

services to combat posttraumatic stress disorder (PTSD), to NASA to prepare for the manned mission to Mars, and to help fight the opioid epidemic that is beginning to plague the workplace. Just a couple of years ago I would have never thought of doing this type of work.

In closing, the focal article has provided a very timely, evidenced-based assessment of I-O psychology that has served its major purpose of generating self-examining discussion and controversy. Hopefully, this comment piece has contributed to this purpose from a historical perspective of someone who has attempted to navigate the journey through the last 50 years of I-O psychology and organizational behavior. This “seasoned” professor is very positive and excited about where both I-O psychology and OB are, and he is anxious to join forces in the journey ahead.

Reference

- Aguinis, H., Ramani, R. S., Campbell, P. K., Bernal-Turnes, P., Drewry, J. M., & Edgeron, B. T. (2017). Most frequently cited sources and authors in industrial-organizational psychology textbooks: Implications for the science-practice divide, scholarly impact, and the future of the field. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 10(4), 507–557.

“This Is Our House!” Why Are I-O Psychologists Losing at the Gender Disparity Game?

Ann Hergatt Huffman
Northern Arizona University

Satoris S. Howes
Oregon State University

Kristine J. Olson
Dixie State University

Aguinis et al. (2017) highlighted the gender disparity in authorship of publications within the field of industrial and organizational (I-O) psychology. We agree with the authors that this is a troubling finding and think that this gender disparity within our field is the most critical implication of the focal article. I-O psychologists are specifically trained to address employment issues, including gender disparities at work. To see such disconcerting findings

Ann Hergatt Huffman, WA Franke College of Business and Department of Psychological Sciences, Northern Arizona University; Satoris S. Howes, College of Business, Oregon State University; Kristine J. Olson, Department of Psychology, Dixie State University.

Correspondence concerning this article should be addressed to Ann Hergatt Huffman, WA Franke College of Business and Department of Psychological Sciences, Northern Arizona University, South San Francisco Street, Flagstaff, AZ 86011. E-mail: ann.huffman@nau.edu

in *our* area of expertise is akin to a sports team losing to a competitor when they have the home court advantage. Namely, we are left feeling deflated and asking ourselves, “What went wrong?”

In the sports arena, home game losses are not exceedingly uncommon, but this was no ordinary loss. This was a blowout! Let’s take a look at the stats. Starting with the textbooks highlighted in the focal article, of the eight authors of those six textbooks, only one is female (Culbertson). This gender disparity cannot be attributed to a faulty assumption that the books were written before women were active within the I-O psychology community, as one textbook was published in 2013 and the remaining textbooks were published in 2016 or later. Further, Aguinis et al.’s most-cited author data provide a grim picture, with women comprising a mere 9% of the most-cited authors and the first woman (Ones) on the list ranked at number 10. Similarly, bleak statistics show that women comprise 15% of first authors and 32% of coauthors.

To add to Aguinis et al.’s (2017) finding and to further understand the I-O psychology gender disparity issue, we conducted a cursory review of the gender makeup of the top I-O psychology graduate programs (as ranked by Gibby, Reeve, Grauer, Mohr, & Zickar, 2002; see Table 1).¹ We then looked at these institutions’ faculty and doctoral student listings on the Society for Industrial and Organizational Psychology’s (SIOP’s) Graduate Training Programs in I-O Psychology and Related Fields Web page to determine the numbers of male and female faculty and doctoral students in the each program. First, the good news: In terms of numbers, it appears there is no gender disparity regarding doctoral students in I-O psychology programs, with women accounting for 57% of all students in PhD programs. The picture changes, however, when we examine faculty positions. According to the 25 schools we reviewed, 41% of current faculty are female, and 76% (19 of 25) of schools had more male than female faculty members (two schools have equal gender representation, and four schools have more women). Interestingly, the schools in our list that are predominantly female have a high ratio of women overall (four to one). These outlier schools with a high proportion of women faculty members skew the data such that when we deleted these four schools, the percent of female faculty across the remaining 19 programs drops from 41% to 33%.

Based on this information and combined with the striking statistics in Aguinis et al.’s (2017) focal article, we believe it is imperative that we return to our own playbook to try to change this pattern of gender bias in publications

¹ Two schools (University of Michigan and Tulane University) were originally listed in Gibby et al.’s (2002) ranking but were eliminated from our examination because they no longer have I-O psychology programs.

Table 1. Gender Make-Up of Sample of 25 I-O Psychology PhD Programs

Faculty (full-time)		Students		I-O psychology program
Male	Female	Male	Female	
4	1	8	12	Bowling Green State University
4	1	20	15	Central Michigan University
1	5	6	12	Colorado State University*
4	8	13	15	Columbia University*
1	4	4	5	DePaul University*
1	1	14	10	Florida International University
4	3	9	20	George Mason University
3	2	14	15	Georgia Institute of Technology
3	2	25	40	Illinois Institute of Technology
6	3	6	14	Michigan State University
3	1	4	9	New York University
4	3	9	13	Pennsylvania State University
1	4	5	5	Purdue University*
3	2	5	9	Rice University
3	2	10	12	Texas A&M University
3	1	7	10	University at Albany SUNY
5	2	20	30	University of Akron
4	0	3	12	University of Calgary
3	2	12	12	University of Connecticut
6	3	6	23	University of Georgia
2	1	5	8	University of Illinois-Urbana Champaign
2	2	10	6	University of Maryland
4	1	10	10	University of Minnesota
5	3	15	18	University of South Florida
4	1	12	1	Wright State University
83	58	252	336	Total

Note. Numbers came from SIOP's Graduate Training Programs in I-O Psychology and Related Fields (<http://my.siop.org/GTP>).

*More female faculty members than male faculty members.

and I-O psychology graduate program faculty composition. An examination of the STEM (science, technology, engineering, and math) gender literature can help provide a framework for why the I-O psychology publication bias has occurred. Thus, we offer three hypotheses that provide a foundation to help explain why women are less represented in STEM tenure-track faculty positions and relatedly the underrepresentation of women in publications in I-O psychology journals and faculty positions in top programs.

The “leaking pipeline model” (Blickenstaff, 2005; Glass & Minnotte, 2010; Xu, 2008) suggests that if there is an adequate supply of women graduating with doctorates in I-O psychology, there is probably a systemic problem with recruiting, retaining, and promoting women in I-O psychology

positions that provide for the support and encouragement to publish in top outlets. Thus, the proverbial “pipe” has a leak between women’s graduation from graduate school and fulfillment of this important job expectation. Evidence for this leak is supported by our earlier analysis that suggests that although women account for 57% of I-O psychology graduate students, women only account for 41% of I-O psychology faculty. The key question is, where is the leak? Is it having opportunities in graduate school to prepare oneself with tools to be a successful researcher? Or is it getting a job that provides the support and encouragement to become a prolific researcher? Finding the possible leak(s) would allow us to fix the leak, and increase the number of I-O publications by female I-O psychologists.

Another possible hypothesis is the “deficit model” (Xu, 2008), which suggests that there are fewer numbers of women in key academic I-O psychology positions that support and encourage high-level research because of formal and informal gender biases that deprive women of leadership opportunities, pay, grant funding, and general support equal to men at an institutional level. The lack of equal representation of women in an I-O psychology department can possibly lead to perceptions of an organizational and professional climate that is “cold” and unfriendly to women (Blackwell, Snyder, & Mavriplis, 2009; Blickenstaff, 2005). Due to this unfriendly and inhospitable climate, women may have higher turnover rates in their academic careers (Xu, 2008). The resulting lack of women in key I-O psychology positions also provides fewer opportunities for women to have female role models and to be mentored by women—an important factor in women’s development in their jobs (Ghosh, 2014).

“Gender bias” and “gender schemas,” or beliefs about gender roles, could also play a role in how women are perceived and treated as I-O psychologists. Cognitively, grouping men and women into categories is generally useful; however, this implicit and explicit categorization based on traditional gender roles (i.e., men are scientists) can lead to sexism, which, in turn, can lead to discrimination. This discrimination could emerge as publication bias. Although our field does offer some protection from biases in the publication process (e.g., blind reviews), the system is not perfect. Biases can occur at the editorial level, as well within publication processes that do not have blind reviews (e.g., book chapters, conference papers, textbooks). Furthermore, gender schemas may affect women’s selection into top I-O psychology positions or for jobs that require research and publication in top journals.

We urge researchers within the I-O psychology community to more fully explore each of these hypotheses offered by the STEM literature. We also urge each member of the I-O psychology community to take a close look at his or her own belief systems and behaviors, and make a conscious decision to take steps to rectify this disparity. Small, individual adjustments can lead to large, systemic changes across our community. Aguinis et al. (2017) were

concerned with students' (future practitioners and researchers) first exposure to I-O psychology through undergraduate textbooks. They stress that how our occupation is publicly presented will affect the identity of its future members. We argue that the gender crisis could also send a message about who we are and what we value as members of the academy. Luckily, undergraduate students are not necessarily keen on the current gender disparity in the field, as textbook citations only list the last and not the first names of authors. However, the gender disparity will become apparent as those undergraduate students further explore their "favorite topics" and graduate schools. Summarily, we need to "retake our house" and show that I-O psychology values all players regardless of sex (or race, or other individual difference)!

References

- Aguinis, H., Ramani, R. S., Campbell, P. K., Bernal-Turnes, P., Drewry, J. M., & Edgerton, B. T. (2017). Most frequently cited sources and authors in industrial-organizational psychology textbooks: Implications for the science-practice divide, scholarly impact, and the future of the field. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 10(4), 507–557.
- Blackwell, L. V., Snyder, L. A., & Mavriplis, C. (2009). Diverse faculty in STEM fields: Attitudes, performance, and fair treatment. *Journal of Diversity and Higher Education*, 2, 195–205.
- Blickenstaff, J. C. (2005). Women and science careers: Leaky pipeline or gender filter? *Gender and Education*, 17, 369–386.
- Glass, C., & Minnotte, K. L. (2010). Recruiting and hiring women in STEM fields. *Journal of Diversity and Higher Education*, 3, 218–229.
- Ghosh, R. (2014). Antecedents of mentoring support: A meta-analysis of individual, relational, and structural or organizational factors. *Journal of Vocational Behavior*, 84(3), 367–384. doi:10.1016/j.jvb.2014.02.009
- Gibby, R. E., Reeve, C. L., Grauer, E., Mohr, D., & Zickar, M. J. (2002). The top I-O psychology doctoral programs of North America. *The Industrial-Organizational Psychologist*, 39(4), 1725.
- Xu, Y. J. (2008). Gender disparity in STEM disciplines: A study of faculty attrition and turnover intentions. *Research in Higher Education*, 49, 607–624.

The Eternal Criterion Problem in the Context of Impact

Edward L. Levine

Emeritus, University of South Florida

The focal article by Aguinis et al. (2017) offers a rich brew of data and explication regarding the devilishly complicated concept of impact of sources (both science-based and practice-based), of industrial and organizational

Edward L. Levine, Emeritus, University of South Florida.

Correspondence concerning this article should be addressed to Edward L. Levine, 6717 Whiteway Drive, Temple Terrace, FL 33617. E-mail: ellevine@usf.edu