empirical, practical, and interpersonal horizons. This issue goes beyond I-O, with many fields discussing globalization, knowledge mobilization, and interdisciplinary networks as critical components to support long-term sustainability. In a changing world, academia has been forced to adapt traditional learning environments to support professional skill development. Based on this, graduate programs in I-O must also re-evaluate traditional approaches and methodologies to support the development of transferable skills at both the masters and doctoral levels. Only by broadening our horizons to alternative teaching methods and opportunities can institutions be proactive in graduate education and training.

Last, with respect to compassion, although the authors hold possibly biased views as current graduate students, our position is echoed by researchers and shared by many graduate students around the world (e.g. Levecque, Anseel, De Beuckelaer, Van der Heyden, & Gisle, 2017). As recognition of mental health and well-being in the workplace continues to increase, so too should conversations about the impact of work demands on well-being for graduate students in their occupational settings. In line with this sentiment, Anna Sverdlik at McGill University is conducting research examining the work–life balance and well-being of doctoral students. Results from this study will help inform individuals and institutions of the barriers facing graduate students and support evidence-based approaches to enhancing graduate well-being.

**Using Past Learnings to Inform Future Directions: Key Takeaways**

We believe that we all share a responsibility in crafting the future of I-O psychology and must be held accountable for ensuring our discipline is effective and impactful. In this vein we propose tangible suggestions for SIOP as an institution, for I-O programs, and for individuals to advance I-O psychology as we move forward together. We also acknowledge our personal responsibilities to modernize our field. This list is not exhaustive; rather, we encourage our readership to use this as a resource to initiate conversations.

What can SIOP do?

- Encourage conference submissions that prioritize multidisciplinary presentations and representation of marginalized voices (e.g., people of color; non-Americans; people with disabilities; indigenous individuals).
- Develop and encourage greater formalized mentorship opportunities for graduate students outside of the annual conference. Similarly, we should encourage opportunities for networking and professional development between practitioners and academics.
- Use our influence as a professional association to support local communities and increase advocacy that removes barriers to employment.
- Challenge gender inequities and discrimination within our discipline and association vis-à-vis greater representation and recognition of women in I-O, as demonstrated in **Mikki Hebl**'s *Shaken and Stirred* presentation at the recent SIOP Conference.
- Call SIOP members to action to discuss social issues and generate solutions and directions within our field as practitioners and academics. We can showcase different perspectives and build broader expertise when invoking greater purposeful action and participation, with initiatives such as SIOP's current relationship with the United Nation's Sustainable Development Goals.

What can I-O programs do?

- Foster more open communication with students to examine issues in graduate education. The landscape of graduate education has changed dramatically because most faculty completed their degrees; therefore, it is appropriate to give voice to current individuals to indicate the tangible supports needed to increase well-being and quality of life. Engaging in program audits can help determine what requirements for graduate students are essential and what redundancies or barriers may exist.
- Allow and encourage programs to evolve with changing demands and interests. Housing practitioners-in-residence within academic units and developing greater collaboration between MA, MBA, and PhD programs could be assets moving forward by keeping programs current.
- Recognize the practical value of I-O psychology as a discipline. Programs must be reminded that we have a duty to use our research and expertise to improve internal systems within our programs and institutions. We must be accountable to fostering healthy, sustainable workplaces by practicing what we preach.
- Engage with innovations in the Scholarship of Teaching and Learning to increase alternative practices in curriculum that foster the facilitation of learning over the communication of knowledge. We can look to program alumni, international institutional collaborations, and nontraditional interdisciplinary partners to expand our scope and reach.

What can individuals do?

- Use critical thinking to question norms and assumptions within our discipline and our practices in order to generate innovative paths and solutions. However, we can't just be critical, we must also take an active role in addressing issues by building collaborations and claiming leadership roles in order to be part of the solution.
- Accept discomfort and unfamiliarity. These feelings will become more common as we move into the future of I-O psychology. Although sometimes anxiety-inducing, it is also an opportunity for great potential. In the words of Miss Frizzle of *The Magic School Bus*, "Take chances. Make mistakes. Get messy." Our path may not be linear or smooth, but if we become too scared of mistakes we won't push our growth to its potential.
- Reward and recognize achievements, effort, and dedication. The current systems don't often provide positive reinforcement; nevertheless, we must persist. It is our responsibility to build cultures of mutual respect and support around us. We need not reinforce hostile competition; instead, we can work to build ourselves and each other up.
- Finally, we know there are problematic events and individuals all around us. We must be prepared to speak up. Only by using our voice and providing constructive feedback can we hope to change our environments. If we remain silent, we will bring our current underlying problems with us into the future.

We, your outgoing TIP-Topics columnists commit to working towards changes within our discipline, institutions, and within ourselves. We are holding ourselves accountable to challenging our assumptions and questioning tradition in everything we do, and having open discussions around our hopes for the future.

I-O psychology is advancing at a rapid pace, and the graduate students of today will be the discipline's members and leaders of tomorrow. As such, SIOP's membership needs to ensure that the training and development of graduate students equips I-O to grow and stay relevant.

**Acknowledgements**

We would like to take this opportunity to acknowledge those who have supported our tenure as *TIP* columnists, including **Peter Hausdorf**, **Morrie Mullins** and **Tara Behrend**, everyone behind the scenes at TIP, and our dedicated readership. We are grateful for this platform and the opportunity to engage in meaningful discussions that impact the field of I-O. Thank you for a wonderful two years!

It is our pleasure to introduce the new *TIP* columnists, **Stefanie Gisler, Bradley Gray, Jenna-Lyn Roman,** and **Ethan Rothstein** from Baruch College and the Graduate Center, City University of New York (CUNY). We look forward to their fresh ideas and insights that will, no doubt, continue to move us forward together.

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## #SIOP17 Review: Technology Takeaways from Orlando

**Tiffany Poeppelman**
**LinkedIn**

**Evan Sinar**
**DDI**

As a follow-up to our April TIP issue, in this column we'll be revisiting and extending the discussion about SIOP 2017 sessions that not only incorporated technology but that conceptualized it as an inte-gral component of workplace practices and employee experiences.

These sessions (see the full list under Recommended SIOP 2017 Technology Sessions) provided sum-mative advice and sense-making structures to advance discussions about new and rapidly changing workplace technologies. They included alternative-type sessions and panels discussing the impact that technology has and will have on I-O psychology, as well as posters presenting specific research find-ings.

The intent of this column is to not only highlight the main takeaways that attendees should have from SIOP 2017 sessions, but to propose considerations for those conducting research in these areas and ideas for others submitting to SIOP 2018. To do so, we contacted the lead authors of a few SIOP 2017 sessions to get their perspective on two areas:

1. Key takeaways an I-O psychologist should have from their session about the influence of tech-nology has on their work: research and/or practice, and
2. Advice for those creating sessions for SIOP 2018: What they would recommend other re-searchers or practitioners focus on to extend this work and more generally, our understanding of technology's influence on our field.

We are extremely appreciative to have received input from these seven SIOP 2017 session leaders: Stan Gully, Matt Howard, Jenna Shapiro, DaHee Shon, Aarti Shyamsunder, Scott Tonidandel, and Na-than Wiita. Based on their insightful advice, paired with our own notes from the conference, we've summarized the main points below.

Key Takeaways From SIOP17 Technology Sessions

- The impact of technology is nonlinear and is influencing every aspect of work and work relat-ed systems. It's influencing how: (a) we think about strategy and strategic implementation; (b) people interact with Human Resource Information Systems (HRIS) and what drives their satis-faction with such systems; (c) the metrics and data that are collected and available; (d) sourc-ing, recruiting, and interviewing; and (d) training and development. The firms that succeed will be those that are creating a set of technological capabilities that are aligned with their strate-gies, goals, and the personal values of the people who work with them. (Gully)

- Technology can be an enabler or a constraint to the research and practice of I-O - Academic I-O research tends to be more reactive [and] needs to become part of the zeitgeist (which prac-tice currently leads and defines). Advantages of technology involvement in I-O: (1) data-based decision making has become a lot more accepted, (2) transparency, and (3) connectivity and instantaneous reporting (though the latter can be a double-edged sword). Downsides of tech-nology involvement in I-O: (1) Maybe one thing we miss about the “good old days” is that there was more thoughtful design of solutions, (2) Now tech drives measurement more than measurement is aided by tech, (3) An organization’s unique context is lost sometimes with [technology] enabled solutions. (Shyamsunder)
- Flex your strongest “growth mindset,” and consider networking with others, forming/joining a community of interest to stay as informed as possible. We need to “Keep up with change.” The speed of change is fast, and probably accelerating. It’s also unstoppable, and if we, as a field, don’t get on participate and take an active role in the change, we risk being left behind. The change is a blessing! Because of technological developments, we’ll have tools that enable us to pose/investigate questions—ultimately impacting the worker and workplace in positive ways—that were not previously possible. And a curse: these tools however, bring with them new concerns and challenges. Ethics, for one, will be a concern. And not all the tools, and the “black box” algorithms behind them, are easily understood and used. Knowing everything that is happening in this space, all the time, is a lost cause. The ground shifts beneath your feet faster than you can keep up. (Wiita)
- Neuroscience measurements are much less invasive than in the past. Apparatus is small and wireless, but expensive. Sociometric sensors suffer from extensive measurement problems that must be addressed through extensive piloting and calibration in order to get usable data. The tech is cool, but don’t get blinded by the glamor of the technology as there are many lo-gistical issues that must be confronted from lost data, lost devices, device services, and so on. Be prepared for that. (Tonidandel)
- There are benefits of investigating employees' procedural behaviors—automatically tracked behaviors that are non-task-specific rather than the outcomes of specific tasks—in furthering our understanding of work behaviors in the modern workplace. Similarly to educational re-searchers who have been analyzing learners’ procedural behaviors to understand how stu-dents learn, there are untapped opportunities for I-O psychologists to leverage automated data to understand behavioral processes and performance in technology-enabled and virtual workspaces. (Shon)
- Features of a technology must match the requirements of a task to be effective. We pro-posed a new and distinct construct, task–technology misfit (TTM), that is composed of two di-mensions, too little (occurs when the technology does not have the necessary features to ac-complish the task effectively) and too much (occurs when the technology has more than enough features to accomplish the task). (Howard)
- Automation is enhancing, and at times replacing, cognitive tasks at work, such as decision making, data synthesis, and analysis. This type of automation is a multidisciplinary approach between I-O psychologists and computer scientists, driving our field to work alongside soft-ware engineers to collaborate on advanced analytical techniques, and I-Os play a critical role to the successful adoption of technology in the workplace. The interaction of humans and ma-chines will shift our focus more toward ensuring legal defensibility of automation decisions, confirming sound methodology is used to collect and prepare data, and guiding the interpreta-tion of results into action. So, while automation does not mean the immediate loss of jobs, technology will augment the work of I-Os by allowing for even more strategic work and advis-ing based on technology's findings. (Shapiro)

Research and Practice Considerations for I-O Psychologists

- Keep your eye on the future. “Do not focus only on what is happening now with technology. Focus on what will happen in the future because the future is so much closer than many of us think.” (Gully)

- Partner with other fields. “Interdisciplinary approaches, working with colleagues from the computer science, math and related fields doing cutting edge computation-al/simulations/modeling/ machine learning approaches. What should I-O students be learning which translates our traditional approaches (e.g. OLS, regression) to current data science terms?” (Shyamsunder)
- “Lead with the ‘customer,’ not the technology. There’s no question technology is influencing our field in profound ways, but [it would be great to] see a heavy focus on user/customer needs (e.g., an individual receiving executive coaching, someone taking a personality assess-ment, and HR leader, a researcher looking to explore new questions). It is very easy to get caught up by the shiny objects in this space. But we must be careful to not be ‘hammers in search of a nail.’ If we focus on what problems we as I-O psychologists actually need to solve—and—ose for whom we need to solve them – we’ll be just fine. If, however, we start with a technology that seems ‘cool,’ and then look for places to deploy it, we risk solving the wrong problems, or worse yet, no problem at all.” (Wiita)
- “Experiment with and embrace ‘failure.’ If we are really going to be successful in staying rele-vant during these times of change, we need to have a greater risk appetite and take a position of learning from failure rather than being defined by it. [It would be great to] see sessions where presenters share how they’ve experimented, what worked and what didn’t, etc.; and for those reviewing [the submissions], maybe we could be a little less judgmental—not diving into methodological minutiae (Ones, Kaiser, Chamorro-Premuzic, & Svensson, 2017)—in the interest of moving the field forward as a whole.” (Wiita)
- “Bring the ‘outsiders’ in; we have a lot to learn from them. Let’s be honest: a lot of the change that affects I-O is happening outside I-O. So let’s bring the “outsiders’ in. And [while we may not] always be so hospitable to outsiders. [it would be great] to see us, as a SIOP au-dience, let go of that behavior.” (Wiita)
- “Share practical lessons learned. The field would benefit from what may feel like pretty basic ‘lessons learned’ type sessions, so that scientists and practitioners can take these insights back to their respective organizations and/or programs of research.” (Wiita)
- Validation of the technology is key. “A lot more emphasis needs to be placed on validating the technology being used. We have a tendency to accept the numbers produced by sophisticated technology to have some basis in fact and that isn’t necessarily so. Unlike other measurement instruments we typically use that are developed by psychometricians, these tools are devel-oped by engineers that don’t have the same training in measurement that we do. We need to go beyond simple piloting of these tools and instead subject them to rigorous validation stud-ies prior to use.” (Tonidandel)
- Explore outside theories. “Moving forward, I-O psychologists should pull from similar theories outside the realm of psychology, such as management information systems and human–computer interaction, to better extend our understanding of technology and the workplace. At the same time, researchers should consider the benefits of studying these topics from an I-O perspective…. I-O psychology can provide large benefits to these overlapping research do-mains, but only if researchers identify what I-O brings to the table (both more and less) than these other domains.” (Howard)

- Cross-collaboration is key. “Cross-collaboration between the field of computer science and I-O psychology. How can we best partner with computer scientists to develop technology that is user friendly and legally defensible? This fits in nicely with SIOP’s theme next year of working with a multidisciplinary approach in mind.” (Shapiro)
- Recommend exploring the interaction of technology and research. “With new technology comes new workplace dynamics. How do our I-O theories interact with this new workplace environment? What research should we focus on to better understand the dynamic between humans and machines? What linkages have we made between artificial intelligence and out-comes (e.g., assessment validation studies using AI algorithms)?” (Shapiro)

Observations and Closing Thoughts for I-O Psychologists:

- “Technology will fundamentally transform society and work as we know it. We have to get ahead of what is happening and think about the implications for work, people, and society. For example, what happens when we have autonomous vehicles and all the people who drive taxis, Uber, Lyft, buses, trucks, and other modes of transportation are out of a job? That’s just the beginning.” (Gully)
- “Machine learning can learn to make decisions or take actions as well as humans and then it can be adjusted to do even better. What is our future? It seems like something we should think about.” (Gully)
- “There is palpable urgency, in a positive way, and going it alone is not a sustainable or suc-cessful strategy. I’ve never seen so much engagement and energy around being a part of the change. Practicality, or lack thereof. Some of these tools/technologies don’t live up to the hype, for a number of reasons (e.g., unreliable operationally, inaccurate data). So, while the field is changing, it is clearly not a wholesale and complete change. It is time we band together as a community and take an active role in the change. We have plenty to learn from each other and from those outside the field.” (Wiita)

## Tech Avenue

The “Tech Avenue” portion of our column, which we include periodically, is designed to draw awareness to and implications from externally sourced technology trends shaping the workplace.

As cited by many of the experts above, for I-O psychologists to anticipate, initiate research, and shape practice on technology trends impacting the workplace, we need to look beyond our typical infor-mation sources. Though there are exceptions in journals and at our annual conference, these tradi-tional sources are typically lagging rather than leading indicators of technology’s influence on business. Instead, we must read and act on conversations in sources specifically aligned with the technology domain. We must know how technology is being discussed and positioned to broad business audienc-es in order to take advance action on its impact. The blistering pace of technology change and the lengthy duration of typical research/publication processes are a dangerous combination for relevance of our work, making proactive awareness essential for us on this topic area.

As one approach toward this goal, we analyzed the content of six leading publications with a heavy or exclusive focus on technology: PC World, Popular Mechanics, Popular Science, Discover, MIT Technol-ogy Review, and Wired. Using EBSCO, we compiled a list of all 29,208 articles published in these publi-cations between January 2013 and May 2017. We analyzed the articles’ subject terms to identify those with the largest upward trend over this time period (weighting all sources equally to avoid skew from cross-publication variation in number of articles released).

We feel that this is one–admittedly, far from the only–indicator of topics gaining interest and prominence within the business community. Below, we list the top-four trending subjects (in each case, number of articles correlated at least r = .93 with year of publication, and showed a steady upward trend across the time period peaking in 2016/2017), along with representative articles from the technology-centric publications reviewed, to familiarize yourself with the topic and what it may mean for technology in the workplace:

Internet of Things

- Finding insecurity in the Internet of Things (MIT Technology Review)
- Look before you leap: 4 hard truths about IoT (PC World)

Hacking/Ransomware

- The year ransomware became one of the top threats to enterprises (PC World)
- Botnets of things (MIT Technology Review)

Fully-Autonomous Automobile Driving

- Self-driving trucks (MIT Technology Review)
- The relentless pace of automation (MIT Technology Review)

Artificial Intelligence

- The dark secret at the heart of AI (MIT Technology Review)
- Designing a moral machine (Discover)
- The end of code (Wired)

Getting and Staying Current on Tech Trends

Although we recommend reviewing these articles for an initial perspective on discussion of these trending technology topics, we also advocate ongoing attentiveness to these publications as leading indicators of the rise and role of emerging technologies. Of these publications, MIT Technology Review is consistently strongest in depth of insight, so if you're going to choose only one external technology source on which to stay up to date, we'd suggest that one. EBSCO, Google Scholar, and other services also offer e-mail alerts for just-released articles from these and other sources or for certain search terms.

As a final resource for technology trend-spotting, we strongly recommend perusal of Mary Meeker's "Internet Trends" report. For over 2 decades, this annual report has been one of the most impactful and integrative summaries of technology's role in business and in shaping consumer expectations. De-spite its deceptively narrow title, the report's implications extend far beyond the Internet; they shape the business environment for every technology-dependent organization, along with its employees. Though the release date of this report immediately before finalization of this column prevents us from a deep analysis here of its links to our field, it nonetheless should be on every I-O psychologist's "must-read" list to spot, react, and take action on impending technology forces.

Based on the trends at SIOP and within industry as shared above, we encourage those who are work-ing in these areas to consider showcasing more examples to SIOP 2018 and extending this work further into journals and publications both inside and outside of our traditional outlets.

What will you be sharing at next year's event? In which facet(s) of technology can you advise and grow in the year to come?

Thank you again to all the SIOP 2017 session leaders responding with your advice and guidance for others actively engaging with technology-centric research and practice!

Contact us on LinkedIn: Tiffany Poeppelman & Evan Sinar
Contact us on Twitter: @TRPoeppelman, & @EvanSinar

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**Creating an Open-Access, Practitioner-Friendly, Scientific Journal for I-O Psychology: The Case of *Personnel Assessment and Decisions* (PAD)**

**Scott Highhouse**
**Bowling Green State University**

**Dennis Doverspike**
**Doverspike Consulting**

In 2015, we launched a new journal, *Personnel Assessment and Decisions* (http://scholarworks.bgsu.edu/pad/). We strived to create a new journal that would: (1) counter the trend away from practical scientific research; (2) be no cost to authors and readers; (3) ease the burden on reviewers; (4) publish shorter and more accessible articles; and, 5) begin to respond to calls for changes in the basic nature of the publication enterprise (see Highhouse, 2015). So far, we believe that we are aligned with these goals. It is free to read and publish in the journal. The articles are of interest to both researchers and practitioners. Reviewers are asked to focus on only major, substantive issues in the first round of review. The articles are brief (maximum 4000 words), and readable. Of course, changing the nature of the research and publication process is a much longer term goal.

Here is the most recent issue published on June 1:

- **Communicating Criterion-Related Validity Using Expectancy Charts: A New Approach.** Cucina, J. M., Berger, J. L., and Busciglio, H. H.
- **Stop Interrupting Me! Examining the Relationship Between Interruptions, Test Performance, and Reactions.** Lawrence, A. D., Kinney, T. B.; O'Connell, M. S., and Delgado, K. M.
- **Using O*NET to Develop a Framework of Job Characteristics to Potentially Improve the Predictive Validity of Personality Measures.** Burrus, J., and Way, J. D.
- **Timeliness is key to the candidate experience.** Ryan, A. M., Ali, A. A., Hauer, T., and French-Vitet, J.
- **Video Killed the Interview Star: Does Picture-in-Picture Affect Interview Performance?** Horn, R. G. and Behrend, T. S.

It is notable that 11 of the 14 authors in this most recent issue currently occupy practitioner roles. We believe that we have broken through the ivory ceiling with *PAD*!

We must confess, however, that there are some challenges involved with starting a new journal—especially an open-access one. The philosophy behind open access is the unrestricted online availability of scholarly research. Whereas scholarly journals were traditionally available only to those affiliated with libraries able to afford subscription costs associated with for-profit journals, open-access journals are available to nonacademic professionals and to academics in third-world countries. Despite the good intentions of open access, however, people remain skeptical of online journals. We suspect that people are aware of predatory journals (https://en.wikipedia.org/wiki/Predatory_open_access_publishing) and erroneously lump open-access journals into the same category.

A related issue is that many people think open access means that all submissions will be published regardless of quality. In fact, we have a rigorous review process, with a great group of regular reviewers who are asked to conduct focused, expedited reviews that focus on the major points in a constructive manner.

This initial skepticism can make it difficult to recruit distinguished scholars to serve on open access editorial boards and can make it difficult to generate submissions. For *PAD*, a major breakthrough was persuading **Neal Schmitt** to sign on as an associate editor. Once Neal took the leap of faith, it was smooth sailing recruiting the other distinguished associate editors: **Sasha Chernyshenko, Mikki Hebl, Cornelius König, Nathan Kuncel, Dan Putka,** and **Mike Zickar**.

Another challenge associated with open-access publishing is the cost associated with a manuscript management system, as well as the labor involved with copyediting and formatting. In the case of *PAD*, we had a number of avenues of support. First, the BGSU library provided us with the platform to host the journal and the Psychology Department supported a graduate student who served as the journal's editorial assistant. Finally, financial support for copyediting was provided by the International Personnel Assessment Council (IPAC), in part by a gift from Harry Brull and Myra Barrett. Although this sounds daunting, there are highly successful open access journals operating with less fancy platforms (e.g., http://journal.sjdm.org).

It will take time for *PAD* to establish an impressive impact factor, and we do not expect to immediately jump onto the "A" list. We can promise, however, that the journal contents will reach an international audience, a built-in practitioner base, and an audience of peers with similar research interests. Visibility among one's relevant constituency should be an important factor in choosing an outlet—in many cases, it trumps impact factor.

We hope that the initial success of PAD will inspire others to consider introducing open access journals in areas where there is a void or niche need. We could envision future journals focused on other topics of interest to researchers and practitioners in I-O (e.g., attitude measurement and change). We also want to encourage readers to submit their work to *PAD* for publication consideration. In addition to general research articles, the journal has a section devoted to measurement issues and a section for research-based innovations in practice. We are also willing to consider ideas for alternative types of research articles or publishing formats. I-O psychology needs new publishing models. We believe *PAD* is one such model.

## Reference

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# SIOP's New Frontiers Include Everybody

**Bharati B. Belwalkar**
**City of New Orleans**

**Charles P.R. Scott**
**DDI**

**Lisa S. Moore**
**Florida Institute of Technolog**y

*Author Note:* We would like to thank **Kisha Jones** (CEMA Chair), **Katina Sawyer** (LGBT Chair), and **Aditi Raghuram** and **Mindy Bergman** (WIN Co-chairs) for letting us share our experiences and views.

True to the 2017 theme of Exploring New Frontiers, SIOP attendees explored new and insightful research and best practices in various areas of I-O psychology. We are sure that all of you enjoyed your time meeting experts face to face, learning new things, and networking. SIOP is also a fantastic place to reconnect with friends from graduate school. Well, this article is a product of such reconnection and informal conversation at SIOP among three of us.

We are a part of SIOP's minority-serving groups: the Committee on Ethnic Minority Affairs (CEMA), the Lesbian, Gay, Bisexual, and Transgender (LGBT) Committee, and the newly formed Women's Inclusion Network (WIN) Committee. Here, we share our perspectives and experiences with these committees, including: (a) how we became involved with them and (b) how those committees are carrying the torch of equality forward. We are sharing this with our readers for three reasons: (a) to inform SIOP members (especially students and recent graduates) about our committees and their agendas, (b) to arouse interest and excitement in joining or supporting our committees, and (c) to call for a continuation (and increase) of the collaborations between our respective committees.

Our committees have different timelines; one committee has a long legacy reaching back as far as early 1990s while another is less than 100 days old. Given this, the styles, tones, and approaches that we draw upon to highlight the ongoing efforts of our respective communities are markedly different.

## SIOP CEMA: Then and Now[1]

**Bharati B. Belwalkar**
**City of New Orleans**

In 2009, I came to the U.S. from India for graduate training. When I arrived, I assumed new identities: international student, outsider, and minority member. I slowly realized that the word *minority* in the United States has a very special meaning. Although I was aware of the U.S. Civil Rights movement and (its considerably strained) race relations through books and news, it was a different experience, as an *outsider*, to witness America under the administration of its first Black president, Barack Obama, and to fathom what it meant for the future of race relations in this country. I noticed an evolving dynamic of race relations in this country. In no time, I became an *insider* to the race relations as an Asian foreign student.

Diversity composition has been rapidly altering the U.S. workforce. As an I-O graduate student, I began to understand how important diversity considerations are to workforce management practices. I soon became interested in the area of diversity. As one of the few students working in this area within my department, I turned to SIOP for more information.

In 2015, I attended a community of interest (COI) session hosted by **Mikki Hebl** and **Enrica Ruggs** on the role of I-O psychology in reducing policing inequity (this was a year after the shooting of Michael Brown in Ferguson, Missouri). This session was particularly noteworthy, because it drew my attention to *inclusion*, which, in my view, is as important as diversity. As I write this, I recall a phrase I had read somewhere "diversity is being invited to the party, but inclusion is being asked to dance." Toward the end of this session, co-chair Hebl mentioned CEMA and SIOP's commitment to diversity and inclusion within its membership (practicing what we preach). I thought, CEMA and its initiatives were worth exploring, and a year later, I became a member of CEMA. Postgraduation, I moved to New Orleans, a melting pot of French, African, and many other cultures. Since then, my interest in diversity and inclusion has quadrupled. One of my purposes behind coauthoring this piece with Lisa and Charlie is to spread the word about CEMA and get more people interested in its initiatives. So, those who do not know about CEMA, here's a quick introduction.

**Looking Back**

To give you a brief tour of the history of CEMA, its inception can be traced back to the SIOP task force on Ethnic Minority Participation (1991-1995) cochaired by Loriann Roberson and **Jeff McHenry**. This task force was a result of a widespread sense of isolation (then) felt among SIOP members belonging to minority groups. A roundtable conversation at SIOP 1996 cochaired by **Jim Outtz** and **Beth Chung** gave rise to an ad hoc CEMA. The ad hoc CEMA's primary goal was (and still is) diversity and inclusion—that is, to attract, retain, and integrate ethnic minorities into SIOP. Later, in 2004, CEMA became a standing committee. The same year, SIOP began conducting CEMA business meetings and social hours at the annual conference. Having attended these events in the past, I can say that they provide a great opportunity to connect with other I-Os who are passionate about diversity and inclusion in the workplace.

This year, CEMA's business meeting involved a discussion about CEMA's mission, structure, and future plans. Attendees were divided in three groups to brainstorm ideas for supporting racial/ethnic minority membership in SIOP, social media presence, and facilitating research/training initiatives. We received some good ideas!

Since early 2000, CEMA has been working with the SIOP Conference Program Committee to develop CEMA-sponsored sessions at the conferences. Keeping the tradition alive, this year's CEMA members, **Sabrina Volpone** and **Katharine O'Brien**, conducted a panel discussion entitled *Work With Me: Practitioner Perspectives on Diversity and Inclusion Research*. The panelists discussed at length the ways in which CEMA can promote research partnerships between academics and practitioners to help facilitate the study of diversity issues in organizations.

One of the greatest achievements of this year's CEMA events was the first awarding of the James L. Outtz Grant for Student Research on Diversity. The inaugural recipient of this grant was **Carlos Moreno** from Rice University. His research project is entitled *Promoting First-Generation Latino Success through Parental Pro-Educational Interventions*. When asked how he felt about winning this grant, Carlos said:

> [I am] very happy to receive this award. Thanks to Dr. Outtz for his work and CEMA! [This is a] wonderful recognition for diversity research and practice.

**Looking Ahead**

The present committee has goals of increasing the visibility of CEMA, supporting ethnic minorities (especially students) in SIOP, and both facilitating and disseminating research on racial/ethnic minorities in the workplace. When asked about her vision for CEMA, Kisha Jones (CEMA Chair) said:

> My vision is for CEMA to help SIOP by serving as a model for applying diversity science at all career stages in order to support ethnic minorities in our field. We are working to build on the foundation that has been previously set, while also meeting the current needs of ethnic minority members in SIOP. The level of interest in CEMA from members — both ethnic minorities and allies — suggests that our future plans will be met with great success!

Needless to say, we are working tirelessly to kick off some exciting initiatives, and I am certain you will hear about them soon. If you are interested in working towards any of these goals and/or have any ideas to share, feel free to share them on our Facebook page or e-mail us at kisha.jones@psu.edu or bbbelwalkar@nola.gov.

**SIOP LGBT Committee: SIOP as a Safe Space**

**Charles P. R. Scott**
**DDI**

It has been almost exactly 11 months, as I write this, since the Pulse shooting in Orlando shook the LGBT community to its core. As a gay man from the Orlando region, I woke on the morning of June 12 to dozens of text messages, phone calls, and emails begging for some response from people from around the country and the world asking if I was alright. It was that same day I learned that several people I knew had been killed, and 2 days later I was moving across the country to start my first postgraduate position. The LGBT community and our friends, family, and allies have grieved for nearly a full year. The constant vigilance when out with friends, the taking inventory of exits and escape routes, and the raw hurt of loss have all begun to fade with time.

Yet less than 2 years after gay marriage was made legal throughout the United States, the atmosphere of our country continues to feel threatening and dangerous, especially for our most vulnerable community members: LGBT people of color and transgendered individuals. This is why I am so grateful for the greater SIOP community for showing compassion, empathy, and a desire to protect and honor its vulnerable LGBT members. This was made immediately clear when **Mort McPhail** asked for a moment of silence for the victims of the Pulse attack in his opening plenary. At its core, SIOP is a group of practitioners and researchers focused on the science of the workplace. With no obligation to do so, SIOP has been wholeheartedly supportive of its LGBT members and the broader community. Jeff Hughes, the Executive Director of SIOP, attended the SIOP LGBT Committee's business meeting to show his support—and the support of SIOP—for our committee. In that meeting, Gina Duncan (of Equality Florida Action, Inc.) discussed the vital role SIOP can play in the mission for transgender equality. This has been a difficult year for minority communities, and I couldn't be prouder of the way SIOP has stepped up to defend and support vulnerable minorities of every category and group.

Returning to Orlando was difficult for me. But immediately upon arrival to the conference hotel, I saw friends I've gotten to know over a half decade of SIOPs, and my trepidation faded. The SIOP LGBT Committee has been especially active this year too. We raised money for the Dru Project, and hosted two events: a social hour in the Dolphin and a happy hour sponsored by The Walt Disney World Resort. Both events were packed full of members of the LGBT community as well as allies and supporters, all celebrating our community and life. During these events, I met many new members of SIOP, and I witnessed our community embrace them and give them a safe space during SIOP. It is hard to forget that SIOP can seem monumental and overwhelming for first timers. To have a safe space to be themselves and to also begin to learn the networking and other professional skills they will need in the future is a huge benefit for LGBT newcomers. If their experience with SIOP is anything like mine, these formative experiences will help them build resources to launch a successful professional (or academic) career.

Opponents of equality seek to marginalize minorities, to make us feel frightened or unwelcome, and make us disappear. But SIOP, and especially the SIOP LGBT community and our allies, fights back by continuing to broaden our coalition of support, to educate people about diversity, and to showcase our universal humanity. SIOP 2017, in many ways, was a celebration for humanity's diversity in a world that can seem to be growing colder and less interested in diversity.

We're making progress on building that coalition. There is a greater push towards collaboration among SIOP's minority committees. This year, CEMA and the LGBT committee collaborated to present a COI session, *Shooting and Hate Crime: How I-Os Can Help and Support*, with **Kecia Thomas** and **Brian Roote.** The discussion revolved around how I-O psychology can help organizations and employees cope with the violence towards LGBT and ethnic minorities.

Of the people who texted or emailed me asking if I was alright on June 12th, 2016, many of them are SIOP members. Thanks again to my broader SIOP family and the SIOP LGBT Committee for standing strong and standing together. If you want to join our vibrant community, please reach out to Katina Sawyer (katina.sawyer@villanova.edu), the outgoing LGBT committee chair or Ismael Diaz (ismael.diaz@csusb.edu), the incoming LGBT committee chair. Here's what Katina and Ismael and have to say to the TIP readers about the work and purpose of the LGBT Committee:

> *The goal of the committee is to create a supportive community of LGBT members and allies within SIOP, but also to create a broader awareness for all those interested in issues of organizational psychology, that we actively advocate for equality for LGBT individuals at work and beyond.*
>
> Katina Sawyer, outgoing Committee Chair of the LGBT Committee

> *The SIOP LGBT Committee has a history of doing great work. The committee has previously worked to raise society wide awareness and focus on LGBT workplace and LGBT inclusion issues. Moving forward, the committee will work to continue bridging the conversations about LGBT matters from the SIOP membership to the workplace. We also hope to continue applying the membership's unique approaches and strengths to LGBT research and to translate that research into practice that improves the lives of LGBT people at work and beyond.*
>
> **Ismael Diaz**, current Committee Chair of the LGBT Committee

## SIOP WIN Committee: Taking Shape and Asking Questions

**Lisa S. Moore**
**Florida Institute of Technology**

My coauthors have beautiful narratives connecting their diverse identities to their respective SIOP committees. My community, the WIN ad hoc committee, is in the planning phase: gathering ideas and developing ways for scholars, practitioners, industry partners, students, and others interested in working on ways to make sure women are better included in all work places and work spaces. I learned about the WIN by email; I proactively reached out and got involved. The narrative bridging my involvement with the WIN committee to the larger SIOP community is being written, and that is very exciting for me.

The SIOP WIN ad hoc committee started three months ago with a question. Many of you may recall from March 2017, a SIOP news story titled "Asking the Right Questions." In this piece, Aditi Raghuram, adjunct professor at the University of Houston-Downtown College of Business asked "Hey, is there a

SIOP Women's Group?" At the time, there wasn't, but after our organizing meeting on the Friday of SIOP 2017, there is now!

**Getting Organized**

The WIN was kicked off with a warm welcome by Texas A&M professor and 2017 SIOP Fellow Mindy Bergman. Her comments emphasized the new WIN committee is open to all members female, male, cis-, transitioning/transgender, nonbinary identifying, etc.) interested in promoting the improvement of the experiences of women in I-O psychology and in the broader workplace. Looking around the room, I saw a diverse group including researchers, industry professionals, SIOP presidents, Fellows, graduate students, recent graduates, early career practitioners, educators at every level, and guests; a global mix of members ready to shape something new. Approximately 25 people attended the foundational meeting to kick start the WIN.   Bergman opened the floor broadly, "So--what do we want to do?"

After a few moments of awkward silence, ideas sprang from around the room and with them opportunities for connections, information exchanges, and plans for next steps. The hour flew by fast. The members in this room were clearly passionate about workplace challenges they personally experienced, researched, or observed. One theme emerged quickly; the importance of working closely with the CEMA, LGBT committees, and others to enhance ongoing efforts for promoting diversity and inclusion in workplaces throughout the U.S. and internationally.

**Follow Up Questions and Getting Involved**

Walking away from the organizing meeting with a list of ideas and questions seemed appropriate: How can social media be used to inform and involve SIOP members about the WIN from all areas (public, private, academic, and practitioner) to support women in the workplace? Which issues (internal/external) must be addressed first? What is needed to recruit strong allies and champions? Where do we get started? We developed five pages of ideas and questions -- a great result! As I reviewed my notes, similar career limiting issues and barriers affect working women of various identity groups, ages, life stages, career stages, job levels, among many others. There is plenty of work to do. The committee co-chairs are thrilled by the amount of volunteer interest following the SIOP meeting. Members are invited get involved by participating in the WIN Facebook group community and attend upcoming WIN events.

WIN organizing meeting attendees shared their reactions after the meeting:

> It was amazing that so many people were able to come when there were other sessions at the same time and there was very little premeeting marketing. I was impressed that people from different stages of careers were there—Fellows, presidents, grad students, new professors, established practitioners—as well as people who came expressly because they are allies and want to support WIN. It was gratifying that so many people were willing to stand up and volunteer to get WIN off the ground; gratifying, but not really surprising, because SIOP has a long and wonderful history of its members digging in and doing the work. It seemed like WIN has tapped into a long-standing need in SIOP.
>
> WIN Co-Chair Mindy Bergman, Professor and Associate Head of Undergraduate Studies Texas A&M University

> As an ally to my female colleagues, it was nice to attend the first meeting and to hear all the ideas for research, advocacy, and discussions about how to help remove barriers to women in leadership and expert roles. The WIN is in a great position to leverage the considerable experiences and

expertise of the SIOP membership for the cause of gender and sex based inclusion, and I know that with the momentum of the first meeting that WIN has the potential for an exciting and productive future.

Ismael Diaz, Assistant Professor of I-O Psychology California State University San Bernardino.

The WIN meeting was amazing. It was so encouraging to see other members of SIOP, especially members with great power and connections, be enthusiastic about similar topics and ideas. Everyone in attendance was so welcoming and some really introspective and remarkable ideas were discussed. I look forward to the multiple research and SIOP conference specific ideas that were avidly brought up to the group.

Jess Sorenson, PhD Student, Industrial/Organizational Psychology, University of Guelph, Canada.

**Moving Forward to 2018**

As we make further progress, members may look forward to: (a) ongoing network development on the Facebook group for sharing ideas, resources, and asking questions; (b) a WIN Program at SIOP 2018; and (c) a WIN networking event at SIOP 2018. As the WIN evolves and draws on wisdom from the CEMA and LGBT committees, the goals and vision will align with the ongoing diversity and inclusion efforts of the broader community.

Questions? Please connect with: mindybergman@tamu.edu, aditiraghuram04@gmail.com, or by Facebook.

**Our General Concluding Thoughts**

In taking stock of SIOP's commitment to its goal of diversity and inclusion, it is clear that the I-O community is moving down the right track. Yet, there is still much work to be done. We think that, despite the differences in scopes and timelines, more collaboration and cooperation between our committees can help each of us better achieve our shared goal of promoting diversity and inclusion in SIOP and the field of I-O in general.

Remember, all of us are far more than one identity typed out on the conference badge we wear or the pins/flair ribbons we chose to add to it. We should acknowledge our multiple identities and embrace this intersectionality in our research[2] and practice.

**Notes**

[v] I would like to thank **Jason Marks** (researcher at Amazon.com, Inc.) for his friendly review and comments.

[2] Weaver, K., Crayne, M. P., & Jones, K. S. (2016). I-O at a crossroad: The value of an intersectional research approach. *Industrial and Organizational Psychology; 9*(01),

## CEMA Wants to Be Here for You, Let Us Know How!

**Kisha S. Jones**
**Pennsylvania State University**
**Chair, Committee on Ethnic Minority Affairs**

I am halfway into my 2-year position as chair of the Committee on Ethnic Minority Affairs (CEMA), a SIOP committee that concentrates on attending to issues relevant to racial/ethnic minorities in SIOP and the I-O psychology field overall. CEMA is made up of a wonderful group of SIOP members from all racial/ethnic backgrounds who are interested in advancing this important work. I have enjoyed having the opportunity to serve SIOP and its ethnic minority community in this role. I have also appreciated the help that the SIOP office has provided to myself and the committee as we have attempted to reach our goals. One example of this support is their assistance in CEMA's recent attempt to survey ethnic minority former SIOP members by adding additional items to the SIOP member exit survey. This information was collected by us to better understand how SIOP can serve its ethnic minority membership in the future. However, as I reviewed the anonymous responses to the question of how CEMA could have better supported them, I became concerned. *Some of these ethnic minority former members mentioned that they had not heard of CEMA and wished that CEMA had better engaged them while they were a part of SIOP*.

Although we had great interest among SIOP volunteers in joining CEMA and an awesome turn out at the CEMA Social Hour during the 2017 SIOP Conference, I still want to act in response to these comments so that CEMA can do its part in better engaging ethnic minorities in our field. One of my goals in my final year as CEMA chair is to increase CEMA's presence within SIOP so that all ethnic minorities are aware of CEMA and have the option to be supported. One major way of doing this is by informing the larger SIOP community of what CEMA has been up to over the past year as well as our future plans. I am pleased to give a brief overview of the main projects that the communications, membership, and training subcommittees of CEMA will be focusing on in the 2017–2018 year.

CEMA's communications subcommittee will focus on keeping SIOP informed of our initiatives and increasing CEMA's overall visibility. Although this subcommittee will work to increase the extent to which SIOP members of all backgrounds are aware of CEMA, they will also share information that will be of use to ethnic minorities in SIOP and I-O. We hope to support them and ensure that there is open dialogue between us all. One way that CEMA has already been working towards this goal is through our Facebook group. This group was created a few years ago and continues to thrive as the more than 200 members discuss and share articles related to race/ethnicity in the workplace and in our society as a whole. Over the next year, the communications subcommittee will continue to manage this group, reach out to SIOP members through other social media outlets, and lead CEMA's efforts in contributing regularly to *TIP*.

CEMA's membership subcommittee will continue our work from last year in finding ways for SIOP and CEMA to better serve its ethnic minority members. This subcommittee will continue to survey past and current ethnic minority SIOP members and use the responses to shape future CEMA initiatives. The aforementioned responses from ethnic minorities who filled out the SIOP exit survey suggest that more outreach and support is needed, and our current initiatives reflect that call. Our additional data collections will help in developing more specific ways that SIOP and CEMA can meet the needs of its racial/ethnic minority members who are students, practitioners, and academics at early-, mid-, and late-career stages.

Related to this, the training subcommittee will work towards providing career-relevant assistance to ethnic minority SIOP members. One way we have accomplished this in the past has been through organizing useful sessions at the SIOP conferences related to research, practice, education, and relevant societal concerns. In addition to this, the subcommittee will focus on student members by overseeing CEMA's student mentoring program. This program, starting this summer, will be open to graduate students in I-O who are from racial/ethnic groups that are currently underrepresented in our field. As we work to meet the needs of our student members, we hope to support them in their preparation for academic or applied jobs, and lay the foundation for their continued investment in and engagement with SIOP over the course of their careers.

It is important to note that these goals will not only be achieved through the hard work of CEMA, and the previously mentioned support from the SIOP office, but also through partnerships with other SIOP committees. Our previous work in collecting data with the SIOP exit survey was done in collaboration with SIOP's Membership Committee. SIOP's Education and Training Committee will assist us in implementing our student mentoring program. SIOP's Electronics Committee and Content Initiative Task Force have been providing great resources for connecting us with the SIOP membership. In addition, we have and will continue working with the Lesbian, Gay, Bisexual, and Transgender (LGBT) and Women's Inclusion Network (WIN) Committees in order to support their efforts and attend to the intersectional needs present across the SIOP members our groups serve.

In closing, I remember joining SIOP as an undergraduate student learning about I-O psychology. As I have progressed through my undergraduate, graduate, and faculty experiences, many amazing individuals in SIOP have greatly impacted my career journey by freely sharing information and providing guidance. Through CEMA, I want to ensure that other racial/ethnic minorities have that same chance and are able to be encouraged in their pursuit of the career paths they desire. Racial/ethnic diversity in SIOP is essential to our goal of using science to understand and impact workplaces in the United States and around the world. I want all current and future SIOP members to know about CEMA, especially the racial/ethnic minorities we seek to serve. CEMA want to be here for you, let us know how!

For more information about CEMA, to join the CEMA Facebook group, to find out more about the student mentoring program, and/or to share suggestions you have for CEMA, please email me at kisha.jones@psu.edu.

## Charting a Path to Visible I-O

**Stephanie R. Klein**
**University of Minnesota-Measurement Services**
**Visibility Committee Chair**

SIOP's visibility mission continues to grow in scope and importance. Visibility—for SIOP and for the field of I-O psychology—is embedded in our mission statement, our vision, and our strategic goals.

Many SIOP members are equally passionate about SIOP and I-O psychology visibility. The annual conference program is just one example: each year, sessions offer new insights on how to be visible, articulate our value, communicate with business leaders, and/or operate effectively among non-I-Os.

This article presents some options for those among you who would also like to make SIOP and I-O more visible. Options range from informal to formal and from simple to complex, and this list is by no means comprehensive.

Option 1: Join APA
Although no longer mandatory for SIOP membership, we are APA's Division 14. Our formal representation within APA is dependent on the number of Division 14 members.

Option 2: Read *TIP*

No, the editors did not make me include this one! Rather, *TIP* can provide you with insights into what SIOP is doing, recent trends, and individual and group I-O activities. You may find ideas for your own visibility efforts, find people with whom to collaborate, or identify others' ongoing initiatives that you might join.

Option 3: Volunteer with an organization that may benefit from your skills
If your favorite local nonprofit struggles to retain volunteers, perhaps you could help them design an interview process that assesses key competencies and provides candidates with a realistic preview of what volunteering might entail.

Offer your services to a job search networking group or new college graduates. I had an opportunity to sit down with a college senior earlier this year. We looked at his resumé and mapped his work and school experiences to likely job competencies and identified with some critical incidents for use in interviews to demonstrate his job readiness.

For additional ideas, please explore the Pro-social I-O website, which lists a variety of programs, projects, and activities.

Option 4: Give a presentation about I-O psychology
Did you know? The SIOP Administrative Office will provide a range of "What is I-O" materials free of charge to schools, people planning to educate others about I-O, or other visibility events.

Look to schools in your community. Consider a guest lecture in a college psychology or business class, or present to high school about this area of psychology they've probably never heard of. You may wish to use SIOP's "What is I-O?" video or a recent webinar as a starting point, followed by stories from your professional life and some Q&A.

Present to community groups about our value to organizations. If it turns out that your audience includes representatives from nonprofit organizations, see Option 1.

Option 5: Volunteer for a SIOP committee.
The Visibility Committee is an obvious choice, and I will describe our structure and work in more detail next. However, virtually every committee has a visibility component. Interested in the Awards Committee? An award can demonstrate to a wider range of stakeholders that the award winner's work is meaningful and relevant. How about Institutional Research? The more research there is, the more visible we can be. On the practitioner side, the Professional Practice Committee's goals include practice resources and practitioner career support. The better we are at our jobs, the more we can demonstrate the value of I-O.

Note: Student Affiliates have fewer volunteer opportunities; most committees are limited to only one student member. If there is a committee whose work you are especially passionate about, contact the chair and let them know how you might contribute. Even if you are not a formal member, there may be a committee project with which you can assist.

The Visibility Committee itself has a multitude of members and goals. Our overall purpose is to increase the visibility of SIOP, SIOP members, and I-O psychology as a whole to business leaders and decision makers, HR professionals, and the general public. Our efforts can also help spotlight SIOP and I-O activities to other I-O psychologists who may be inspired to engage in their own visibility activities.

Visibility pursues its goals through the work of six subcommittees, as well as close collaboration with SIOP's Administrative Office and other committees. The descriptions below include a partial list of activities and accomplishments, and new ideas continue to emerge.

- The Branding Subcommittee builds and manages the SIOP and I-O brands. Recent accomplishments include creating and publicizing the 2016 "What is I-O?" video, and creating and compiling a suite of graduate student resources to promote our brand.
- The HR/Business Subcommittee enhances visibility among HR professionals and business leaders. Their recurring projects include the Hot Topics White Papers and the Top Minds, Bottom Lines preconference events.
- The Media Subcommittee enhances visibility through media channels. Recurring projects include the annual Top Ten Workplace Trends and Smarter Workplace Awareness Month. Social media visibility is in collaboration with the Electronic Communications Committee.
- The Metrics Subcommittee measures the effectiveness of visibility initiatives. They work with a media intelligence company to track SIOP and I-O media mentions, and manage the SIOP Brand Awareness Survey. The survey was first conducted in 2012 and 2013, and an updated survey will be administered this year to business leaders and HR professionals.
- The Prosocial Subcommittee enhances visibility of I-O professionals' prosocial endeavors and ways in which I-O knowledge and skills can apply to prosocial work. They designed the Prosocial SIOP website and are responsible for content updates, including resources for volunteering, and spotlights on individual I-O psychologists' prosocial activities.
- The Students/Academia Subcommittee enhances I-O visibility among students and academics, especially those in psychology and business programs. They have developed toolkits for instructors who would like to introduce students to I-O and publish a bimonthly blog through APA.

## Announcing the Corporate Social Responsibility and Prosocial/Humanitarian I-O Registry!

### SIOP-United Nations Committee

To complement and further enhance SIOP's prosocial agenda and, more generally, to increase the visibility and impact of I-O psychology, we are happy to announce the launch of the **Corporate Social Responsibility and Prosocial/Humanitarian I-O Registry**. This searchable database will allow for identification of SIOP members with (a) expertise in specific IO-related CSR/HWP/prosocial content areas and (b) experiences with and interests in related activities (e.g., preparing statements to the UN, interacting with the media, responding to project solicitations). It provides an easily searchable website that allows SIOP members, members of the media, organizations, policymakers, and other relevant parties to easily identify and contact individuals with knowledge, experience, and interest in issues related to the psychology of corporate social responsibility, prosocial, and humanitarian issues.

The registry can be viewed here: http://my.siop.org/Services/CSR-ProSocial-Humanitarian-Registry

SIOP members (including Associate and Retired members) wishing to join the registry can find instructions for doing so here: http://my.siop.org/DirectoryRegistryInstructions

For the last several years, SIOP has put great effort into emphasizing the prosocial side of our field. This involves both science and practice that seeks to benefit others and/or society as a whole. It has included the efforts of the SIOP UN committee (http://www.siop.org/Prosocial/UN.aspx), SIOP's Veteran Transition Project, the Poverty Research Group, the Volunteer Program Assessment project, and many other individual projects led by SIOP members (http://www.siop.org/prosocial/). SIOP also partners in multiple ways with the Global Organisation for Humanitarian Work Psychology (http://www.gohwp.org) in fulfilling their mission to bring together I-O and other areas of psychology with deliberate and organized efforts to enhance human welfare.

For the first time, SIOP has recently been successful in obtaining federal funding for facilitating its prosocial mission. This has culminated in a National Science Foundation grant (funded by the Science of Organizations program) focused on the psychology of corporate social responsibility (CSR). This grant funded the Corporate Social Responsibility Summit, a SIOP preconference at the Hilton Anaheim (April 12-13, 2016, www.siop.org/csr) aimed at uncovering new directions for psychological research and practice on corporate social responsibility and catalyzing new collaborative multidisciplinary projects. A follow-up event took place at SIOP 2017 in Orlando.

A registry of those with experience and expertise in corporate social responsibility was proposed as an outcome of the summit grant. The purpose is both for experts to find each other (for work on new collaborative projects) but also for the media and organizations to identify individuals with such expertise. A secondary purpose of the registry is to serve as tool for prosocial-oriented SIOP committees (e.g., the SIOP UN Committee, the Prosocial I-O subcommittee, etc.) to identify experts when preparing statements and issuing project calls.

We encourage those who have interest and/or do work within these areas to join the registry and help us spread the word about this exciting new initiative.

For more information contact Deborah Rupp (ruppd@purdue.edu

## The Alliance for Organizational Psychology (AOP): A Collaboration Among Organizational Psychology Organizations Worldwide

**Donald Truxillo**
**AOP Treasurer**

**Rosalind Searle**
**AOP Secretary-General**

**Franco Fraccaroli**
**AOP President**

The Alliance for Organizational Psychology (AOP) was established in 2009 by an agreement among SIOP, the European Association for Work and Organizational Psychology (EAWOP), and the Organizational Psychology Division of the International Association for Applied Psychology (IAAP-Division 1). The agreement to create AOP was signed at the 2009 SIOP conference in New Orleans, by the presidents of SIOP (**Gary Latham**), EAWOP (Franco Fraccaroli), and IAAP-Div. 1 (**José Maria Peiró**). The mission of AOP is to support and advance the science and practice of I-O psychology worldwide and to expand I-O's application and contribution to society to improve the quality of working life.

AOP is therefore designed to offer a distinct value proposition to the founder organizations, but is itself a "light" organization. Thus, AOP does not seek to duplicate its member societies' activities, but instead to increase the visibility of I-O around the world and to enhance, extend, and facilitate exchanges between these associations and their members.

The specific goals of the AOP are to:

- Enhance the contributions of organizational, industrial, and work psychology to society through improvements in the quality of work life and the effectiveness of individuals and organizations;
- Develop more effective communication and collaboration among its member organizations;
- Advance the science and practice of organizational, industrial, and work psychology internationally.

In this article, we describe the structure of AOP and its current key AOP initiatives.

**AOP Structure**

AOP held its inaugural meeting of 12 delegates at the University of Bologna in November 2011, with **Milt Hakel** as president. AOP held elections for its officers in 2014, and Franco Fraccaroli, Rosalind Searle, and Donald Truxillo were elected to the Executive Committee as President, Secretary-General, and Treasurer, respectively. They will serve until the 2018 International Congress of Applied Psychology, to be held in Montreal, Canada.

There is also a Board of Delegates with representatives from each of the member organizations. In addition, there are four committees focused key AOP initiatives: Conference Programming, White Papers, Small Group Meetings, and Local Groups.

**Conference Programming**

The current AOP Conference Programming Committee includes **Julie McCarthy** (Chair), **Frederik Anseel, Ioannis Nikolaou,** and **Alicia Grandey**.

The AOP presence has been visible at the SIOP conference as well as at the EAWOP and IAAP congresses for several years. These AOP conference sessions, which include panels, symposia, and incubators, are focused on topics that are important to I-O psychologists globally. Topics of recent AOP sessions have included work and health, big data in the workplace, and decent work.

Alliance sessions presented at the SIOP Conference in Orlando focused on The Impact of Technology on Recruitment and Selection; 100 Years of I-O Research; and Ethical, Rigorous and Relevant Research.

In addition, the following sessions were presented at the EAWOP Congress in Dublin in May: Policy Matters and Work Psychology; Fostering Emotional Work Climates Aaround the Globe; Local Communities of Work and Organizational Psychologists; Meet the Editors; and Conducting Ethical, Rigorous, and Relevant Research.

## White Papers

The AOP white papers series was developed to promote I-O science and practice that can inform organizational practices and policy. The current White Papers Committee consists of Angela Carter (Chair), **Autumn Krauss,** and **Helena Cooper Thomas**. The White Papers Committee has worked to develop a process for commissioning and publishing white papers. The goal is for AOP to publish two white papers per year. The white papers will be published on the web sites of the member organizations. We also appreciate the support that we have received from *Organizational Dynamics* editor Gary Latham to publish the AOP white papers in that journal. The first white paper is focused Active Aging at Work (**Hannes Zacher, Dorien Kooij,** and **Margaret Beier**), with a second white paper on Women and Power forthcoming. Other topics for the coming years include Well-Being Interventions and Mindfulness Interventions in Organizations.

## Small Group Meetings

The Small Group Meeting (SGM) Committee is tasked with supporting meetings of researchers from around the world on topics of keen interest to organizational psychology. AOP's first small group meeting on "Relevant and Ethical Research" was hosted in February 2016 at the University of Zurich, and hosted by Gudela Grote and Jose Cortina. The SGM Committee, consisting of **Steven Rogelberg** (Chair), **Alex Alonso, Sharon Parker,** and Ioannis Nikolaou, is soliciting proposals for the next SGM. The deadline for applications is June 1, 2017.

## Local Groups Committee

The purposes of the Local Groups Committee is to help create local I-O groups around the world, in other words, to develop I-O groups from the bottom up. This may be particularly important in cases where no national I-O group exists. Current members include **Anna Erickson** (Chair), **Bill Farmer,** Helen Baron, and **Barbara Kożusznik**. The Local Groups Committee is currently conducting a survey to determine member needs on this topic. They had stands at the SIOP and EAWOP conferences to promote their work.

## Adding New Members to the Network

One key initiative of AOP is to add new member organizations to AOP, and talks are underway with these I-O-related organizations. The first new member organizations, the Canadian Society for Industrial and Organizational Psychology (CSIOP), was added in 2016.

Visit our website to find our more: http://www.allianceorgpsych.org/

To learn more about AOP, particularly in relation to practice issues, please see the article by **Lynda Zugec** in this issue of *TIP.*

## International Practice Forum

**Lynda Zugec**
**Managing Director, The Workforce Consultants**

### Alliance for Organizational Psychology: Getting Involved as a Practitioner

In this edition of the International Practice Forum, the Alliance for Organizational Psychology (AOP) is highlighted in a quest to encourage a greater number of practitioners to become involved in AOP activities. Are you an internationally minded practitioner? Do you want to connect with practitioners across the globe? Have you heard or seen some of the initiatives held by the AOP at the various conferences? Are you eager to partner with academics outside your country? If so, read on to discover what is happening and how you can connect and participate!

### What Is the Purpose of the AOP?

The aim of the AOP is to form an international alliance that would increase the visibility of I-O psychology in the public and private sectors, and be mutually beneficial to each society.

The AOP does not seek to duplicate functions that are already done by other existing I-O psychology Associations but instead intends to enhance, extend and facilitate exchanges among associations and their members.

The specific purposes of the Alliance are as follows:

a. Influence policies and practices related to the quality of work life and the effectiveness of individuals and organizations;
b. Advocate internationally for the science and practice of organizational, industrial, and work psychology;
c. Enhance communication and collaboration among its member societies and the individuals who are members of these societies; and
d. To do any and all acts and things necessary and expedient to accomplish any of the foregoing.

### When Was the AOP Established?

The AOP was established in 2009 by the Work and Organizational Psychology Division of the International Association for Applied Psychology (Division 1), the European Association for Work and Organizational Psychology (EAWOP), and the Society for Industrial and Organizational Psychology (SIOP). The agreement to create AOP was signed at the 2009 SIOP conference in New Orleans by the Presidents of SIOP (**Gary Latham**), EAWOP (**Franco Fraccaroli**), and IAAP (Division 1) (**José Maria Peiró**).

### Who Are the Current Officers of the AOP?

Franco Fraccaroli, Rosalind Searle, and Donald Truxillo are the current Officers, serving as President, Secretary-General, and Treasurer respectively. Each serve until the 2018 International Congress of Applied Psychology (ICAP), to be held in Montreal, Canada.

### Who Qualifies for Membership in the AOP?

The AOP is a federation of associations. Current members of the AOP include the Work and Organizational Psychology Division of the International Association for Applied Psychology (Division 1), the European Association for Work and Organizational Psychology (EAWOP), the Society for Industrial and Organizational Psychology (SIOP), and the Canadian Society for Industrial and organizational Psychology (CSIOP). If you are a member of one of the member associations, you are effectively a member of the AOP. It is anticipated that the AOP will continue to grow in the coming years as various associations across the globe join.

### What Sort of Activities Can I Become Involved In?

The AOP routinely seeks submission, ideas, and thoughts on items such as:

- **Small group meetings**

  One way the AOP seeks to achieve its mission is to fund small group meetings (SGMs) that bring together organizational psychologists across member associations to address topics that are:

  1. Highly significant to our profession and/or society
  2. Challenging and potentially vexing, or maybe even controversial
  3. Directly or indirectly relevant to both research and practice
  4. Complex, thus benefiting from a global perspective

  Each year, AOP seeks proposals for SGMs that address topics with these characteristics. These meetings typically span 2 days and have a maximum of 20–25 people (although exceptions are considered), draw attendees from all member associations, and have clear international representation.

- **Conference sessions**

  The AOP coordinates with member associations to produce Alliance Special Sessions at member conferences. The SIOP conference in April 2017 had a total of three: http://www.siop.org/Conferences/17con/Regbk/alliance.aspx. These Alliance Special Sessions welcome all conference goers to attend and involve speakers from the various associations. If you are looking to hear about, or become more involved with, practice and research being done outside the U.S., you would be well-advised to attend these.

- **White papers**

  The aims of the white papers are to:

1. Address globally relevant topics that are of interest to policy and decision makers;
2. Highlighting key areas where organizational psychology can make a substantial contribution to practice;
3. Feature contributors offering international perspectives (from at least three continents) and view-points (ensuring a minimum of one academic and one practitioner contributor);
4. Offer international comparisons throughout the paper: outlining the problem; explaining why the issue is important; reviewing the evidence; through to offering solutions and /or interventions.

These aims are distinct from member association white papers in that the focus is global in terms of authors, literature reviewed, and solutions offered.

The AOP seeks to produce white papers that involve practitioners and academics representatives from member associations. The White Papers Committee ensures that the process for developing white papers meets the requisite standards. You can submit your white paper ideas to the AOP for consideration.

- **Local Work and Organizational Psychology Groups**

  The AOP seeks to support local work and organizational psychology groups worldwide. A local work and organizational psychology group is a professional community that creates a forum for work and organizational psychologists to share their occupational knowledge, experience and inspiration. If you are interested in joining a local group in your area or starting a group, the AOP is available to provide the necessary supports.

**Does the AOP Have a Website?**

Yes. You can visit the AOP website here: http://www.allianceorgpsych.org/

WE ARE LOOKING FOR YOU AND YOUR INPUT! We are calling upon you, the global I-O psychology community, to reach out and submit topic ideas for future columns. Give us your insights from lessons learned in your practice or inform us of what is happening. We are always seeking global contributors!

To provide any feedback or insights on the International Practice Forum or find out more about the Alliance for Organizational Psychology, please send an email to the following address: Lynda.Zugec@TheWorkforceConsultants.com

Or contact any of the Alliance Officers:

Franco Fraccaroli: Franco.Fraccaroli@unitn.it

Rosalind Searle: ab2919@coventry.ac.uk

Donald Truxillo: truxild@pdx.edu

**Does Your Intro to Psychology Textbook Lack Sufficient I-O Coverage? SIOP Can Help!**

**Stephen F. Young**
**Center for Creative Leadership**

**Gary W. Giumetti**
**Quinnipiac University**

Every year, there are more than one million college students who take an introductory psychology course (Griggs, 2014), and the number of high school students who take an AP psychology course has grown from 3,900 in 1992 to over 300,000 in 2016 (Rodes & Berreby, 2017). These students may only take this one psychology course, so this a key opportunity to introduce these students to the field of I-O psychology. For a number of reasons, most introductory psychology textbooks lack adequate coverage of I-O psychology's core and related content. During **Tammy Allen's** tenure as SIOP president, the Education and Training Committee initiated several efforts to increase the presence of I-O content within general psychology courses, texts, exams, and so on (Allen, 2014). Based on a survey of the needs of introductory textbook authors (Giumetti, Fullick, Young, & DiazGranados, 2014), our subcommittee decided to coordinate the development of 1-page summaries of I-O competencies and related areas for inclusion in introductory psychology textbooks. All summaries were written and then reviewed by individuals with a PhD or master's degree in I-O psychology or a related field (e.g., human factors engineering). In February 2015, an initial set of the 1-page summaries were provided to 11 textbook authors who had indicated interest in receiving more I-O and related content within this format.

Based on the 2016 revisions to the *Guidelines for Education and Training in Industrial-Organizational Psychology,* the 1-page summaries were subsequently revised and redistributed to textbook authors in February 2017. **You may now access these summaries** here. When redistributing the summaries to textbook authors, we also asked them to rate the following item: Rate the extent to which you have incorporated these summaries into your *Introduction to Psychology* textbook(s) on a 1–5 scale where 1 = *not at all or very little extent* and 5 = *to a very great extent*. Though they did not all provide a quantitative rating, four textbook authors replied and stated that the content has been useful (one editor said that he already had a strong I-O focus in his textbook). As an example, David Meyers says that he now uses this collective body of work as an example to other disciplines of psychology about how they should communicate their useful ideas and major findings to adult learners. However, he has continued to challenge us to be as clear as possible about the top findings that all educated adults should know about our field. Though a handful of textbook authors have not yet been able to incorporate our content within their textbooks for a number of reasons (e.g., textbook out of print), we have provided the references below for two textbooks that now contain significant I-O content. Additionally, both textbook authors are nearing completion of new editions that will include even more updated I-O content.

It is our hope that these summaries will increase the presence of I-O psychology within introductory psychology textbooks so that students may gain a broader perspective on our field and the key role we play in shaping human behavior and promoting human flourishing. We also believe that introductory psychology teachers will also find these summaries useful in covering those areas of I-O that still lack adequate coverage in their introductory textbooks. We ask that SIOP members with personal contacts help us more widely distribute these summaries to textbook authors of additional introductory psychology textbooks (please email the first author who can cross-check your contact against the list we already have). Finally, this effort would not have been possible without the many individuals (SIOP members and even some non-SIOP members) who volunteered to write and review these summaries. Special thanks to the following individuals who helped our committee coordinate the recently revised summaries: **Jennifer Gibson, Diane Wentworth,** and **Vipanchi Mishra**.

### Introductory Psychology Textbooks With Significant I-O Coverage

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## Conference Reflections

The annual conference means something different to each one of the 4,801 people who attended. This special section contains reflections from new attendees and old-timers; scientists and practitioners; and students and professionals who share their unique perspectives.


**Katie England**
**Graduate Student, I-O Psychology**
**Pennsylvania State University**


This year, I attended my first ever SIOP conference. Until now, SIOP has been a conference I heard about, and now that I’ve experienced it, I can say with certainty that it was not a letdown. I cannot imagine a better way to end my first year as a PhD student than by being surrounded by the best minds and the most up-to-date research in our field. During my time at SIOP, I was able to meet and talk with some people whose names I’ve only read in articles. I attended symposia focused on emotional regulation and the future of emotions in the workforce, which allowed me to get a better perspective of where my current interests are heading. While the aforementioned events alone would have made for an excellent experience, the biggest take home of the conference for me was the realization of the impact our field can truly have. During SIOP, I attended a talk on the role I-O psychologists can play in reducing hate crimes and shootings. This was just one example of many impactful talks that occurred during the conference that opened my eyes to the influence I-O can have. Overall, my first SIOP was more than I could have asked for and I look forward to attending many more in years to come!

**Sertrice Grice**
**Master's Candidate**
**Radford University**

When it comes to I-O you see people who are interested in training and development, engagement, big data, the list goes on. SIOP brings together I-O psychologists of all different backgrounds and allows them to attend sessions targeted towards their area of interest. Sitting in each session you can find people comparing experiences, offering advice, as well as asking for advice. There are also sessions and activities targeted for current and recent graduate students that offer advice on navigating the I-O world outside of school.

That is the category I fell under this year. I was one week away from graduating with my MS and I was bright eyed, bushy tailed, and ready to see what the world had to offer. When I first looked through the various sessions I was overwhelmed! As a student, I still had various interests, and it was hard to narrow down which sessions to skip and which to attend. Not to mention I also wanted to find time to participate in the job placement center and to network as much as possible. Thursday, due to all of the excitement, I even forgot to break for lunch!

I think it's great that the organizers of SIOP make a conscious effort to have activities relevant to everyone. Throughout the conference everyone seems entertained, be it from the sessions, networking, or just catching up with old friends. In my opinion, that is actually the best part about SIOP, it feels like a little community. It seems like most people know each other, are willing to meet those they don't know, and are willing assist others any time they can. For these reasons, in my eyes, SIOP 2017 was a success! I am eager to continue my career as a part of this community, help the conference continuously represent what is needed by all in our field, and recruit others to do the same.

**Ben Hawkes**
**Assessment Lead**
**Shell International**

I am convinced that attending SIOP Conference (and this was #10 for me) has had a huge and positive impact on my career. So bear in mind that what I"m about to say comes from love. Okay, perhaps not love exactly. Let"s call it "warm appreciation."

Seriously, we need to get over this "science versus practice" thing. That "SvP" divide was quite obvious when I first attended back in '08, and it is still apparent now, even if these days we mostly talk about it half jokingly. I-O psychology, by its very definition, is applied psychology. Yet, we still see plenty of examples of science being conducted in isolation from practice and practice being carried out without substantive science to back it. (Naturally I recognize that there will always be a need for "pure" science, just as there are areas of practice where science cannot always help.)

I haven't been around SIOP anything like long enough to understand the root cause of this SvP schism, but right now the cause is less important than the solution. To my mind, it needs better and more frequent communication, cooperation, and collaboration between science and practice. For my part, I'm exploring with a few academics how we might make available some of Shell's extensive HR data sets for them to work with. It's not easy of course: understandably, our organization has strict internal policies about who gets access to this data about our people. But I know from my own experience that practitioners and scientists alike benefit from collaborations like this. This is just one example, and I know of many other “science with practice” collaborations like this already happen. I’d just like to see more of them: It’s good for scientists and practitioners alike, and it’s good for our field.

**Jacqueline Marhefka**
**PhD Student, Industrial-Organizational Psychology**
**The Pennsylvania State University**

This year, I attended my very first SIOP Conference as a first year graduate student. As I was not presenting any research this year, I was free to attend various poster sessions, symposiums, and community of interest talks. It was exciting to put a face to the names of academics I have encountered in my classes and thesis research, as well as learn about current topics and methods they are studying. I also enjoyed attending symposiums about areas in which I was less familiar and seeing my fellow graduate students share their work in these settings.

I was particularly excited about the topics discussed in the "Studying the Dynamics of Team Dynamics" symposium, as teams is my primary research focus. It was great to follow this symposium up with the Multiteam Systems Community of Interest, which was facilitated by **Leslie DeChurch, James Grand**, and **Dustin Jundt.** It was so beneficial to see what these researchers and others had been working on regarding this topic as well as discuss where multiteam systems are going.

The conference was an excellent opportunity to meet with Penn State alumni and discuss what work they have been doing since graduating. Overall, the conference was a wonderful setting to learn about current research in the field and see a great number of those researchers. I am looking forward to attending again next year!

## An Old-Timer’s Impressions of SIOP Conference 2017

**Allen I. Kraut**
**Professor Emeritus of Management,**
**Baruch College CUNY**

Flying home to New York from Orlando, I thought of what I’d just seen at SIOP and I found myself thinking about the changes over the years. I have been going to our Annual Conference for several decades, and this meeting was a lot bigger than others. At the first SIOP-only meeting in Chicago, 33 years ago, there were just 704 attendees. This year, we topped 4,800 registrants, which was even more than the 4,200 or so in each of the last 2 years. Partly I guess, we have to thank Walt Disney and the Resort setting, which would also explain why I saw a lot more children than in most years, and why so many of us had trouble getting a room at the conference hotel.

### SIOP a Part of Global Trends

I saw that changes in the world around us affect SIOP and its members at least as much as the rest of society. Digital developments gave us WHOVA, an app to check the SIOP program agenda and set our choices by topic and presenter. I tried it and did not really get it. I still prefer paper. Some others seemed to find it useful. Maybe I’ll get it next year.

The Internet seemed to keep many book publishers away from our Exhibition Hall. I saw only two displays showing books that I could pick up and look through. There were handouts offering 30%

discounts if books were ordered online. Like Amazon, I think our publishers no longer want to haul cartons of books to the conference, not knowing how many they will have to lug back again.

Instead there was a higher proportion of consulting firms in the Exhibition Hall. Many of them have new names, as consulting firms have been quite busy starting up or merging and acquiring other consulting firms. It looked as if most of them were promising to do what the others do but better. There were so many new assessment tools and promises offered, it made my head spin. I was satisfied to walk away with souvenir writing pens and some chocolates.

Big data, how you get it and what you do with it, was the topic on several panels. The huge increases in computing power over recent years lets us get and crunch an enormous amount of data, though we still need to really know what we are doing. It is a "gee whiz" phenomenon and opens many possibilities for us in the future, and much of that future is already here.

Globalization was also evident. There was more diversity among presenters (although African Americans were less visible than I'd like to see.) This showed up in more Asian names and also English spoken with many accents, including Australian and European. SIOP is going global even more so than I had noticed some years ago (Kraut and Mondo, 2009). While SIOP membership overall (aside from students) grew about 38% in the last decade, the number of SIOP members who live overseas has increased 145%. As a portion of SIOP members, non-US members rose from 12.1% in 2007 to 21.6% in 2017 and are still on the increase. Almost one in four (24.4%) of new members joining in 2016 live out of the US!

That seems all to the good, improving our viewpoints, our science and our impact in the world. For me personally, it is a huge plus. I had the joy of seeing my former student from Baruch College, Mukta Kulkarni, present her research on disability and inclusion. She came in from Bangalore, where she is now a professor at the India Institute of Management (India's MIT). My friend **Michael Frese**, a past president of IAAP's Division of Work Psychology, came in from the National University of Singapore to discuss his work on fostering entrepreneurship in Uganda as part of a World Bank project. I found all of this exciting.

**Uneven Quality of Presentations**

I continue to be amazed by the unevenness of the formal presentations at SIOP Conferences. Leading edge sessions were balanced by others that made me think, "Are we still discussing this issue? After so many years?" I heard that 50% of this year's submissions were rejected, so my expectations were high.

Some of what I saw was dreadful. Researchers who have given months of effort to a project have only 15 minutes or so to make a good impression on an audience that actually chose, with high hopes, to hear them. So why would the presenters use Power Points with far too much text on a chart, or typefaces too small to read, and colors that wash out and give eyestrain? Did they even try out their presentations? Where were their friends? Where were their advisors?

On the other hand, a few sessions were brilliant. For example, in a debate about using performance appraisals to support meritocracy, **Seymour Adler** and **Tomas Chamorro-Premuzic** were on one side and **Paul Sackett** and **Alan Colquitt** on the other. (That is already a fine lineup.)

In his introductions, the moderator, **Marc Effron**, described them as parts of a tag-team event. Then he stepped back, put on a black-and-white striped referee's shirt and pulled out a whistle and penalty flag.

Wow! The audience went wild, cheering, applauding, and laughing. After that they were totally alert to the speakers' comments and repartee. It was a fun and engaging session where we all learned a lot about the topic.

Perhaps the most amazing session I saw was "SIOP Shaken and Stirred." Set in a large, darkened meeting room, the stage was worthy of a Silicon Valley new-product announcement by Steve Jobs or Mark Zuckerberg. Fifteen presenters had just 3 minutes each to answer the question "What If…?" They each filled in their own question and then answered it. This session was, by turns, dramatic, mold breaking, inspiring, and heart-warming. Talk about challenging and imaginative viewpoints. Here are just four examples:

**Amy Grubb** of the FBI asked, "What if You Could Change Something Just by Describing it Differently?" Her point: Words can limit and also expand our thinking. She gave a variety of examples to show that how we describe and frame an issue greatly changes our approach to understanding, researching, and solving it.

**Mikki Hebl** of Rice asked, "What if Gender Mattered Less?" She brought out the underrepresentation of women in business and the US Congress, and she noted that only six, or 29%, of this year's 21 SIOP Fellows were female, inviting us to think about why this should be.

**Mike Morrison,** a graduate student at MSU asked, "What if Work Becomes Optional in the Future?" With automation rapidly replacing jobs, leading to unemployment, perhaps every person would be need to be guaranteed an annual salary, say of $24,000 a year, whether they worked or not. What then?

**John Scott** of APTMetrics asked "What if SIOP Could Help Eradicate Poverty on a Global Scale by Supporting the GLOW Agenda in Both Applied and Research Settings?" In his answer, he showed an inspiring film on providing a global living wage that would enable people, organizations, and communities to prosper and thrive. See it at https://youtu.be/zbZafHgqumo.

**Jennifer Weiss**, who served as event MC, created SIOP Shaken and Stirred to be an ongoing and evolving project. I learned that the 2017 debut of this novel and engaging session came about with significant support from SIOP, particularly from **Aarti Shyamsunder** from the Special Events committee, who served as cochair.

Each of the speakers had obviously prepared and rehearsed for their brief time on stage, as if giving a TED talk. They were models for all of us. I would love to see this type of session repeated. It deserves a wide audience. (See for yourself; most of the sessions are now on You Tube.)

**Why I Attend SIOP**

Of course the formal sessions are only part of why I go to SIOP. It is also a big social event and I love re-connecting to old friends and making new ones. I love meeting former students and interns and colleagues and catching up with each other's lives. I love eating and drinking with them, and going to vendors' parties with them. Over the years, many of my professional associates have become close personal friends.

One thing did puzzle me, though. Several times, an associate greeted me with "You look terrific!" or a similar phrase. I'd say "Thank You," but wonder why they seemed so genuine, maybe even surprised. Perhaps they do not expect someone whose hair is as white as mine to still be standing tall and straight?

Perhaps not to be standing at all? I'd prefer to think it is because I still wear a jacket, shirt, and tie, a throwback to my days working at IBM.

I don't know how many more SIOP Conferences I will be able to attend, but I do enjoy them. I always learn something new. I love seeing my friends. More than 3 decades ago, I chaired the Workshop Committee and then the Program Committee. Since then, the work of these groups has expanded greatly and the current chairs and committees, bless them, seem to handle the work flawlessly. The growth of SIOP overall impresses me. The accomplishments of the new SIOP Fellows awe me.

Going to the SIOP Conference is a vivid reminder to me that I-O is an exciting, worthwhile and rewarding field, and a solid contributor to our world and that SIOP is an organization well worth the effort given to it by so many members. I hope to see you all at next year's conference in Chicago.

**Reference**

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**Julian B. Allen**
**PhD Student, Industrial-Organizational Psychology**
**The Pennsylvania State University**

As a first time attendee at SIOP I was amazed and pleasantly overwhelmed with the cacophony of thousands of I-O psychologists in the same room. My first year at The Pennsylvania State University has been a whirlwind, as my cohort and I have jumped into classes, lab meetings, and multiple research projects. However, I could not think of a better way to bring everything into perspective than attending the 32nd Annual SIOP in sunny Orlando at the end of the semester.

In my eyes the beauty of SIOP is its ability to bring together likeminded individuals, both practitioners and academics alike. Throughout my time in Orlando I was able to reconnect with co-workers from a previous internship with OrgVitality. I was also able to meet alumni from the Leadership and Innovation Lab, such as **Lily Cushenbery** and **Andrea Hetrick**. Last, I was able to start placing faces to articles.

While at SIOP I attended multiple symposia regarding leadership and innovation management, my main areas of interest. It was exciting to meet fellow colleagues with similar curiosities and research questions. Of particular interest was symposium titled Advancing the CIP Model of Leadership. Although the session was run by fellow Penn State graduate student **Brett Neely**, it was exciting to note the similarities and differences with how our lab has been talking about CIP and integrating that into others current research.

I could not have asked for a more welcoming and motivating first SIOP. I'm excited for many more SIOPs to come!

**Rick Jacobs**
**Professor of Psychology, College of Liberal Arts**
**Distinguished Honors Faculty, Schreyer Honors College**
**Senior Fellow, Justice & Safety Institute**
**Penn State University**

Reflections on SIOP 2017: This year I attended my 31st SIOP conference including the very first in Chicago back in 1986. I missed one many years ago so I could attend the Bat Mitzvah of the daughter of my college roommate and best friend. That was the year I became a Fellow but my personal priorities dictated being in LA rather than St. Louis back in 1997. The 32nd SIOP meeting in Orlando was really grand personally and professionally. I was part of three different sessions that were well attended and tons of fun. I really thought it ironic that for my talk on Wednesday at the Doctoral Consortium I was given 75 minutes to discuss the elevator speech—over an hour to cover a 90 second event. The very next day I gave a talk as part of a panel of “Career Visionaries.” For this session I had 10 minutes to talk about my 40 years in the field. Oh well, both were fun and it certainly was great to hear the stories of my “Visionary” colleagues.

SIOP is almost always a great few days as it gives me the opportunity to visit with former students who have become life-long friends as well as time with so many valued colleagues who mostly I only see at the conference. This year I had two career affirming experiences. The first was Thursday morning at the Fellows breakfast when I realized that I was lucky enough to be sitting with my graduate advisor, **Shelly Zedeck** and one of my advisees from years ago, **Paula Caligiuri**. How fortunate to have three generations of Fellows at the same table. Later that day, as attendees were filtering into the Careers session, I saw a face in the crowd that I had not seen for several years. **Bob Goldsmith** wandered in, Bob was my very first PSU PhD back in 1982. Also in the room was **Kristen Swigart**, she will be my last PhD when she graduates in June of 2019, the same date I will retire after 40 wonderful years in Happy Valley.

I have often said that being a professor of I-O psychology is the best job in the world. This SIOP certainly reminded me of how lucky I have been to be part of our profession.

## Letters to the Editor

### In the I-O Psychology Credibility Crisis, Talk Is Cheap

Dear Editor,

With the backdrop of science’s replication and now credibility crisis, triggered perhaps by psychology but now much broader than that, I-O psychology is finally beginning to reflect. This is great news. **Deniz Ones** and colleagues published a paper in the last issue of *TIP* providing some perspective on the unique version of this crisis that I-O now faces, a crisis not only of external credibility but also of internal credibility. In short, both I-O practitioners and the world more broadly increasingly do not believe that I-O academics have much useful to say or contribute to real workplaces.

In response to this, I suggest seven specific actions that almost any I-O psychologist can take to unravel this crisis before it worsens. They are:

1. If your paper is rejected from a journal because you purposefully and knowingly traded away some internal validity for external validity, complain loudly. If the only way you can reasonably address a research question is by looking at correlational data inside a single convenient organization, the editor should not use criticisms of your sampling strategy as a reason to reject your paper. Do not let journal gatekeepers get away with applying their own personal morality to your paper. Do not do this with the expectation or even hope that you will get your manuscript unrejected. Do this because it's right. Change one mind at a time.
2. Prioritize submissions to journals that engage in ethical editorial practices (including but not limited to *Journal of Business and Psychology* and *Personnel Assessment and Decisions*). Even better, submit to such journals exclusively. If you ignore journals engaging in poor practices, they will either adapt or disappear.
3. Casually engage in the broader online community. I-O psychology is strangely quiet online, limited to Reddit, a handful of Facebook and LinkedIn groups, and an even smaller number of blogs. In the modern era, this lack of representation diminishes our influence. Speak up. You don't need to be sharing the results of a research study to have something worthwhile to say.
4. It's time for some difficult self-reflection: Is your research useless? Does it tackle a pressing problem in organizations, either directly or indirectly? Can it be applied across multiple workplace settings? Are your effects practically meaningful?
5. Share your research and perspective beyond the borders of I-O psychology. We all have a shared responsibility to conduct research and spread it not only among each other but also among all decision makers in the world.
6. Innovate by seeking out what I-O-adjacent fields are doing and learn all about them as if you were in graduate school again (or still are). This is not just a matter of our field's health. Many bread-and-butter I-O psychologists can already be replaced with algorithms, and this will only get worse in the coming years. Make sure you have a skill set that can't be automated, and if you're at risk of being automated, go get more skill sets.
7. Accept that sometimes, engineering can be more important than science. You must actively try to be both a scientist of psychology and an engineer of organizational solutions. When your engineering project is successful, remember to trumpet the value of I-O psychology for getting you there.

After publishing this list and background on my blog, I had numerous conversations about these recommendations at SIOP. I remain convinced that they are a valuable first step towards fixing I-O, and I encourage you to adopt them immediately.

Signed

**Richard N. Landers**

(This letter was excerpted from http://neoacademic.com/2017/04/05/fixing-o-psychology-talk-cheap/)

Dear Tara,

We agree with Ones, Kaiser, **Chamorro-Premuzic**, and Svenson (2017) about the need to close the gap between scientist and practitioners. We have research models that have been tested and proven under rigorous peer reviewers and now require proactive effort by professionals in organizations to bring these evidence-based methods into broad practice. This is how the medical and other science-based professions transfer research to practice. Today many leading-edge firms are giving our methods and models opportunities to prove their contributions to their companies' health and profit (Deal & Levenson, 2016).

Take for example, that in order to be effective change agents, HRM professionals need to be trained in executive coaching principles and practices, as well as in the latest thinking and practice of design-focused team culture. Education in values, issues, priorities and preferred work environments of millennial workers is also a recommended learning agenda to ensure alignment of the latest talent management strategies (Canedo, Graen & Grace, forthcoming).

By following this plan, HRM leaders can more successfully align performance management (PM) strategy with existing business priorities for innovation, gaining executive recognition and avoiding what could be an expensive and lengthy battle to upend current PM standards and practices. HRM professionals can expand their skills portfolio and satisfy the growing need within new collaborative teams that are increasingly the major decision-making structures in business enterprise. By taking the role of coach and facilitator of team processes, HR professionals can more fully support management, enable the establishment of team contracts, improve the work flows within teams, and achieve the eventual institutionalization of continuous team performance conversions and monitoring that will replace the dreaded usual performance appraisal and its negative outcomes.

My two practitioner coauthors, Miriam at Boeing and Bill at Metrus, and I, a supporter of SIOP, think that the scientist–practitioner divide should be viewed as a bridge. We hope to encourage the active partnership roles of discovering the regularities in our field and making them useful in organizations. We submit this brief letter of encouragement. We think that in our field, SIOP should become that bridge. What do you think?

**Miriam Grace**, The Boeing Company

**William Schiemann**, Metrus Group

**George Graen**, Keio, Illinois, USTHK

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## Members in the Media

**Barbara Ruland**
**SIOP Communications Specialist**

The media landscape continues to evolve, with online media including video and audio playing an ever-larger role.

According to the Pew Research Center, most Americans get at least some of their news online, with 1 in 4 getting most of their news from websites, apps, or social networking sites. So "Members in the News" is changing too. Where possible, we are including online links for media notices.

The column format is evolving, but its goal remains the same: to highlight and celebrate SIOP members' public recognition. Send in your media notices, and we will share them on SIOP's social media, as well as in this column.

SIOP members are making news in many different arenas. This edition, covering media mentions from February 1 through May 1, 2017, illustrates some of the many fields where SIOP members are working. Some members are creating media content directly, whereas others are included in media coverage. Both industry-specific and general interest publications are turning to SIOP members for evidence based information and insights.

This all contributes to heightened awareness of the field of I-O psychology, those who work in it, and their many contributions to society. Prominent ranking in online "best job" listings illustrates how that awareness is growing.

*US News* quoted members **Steve Kozlowski** and **Mark Poteet** in its list of best science jobs, where it places I-O psychology as the 2nd highest ranked career field. The profession ranks 21st in *Yahoo Finance's* list of 25 best STEM jobs, and is included in a Monster.com article on the best psychology jobs.

**Tiffany Poeppelman** raised I-O psychology's profile with her appearance in another list, *Inc.'s* 30 inspirational Women to Watch in Tech in 2017.

Writers are also citing information published on the SIOP website. Both ColoradoBiz and the HR Bartender cited statistics on preemployment assessment from SIOP's FYI on Workplace Topics pages. Kevin Daum, writing about leader arrogance for *Inc*., cited a *TIP* article on that same topic.

*This excerpt from a* ***profile of Paul English****, the billionaire tech entrepreneur who founded the Kayak travel service gives a clear signal of the increasing public awareness of I-O psychology. "A lot of what I focused on at Kayak and what I'm focusing even more so on at Lola [his new venture] is playing the role* *of coach or organizational psychologist. I observe interactions, debug them, and make sure we're set up for success."*

*We found over 100 references to SIOP members in popular and special interest publications during the 3 months covered in this report.*

Member notices in general audience publications included business advice for employers and managers, employees, and job seekers.

Several members offered advice for reducing job stress. **Paul Baard** penned two columns, one on the advantages of intrinsic motivation, the other on self-validating behaviors.

***David Ballard*** *and* ***Michael Woodward*** *offered tips in* ***"7 Ways to Combat Work Stress"*** *for Monster.com. Woodward also participated in a* ***video interview on mindfulness*** *for SHRM.org. Coming at it from a darker place,* ***Amy Wrzesniewski*** *was featured in* ***"How to Not Be Miserable At Work"*** *for Success.com, and* ***Ben Dattner*** *offered advice on* ***"How to Manage That One Employee You'd Like to Strangle"*** *for multibriefs.com.*

*More general topics for workers included advice on* ***what successful people do on Sunday nights****. Featuring Michael Woodward,* ***how to network*** *from Paul Baard and on* ***conquering laziness*** *from* ***Amy Cooper Hakim****.*

***Beth Demko*** *offered advice predicated on looking within, suggesting career success relies on* ***understanding your personal thinking style.***

*Other members looked into the future and at technologically driven changes in the workplace.* ***Muriel Clausen*** *contributed* ***"Creating Career Advice for the About-To-Be Automated Worker"*** *for Fast Company.*

*There's good news for gamers as technology advances are significantly impacting the workplace. SIOP members* ***Elizabeth Short*** *and* ***Nathan Weidner's*** *study of how skills honed playing "World of Warcraft" translate to the workplace was covered by several publications, including* ***USA Today****,* ***Business News Daily****,* ***itechpost.com*** *and the newspaper for* ***Missouri University of Science and Technology.***

Topics tailored for job seekers included tips on how to stay positive during the job search from Amy Cooper Hakim**. Lynda Zugec** contributed to a widely syndicated article from the Canadian Press about when to bring up salary in the hiring process, while Paul Baard offered tips on unexpected interview questions. **Nicolas Roulin** discussed his new book, *The Psychology of Job Interviews* with the Psychology Today Book Brigade.

The SIOP Administrative staff helped connect APA.org with **Helena Cooper-Thomas** for an article about how to tell whether a potential employer is a good fit. David W. Ballard also contributed to that discussion.

Articles targeted for management included four topical pieces about politics and workplace interactions between the sexes.

**Ben Dattner** contributed to a Denver Post item about the effect of political turmoil on employee productivity. Lynda Zugec spoke with Fast Company about companies offering paid time off for employees' political involvement.

In a Valentine's Day article, **Amy Nicole Baker** discussed how office romance can undercut perceptions of justice in the workplace. Lynda Zugec contributed to an article about workplace hotlines, prompted by the sexual harassment scandal at Fox News.

The less scintillating but very important topic of employee turnover was addressed in a couple management items. A Hawaii TV station picked up an article on the costs and causes of employee turnover featuring **Lindsay Sears.** Paul Baard wrote about the keys to reducing turnover.

Other articles on management included tips for successful meetings featuring **Alexandra Luong**, and Baard's articles using baseball and basketball as metaphors. The Huffington Post quoted **Edwin Locke** in an article on the happiest, and unhappiest, places to work.

**Alison Eyring**, SIOP member and endurance athlete, who frames her book, *Pacing For Growth: Why Intelligent Restraint Drives Long-Term Success,* in terms of her sports avocation, received coverage in several publications including Forbes.com.

**Adam Grant's** *Give and Take* got a lot of attention, with different outlets focusing on employee engagement and performance. More than one website linked to his TED video on the topic.
Grant and co-author Sheryl Sandberg received wide attention in local and national media, including the PBS Newshour for their book, *Option B*.

Many other SIOP members have commented on topics with relevance reaching outside the workplace. Diversity and inclusion is one such topic with wide implications. **Eden King** was quoted in a discussion of sexual harassment in the sciences. **Joyce Russell**, discussed her status as an unintentional trailblazer for diversity at Villanova University. **Patrick McCarthy** moderated a program on inclusion for the LGBT+ College Conference in Nashville, and graduate student **Manasia Sturdivant's** project on the relationship between SAT scores and diversity in college admission processes was highlighted in her college newspaper.

**Seth Kaplan** discussed the social status of being too busy in a Tucson based publication. **Cristina Banks** contributed to a discussion of environment and creativity for *Psychology Today*.

**Erin Richard** contributed tips for avoiding email faux pas to techlicious.com, and Amy Cooper Hakim discussed why to unfollow anxiety causing social media contacts.

**Ben Hardy** discussed lessons for life and for raising children. Hakim also applies I-O psychology practices to parenting.

As highlighted at the 2017 SIOP Annual Conference, I-O psychology has a lot to offer those reaching outside earth's atmosphere. **Kelley Slack**, a member of NASA's astronaut selection team was quoted in general interest stories about the psychological challenges of Mars travel.

SIOP member notices in trade publications were just as numerous as those in the popular press. Some notable HR and management publication placements included:

- **Nikki Blacksmith** and the SIOP Top 10 Trends in benefits news;
- **Sy Islam** on "The 'Yelping' of Pay" for SHRM.org;
- **Nathan Mondragon** on separating exceptional performers from the average for eremedia.com; and
- Clif Boutelle's piece for workforce.com on single workers, featuring **Wendy Casper** and **Jennifer Deal**.
-

In addition to publications for management and HR professionals, publications several other industries also reached out to I-O psychologists for insights.

Some technology industry examples include:

- A website devoted to IT enterprise technology references Adam Grant's *Originals*;
- **John Boyatzis** discusses how to create a positive workplace in a publication for the higher education IT community; and
- An online magazine for chief information officers quotes Michael Woodward in a story on psychopathic CEOs.

Several publications devoted to insurance, workplace safety and loss prevention also published insights from SIOP members.

- **Jennie Hollman** wrote about millennial recruiting for iamagazine.com
- EHSToday.com, a publication on environment, health, and safety, picked up SIOP's article on the study of Leader IQ coauthored by **John Antonakis**.
- Losspreventionmedia.com referenced a SIOP symposium on emerging workplace diversity issues.

SIOP members Josh Quist, Alex Morris, Matt Tripp, and Paul Hanges were featured in publications devoted to government workers. **Leslie Miller's** work with Clearwater Fire & Rescue was profiled a local paper.
**Billie Blair** was quoted in a publication for the grocery industry, and **Whitney Martin** has written for executives in the hotel industry.

The volume and variety of SIOP members' media mentions listed here illustrates the vitality and importance of our members' work. Evidence based solutions to the evolving challenges facing individuals, teams, and organizations will only become more important as we move further into the current technological revolution.

The SIOP Administrative Office seeks to support members' work with this column and on its social media platforms by helping raise awareness of the benefits I-O psychology offers. Please email your media mentions for inclusion to Barbara Ruland. Non-electronic notices may be sent to her attention at SIOP at 440 East Poe Rd., Suite 101, Bowling Green, OH 43402.

## SIOP 2017 Science Funding Speed Mentoring Event

**Christopher D. Nye and Thomas Schoenfelder**

The SIOP Scientific Affairs Committee is excited to report that the 4th Annual Science Funding Speed Mentoring event held on Friday, April 28 at SIOP 2017 in Orlando, FL was quite a success! With the help of eight generous and wonderful mentors (another huge thanks to **Lillian Eby, Shawn Burke, Greg Ruark, Reeshad Dalal, Daisy Chang, Sallie Weaver,** and **Louis Tay**), we were able to improve the science funding knowledge and interests of 27 motivated and enthusiastic SIOP members! Program evaluation results revealed that every single participant rated the event as very useful and was likely to recommend this event to others in the future. As in previous years, the event was also rated as "good" or "very good" by every attendee, and attendees expressed interest in participating again in the future. Some of the remarks made by our protégés:

- Thank you!
- I liked that we were able to talk to multiple mentors with diverse experience.
- The mentors this time were great.
- The mentors were really prepared and well-versed in the subject.
- Please do again next SIOP.

We also received many great suggestions for how to improve the session in the future, and we look forward to providing this service for our membership again in 2018!

## 2017 Frank Landy SIOP 5K Fun Run Results
## Orlando, FL April 27, 2017

**Paul Sackett**

A sunny but humid day greeted a record-setting 146 participants as they gathered just outside the conference hotel for the 25th running of the Frank Landy SIOP 5K Fun Run. The course was a scenic tour of the Disney property. A misplaced course turnaround produced a course of 2.8 miles, rather than the promised 3.1, resulting in many runners being pleasantly surprised at their quick finishing time. Nonethless, a good time was had by all. Top finishers are listed below. Join us next year in Chicago!

**Top 10 Men**

| Name | Place | Time |
|---|---|---|
| Dylan Sorman | 1 | 16:16.1 |
| Filip Lievens | 2 | 16:18.5 |
| Eric Day | 3 | 16:42.8 |
| Robbie Brusso | 4 | 17:05.0 |
| Tyler Slezak | 5 | 17:20.3 |
| Aidan Johnson | 6 | 17:23.5 |
| Patrick McCarthy | 7 | 17:32.0 |
| Miguel Quinones | 8 | 17:35.0 |
| Shea Fyffe | 9 | 18:05.8 |
| Matthew Sloan | 10 | 18:33.9 |

**Top 10 Women**

| Name | Place | Time |
|---|---|---|
| Sarah Mulvey | 1 | 17:29.0 |
| Deborah Powell | 2 | 17:54.8 |
| Christine Nittrouer | 3 | 17:56.1 |
| Alexandra Henderson | 4 | 18:36.9 |
| Beth Anne Helgason | 5 | 18:53.7 |
| Andrea Tocci | 6 | 19:47.3 |
| Jamie Donsbach | 7 | 19:51.9 |
| Lauren Borden | 8 | 19:53.6 |
| Colby Kennedy | 9 | 20:57.9 |
| Erica Barto | 10 | 21:14.7 |

**Age Group Winners**

| Men <30 | | Women <30 | |
|---|---|---|---|
| Dylan Sorman | 16:16.1 | Sarah Mulvey | 17:29.0 |
| Tyler Slezak | 17:20.3 | Alexandra Henderson | 18:36.9 |
| Shea Fyffe | 18:05.8 | Beth Anne Helgason | 18:53.7 |

| Men 30-39 | | Women 30-39 | |
|---|---|---|---|
| Robbie Brusso | 17:05.0 | Deborah Powell | 17:54.8 |
| Jason Randall | 20:08.9 | Christine Nittrouer | 17:56.1 |
| Andrei Ion | 20:22.1 | Jamie Donsbach | 19:51.9 |

| Men 40-49 | | Women 40-49 | |
|---|---|---|---|
| Filip Lievens | 16:18.5 | Jamie Donsbach | 19:51.9 |
| Eric Day | 16:42.8 | Liberty Munson | 21:23.5 |
| Miguel Quinones | 17:35.0 | Michelle (Mikki) Hebl | 22:43.8 |

| Men 50-59 | | Women 50-59 | |
|---|---|---|---|
| Patrick McCarthy | 17:32.0 | Marilyn Sharp | 22:55.5 |
| Douglas Reynolds | 20:32.0 | Jill Floyd | 28:07.7 |
| Kyle Lundby | 21:31.6 | Deborah Whetzel | 34:20.8 |

| Men 60-69 | | Women 60-69 | |
|---|---|---|---|
| Michael Pearn | 23:59.6 | Deborah Gebhardt | 24:40.8 |
| Paul Sackett | 28:21.0 | Pat Sackett | 37:16.1 |

| Men 70+ | |
|---|---|
| M. Peter Scontrino | 28:52.3 |

**Four-Person Teams**

| | |
|---|---|
| Shaker Consulting | 79:54 |
| University of Minnesota | 80:33 |
| HumRRO | 86:19 |

**Scientist/Practitioner**

| | |
|---|---|
| Filip Lievens/Herlinde Pieters | 40:43 |
| Kyle Morgan/Steven Toaddy | 42:49 |
| Jason Randall/Katherine O'Brien | 49:55 |

**Advisor/Advisee**

| | |
|---|---|
| Nathan Kuncel/Casey Giordano | 37.59 |
| Charles Scherbaum/Elliot Larson | 40:55 |
| Clare Barratt/Alexandra Henderson | 50:40 |
| Gina Marie Ligon/Haley Shelton | 61:20 |

**Mixed Doubles**

| | |
|---|---|
| Filip Lievens/Herlinde Pieters | 40:43 |
| Elliot Larson/Juliet Aiken | 42:58 |
| Tori Ellis/Terence Bostic | 45:33 |
| Gilad Chen/Ella Chen | 49:54 |
| Brian Payne/Stephanie Payne | 52:27 |

| | |
|---|---|
| Paul Sackett/Pat Sackett | 65:37 |

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## Recent Offerings From the SIOP Professional Practice Series

**Nancy Tippins**
**Series Editor**

The Professional Practice Series is intended to provide current information regarding science and best practices in a variety of industrial and organizational psychology topics. In each volume, the reader will find guidance and insights that are firmly grounded in science as well as advice on how to apply the concepts, findings, methods and tools to organizational problems. The series is designed to meet the needs of a broad audience of practitioners, including industrial and organizational psychologists, organizational scientists and practitioners, human resources professionals, managers, executives, and others interested in organizational behavior and performance.

Past volumes in the series have typically been edited volumes focused on a particular topic. Several have included case studies that highlight how science has been put into effective practice in a particular organization.

- *Using Experience to Develop Leadership Talent: How Organizations Leverage On-the-Job Development* edited by **Cynthia D. McCauley** and **Morgan W. McCall, Jr.**
- *Advancing Human Resource Project Management* edited by **Richard J. Klimoski**
- *Diversity at Work: The Practice of Inclusion* edited by **B. M. Ferdman** and B. R. Deane

The entire list of books in the Professional Practice Series can be found at this website: http://www.wiley.com/WileyCDA/Section/id-300243.html

In 2016, SIOP contracted with a new publisher for the Professional Practice Series, Oxford University Press (OUP). The Professional Practice Series Editorial Board is excited about this new relationship and the opportunities for marketing the Professional Practice Series books to a broader audience. In addition, OUP has encouraged the editorial board to explore types of volumes other than edited ones and different formats that better serve the needs of potential readers.

Although no new volumes are officially under contract, several are well underway:

- *The Practice of I-O Psychology: Current Practices and Applications in Organizational Settings* edited by **Rob Silzer** and **Wally Borman**
- *Becoming a Talent Magnet: Lessons From the Field on Attracting and Recruiting Great People* edited by **Mark Morris**

In addition, **Will Shepherd** is developing a volume on employment value proposition, and **Bill Macey** and **Alexis Fink** have agreed to write a new volume on current survey practices. The board is also developing other ideas for new books on a variety of other "basic" I-O topics, including the following:

- Performance management
- Training and development
- Teams
- Organizational development
- Getting from individual performance to organizational results: Multilevel strategies
- Personality assessment

The Board welcomes your ideas for new topics.

## Recent Offerings From the SIOP Organizational Frontiers Book Series

**Rich Klimoski**
**Series Editor**

### Organizational Frontiers Series Mission

The Organizational Frontiers Series is sponsored by the Society for Industrial and Organizational Psychology (SIOP). Launched in 1983 to make scientific contributions accessible to the field, the series publishes books addressing emerging theoretical developments, fundamental and translational research, and theory-driven practice in the field of industrial-organizational psychology and related organizational science disciplines including organizational behavior, human resource management, and labor and industrial relations.

Books in this series aim to inform readers of significant advances in research; challenge the research and practice community to develop and adapt new ideas; and promote the use of scientific knowledge in the solution of public policy issues and increased organizational effectiveness.

The series originated in the hope that it would facilitate continuous learning and a spur research curiosity about organizational phenomena on the part of both scientists and practitioners. Toward this end, with the collaboration with Taylor and Francis as our publishers we make available on average two new volumes a year to SIOP members and those interested in the most up to date developments in the science of I-O psychology. Please take a moment to look at the most recent additions to our portfolio.

*Big Data at Work: The Data Science Revolution and Organizational Psychology*
Edited by **Scott Tonidandel, Eden B. King,** and **Jose M. Cortina**

*Facing the Challenges of a Multi-Age Workforce: A Use-Inspired Approach*
Edited by **Lisa Finkelstein, Donald Truxillo, Franco Fraccaroli,** and **Ruth Kanfer**

*Understanding the High Performance Workplace: The Line between Motivation and Abuse*
Edited by **Neal M. Ashkanasy, Rebecca J. Bennett,** and **Mark J. Martinko**

*Autonomous Learning in the Workplace*
Edited by **Jill Ellingson** and **Ray Noe**

For a full listing of books in our Series please go to our Publisher's web site.
**www.routledge.com/series/SIOP**

If you have an idea for a potential future volume for the Frontiers Series, do not hesitate to contact me.

## SIOP's Programming at the 2017 APA Convention

**Mindy Shoss**
**2017 APA Program Chair**

SIOP's APA Committee is pleased to announce a fantastic program for the 2017 APA Convention!

Want to learn more about open science and research replication; the aging workforce and today's young employees; the role of I-O in sustainable development; transitioning military veterans; building datasets from Twitter and Facebook; and APA and SIOP organizational matters? Then, plan to attend this year's APA Convention! We have a wide range of programming (invited addresses, symposiums, panel discussions, conversation hours, skill building sessions, etc.) offered by researchers and practitioners. Click here to see the program schedule for Division 14's hosted sessions. The full program will be available on APA's website in June.

We're also excited to announce that the Personnel Testing Council of Metropolitan Washington will be co-hosting this year's reception! It will be held at the R.F.D. Bar Washington, fron 7:00-9:00pm on Thursday, August 3rd. SIOP APA attendees and local I-Os are welcome! See the flyer here.

Don't miss out! **APA registration is currently open**. The convention takes place Aug. 3-6, 2017 in Washington, DC.

## CONFERENCES AND MEETINGS

Please submit additional entries to **Marianna Horn** at mhorn@aptmetrics.com.

**2017**

July 29-August 3
Joint Statistical Meetings. Baltimore, MD. Contact: American Statistical Association, www.amstat.org (CE credit offered.)

August 3-6
Annual Convention of the American Psychological Association. Washington, DC. Contact: APA, www.apa.org (CE credit offered.)

August 4-8
Annual Meeting of the Academy of Management (AoM). Atlanta, GA. Contact: AoM, http://aom.org/.

August 17
Workshop: Update on Legal Context for Employment Decisions. Georgia Association for Industrial and Organizational Psychology (GAIOP). Atlanta, GA. Contact: GAIOP, www.gaiop.org. (CE credit offered.)

September 20
Workshop: Best Practices in Organization Mentoring. Georgia Association for Industrial and Organizational Psychology (GAIOP). Atlanta, GA. Contact: GAIOP, www.gaiop.org. (CE credit offered.)

October 9-13
Annual Conference of the Human Factors and Ergonomics Society. Austin, TX. Contact: The Human Factors and Ergonomics Society, www.hfes.org. (CE credit offered.)

November 10
Workshop: Technology-Enabled Assessment: Current and Future Directions. Georgia Association for Industrial and Organizational Psychology (GAIOP). Atlanta, GA. Contact: GAIOP, www.gaiop.org. (CE credit offered.)

November 8-11
Annual Conference of the American Evaluation Association. Washington, DC. Contact: AEA, www.eval.org.

**2018**

March 6-9
Annual Conference of the Southeastern Psychological Association. Charleston, SC. Contact: SEPA, www.sepaonline.com. (CE credit offered.)

April 12-16
Annual Convention, National Council on Measurement in Education. New York, NY. Contact: NCME, http://www.ncme.org/ncme/NCME/

April 13-17
Annual Convention, American Educational Research Association. New York,NY. Contact: AERA, www.aera.net.

April 19-21
Annual Conference of the Society for Industrial and Organizational Psychology. Chicago, IL. Contact: SIOP, www.siop.org. (CE credit offered.)

May 6-9
Annual Conference of the Association for Talent Development. San Diego, CA. Contact: ATD, http://www.atdconference.org/

May 24-27
Annual Convention of the Association for Psychological Science. San Francisco, CA. Contact: APS, www.psychologicalscience.org. (CE credit offered.)

August 9-12
Annual Convention of the American Psychological Association. San Francisco, CA. Contact: APA, www.apa.org (CE credit offered.)

August 10-14
Annual Meeting of the Academy of Management (AoM). Chicago, IL. Contact: AoM, http://aom.org/.

Sept 30-Oct 10
Annual Conference of the Human Factors and Ergonomics Society. Philadelphia, PA. Contact: The Human Factors and Ergonomics Society, www.hfes.org. (CE credit offered.)

## IOTAs

**David L. Tomczak**
**George Washington University**

### Honors and Awards

**John P. Campbell** received a Lifetime Achievement Award from PTCMW (Personnel Testing Council of Metropolitan Washington) for his outstanding contribution to I/O psychology at PTCMW's Fall Event in Washington, DC.

**Steve Cohen** published *The Complete Guide to Building and Growing a Talent Development Firm* by the Association for Talent Development (ATD), which covers the steps necessary for creating a successful consulting business.

**Brennan Cox** has been selected as the 2016 Navy Medicine Research Enterprise and Naval Health Research Center Junior Officer of the Year.

**Karen Korabik** received the *Outstanding Scholarship for Established Scholars Award from the Women and Leadership Affinity Group (WLAG) of the International Leadership Association (ILA).*

**Ted Rosen** received a PTCMW Service Award to for his outstanding service to PTCMW at this year's Fall Event.

**Transitions, New Affiliations, Appointments**

**Christopher C. Rosen** has been named associate editor for the *Journal of Management*.

**Bill Schiemann** has been appointed to the Strategic Advisory Board of SmashFly Technologies.
**Lindsay Sears** has been appointed to associate vice president of Research and Analytics at Work Institute.

**Sam Tisdale** has been named director of the Center for Corporate and Professional Development at Furman University.

**Logan Watts** will join The Department of Psychology at Baruch College, City University of New York as a new faculty member in fall 2017.

**Lynda Zugec** has been appointed to the Canadian Psychological Association (CPA) Fellows and Awards Committee.

**Good luck and congratulations!** Keep your colleagues at SIOP up to date. Send items for IOTAs to **Tara Behrend** at behrend@gwu.edu.