Voices for Change in Scholarly Publishing

Susan Spilka, Co-founder, Workplace Equity Project

DIVERSITY IN PEER REVIEW: IMPROVING THE AUTHOR EXPERIENCE
A half-day conference with industry experts on challenges and solutions in peer review

SEPT. 12, 8:45AM - 12:15PM ET

REGISTER FOR FREE AT: LEARN.AJE.COM/PEERREVIEWWEEK2018/

TOPICS INCLUDE:
- Diversity Issues
- Speed in Peer Review
- Open Peer Review
- Technologies and initiatives to improve the Peer Review Process

September 12, 2018
There is a business imperative
Companies in the top quartile for gender diversity on their executive teams were 21% more likely to outperform on profitability, and 27% more likely to have superior value creation...

Nor is it limited to gender
Companies in the top quartile for ethnic/cultural diversity on executive teams were 33% more likely to have industry-leading profitability.

...and there is a penalty for low performance on diversity
Companies in the bottom quartile for both gender and ethnic/cultural diversity were 29% less likely to achieve above-average profitability....

McKinsey, Delivering through Diversity, 2018
Is Science Built on the Shoulders of Women? - Benoit Macaluso; Vincent Larivière; Thomas Sugimoto; Cassidy R. Sugimoto, *Academic Medicine*

“Women were significantly more likely to be associated with experiments, and men were more likely to be associated with all other authorship roles. Gap was constant across contributors’ ages. These disparities have implications for the production of scholarly knowledge, the ethical conduct of science.’

Research Evaluation’s Gender Problem - Stacy Konkiel

“No matter the authorship position of a female researcher, she is less likely to be cited than her male counterparts.”

Gender equality in academic science - Laura Norton, *FEBS Letters*

In Europe, approx. half of PhD graduates are women; in life sciences, women account for >50%. There is a dramatic drop in representation of women at leadership levels -- only 20% of grade A researchers & 15% of directors of institutions are women.

Gender differences in grant peer review: A meta-analysis - Lutz Bornmann, Ruediger Mutz, Hans-Dieter Daniel, *Journal of Infometrics*

“The body of literature we reviewed provides evidence that women in academic careers are disadvantaged compared with men in similar careers. Women faculty earn less, are promoted less frequently to senior academic ranks, and publish less frequently than their male counterparts.” (National Science Foundation, 2003)

“Among grant applicants, men have greater odds of approval than women by about 7%”
Opinion Piece

From the podium to the boardroom: Encouraging gender parity in scholarly publishing

Lauren Kane, Alice Meadows

First published: 09 March 2016  |  https://doi.org/10.1002/leap.1022  |  Cited by: 1

Read the full text

Key points

• Despite their nearly three-fifths industry majority, women trail men in key leadership positions, occupying about one-third of CEO positions, and one-fifth of Board chairs.

• Speaking at industry conferences is key to professional development and to consideration for senior leadership positions.

• An analysis of seven major scholarly publishing conferences held in 2015 showed an average gender split of 63% male to 37% female speakers, with nearly two-thirds of all keynote addresses given by men.

• To correct for this disparity, the authors propose three distinct challenges, to include a potential accreditation for conferences that prioritise diversity.
“That’s an excellent suggestion, Miss Triggs. Perhaps one of the men here would like to make it.”
“Let me interrupt your expertise with my confidence.”
Left to right:
Workplace Equity Project co-founders Susan Spilka, Simone Taylor, and Jeri Wachter, with Research Square’s Jodi Harrell, at the ISMTE North American Conference
How Diversity Makes Us Smarter

Being around people who are different from us makes us more creative, more diligent and harder-working.

By Katherine W. Phillips on October 1, 2014
Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.

Margaret Mead
Just because you are right, does not mean, I am wrong. You just haven't seen life from my side.
<table>
<thead>
<tr>
<th>Demographics</th>
<th>All Respondents</th>
<th>Editors</th>
<th>INDUSTRY ESTIMATES: 63% FEMALE / 35% MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male / Female / Non-binary</td>
<td>21% / 76% / 1%</td>
<td>14% / 82% / 2%</td>
<td>MORE FEMALES</td>
</tr>
<tr>
<td>Straight / Gay / Bisexual</td>
<td>83% / 5% / 5%</td>
<td>86% / 4% / 2%</td>
<td>STRAIGHTER</td>
</tr>
<tr>
<td>20-35 / 36-50 / 51-65 Age Groups</td>
<td>34% / 43% / 20%</td>
<td>50% / 31% / 16%</td>
<td>YOUNGER</td>
</tr>
<tr>
<td>White / Black / Multiple / Asian / Other</td>
<td>81% / 2% / 6% / 8% / 3%</td>
<td>81% / 3% / 6% / 8% / 3%</td>
<td></td>
</tr>
<tr>
<td>PhD / Master’s / Bachelor’s Degrees</td>
<td>12% / 40% / 44%</td>
<td>21% / 34% / 45%</td>
<td>MORE PHDs</td>
</tr>
<tr>
<td>% Caregivers</td>
<td>40%</td>
<td>31%</td>
<td>FEWER KIDS &amp; AGING PARENTS</td>
</tr>
<tr>
<td>FT / PT / Contract / Freelance</td>
<td>90% / 4% / 2% / 2%</td>
<td>85% / 6% / 4% / 3%</td>
<td>MORE GIG ROLES</td>
</tr>
<tr>
<td>&lt;$50K / $50-100K / &gt;$100K</td>
<td>29% / 40% / 23%</td>
<td>41% / 41% / 12%</td>
<td>LOWER PAY</td>
</tr>
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</table>
How easy is it to balance your work life and personal life where you work?

<table>
<thead>
<tr>
<th></th>
<th>All Respondents</th>
<th>Editor</th>
<th>Female</th>
<th>White Male</th>
<th>Black</th>
<th>36-50</th>
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<tbody>
<tr>
<td>EXTREMELY/VERY EASY</td>
<td>35%</td>
<td>8%</td>
<td>35%</td>
<td>39%</td>
<td>19%</td>
<td>31%</td>
</tr>
<tr>
<td>SOMEWHAT EASY</td>
<td>40%</td>
<td>35%</td>
<td>41%</td>
<td>37%</td>
<td>52%</td>
<td>43%</td>
</tr>
<tr>
<td>NOT SO/ NOT AT ALL EASY</td>
<td>22%</td>
<td>52%</td>
<td>23%</td>
<td>23%</td>
<td>28%</td>
<td>26%</td>
</tr>
</tbody>
</table>
In your experience, how supportive do you find the culture in your organization?

<table>
<thead>
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<th>White Male</th>
<th>Black</th>
<th>36-50</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT/ SLIGHTLY SUPPORTIVE</td>
<td>16%</td>
<td>16%</td>
<td>11%</td>
<td>14%</td>
<td>18%</td>
<td>7%</td>
</tr>
<tr>
<td>SOMEWHAT SUPPORTIVE</td>
<td>19%</td>
<td>21%</td>
<td>19%</td>
<td>19%</td>
<td>23%</td>
<td>24%</td>
</tr>
<tr>
<td>MODERATELY/ VERY SUPPORTIVE</td>
<td>62%</td>
<td>59%</td>
<td>62%</td>
<td>63%</td>
<td>52%</td>
<td>53%</td>
</tr>
</tbody>
</table>
“I work from home half-time and in the office half-time, and it makes all the difference in the world.”

“Very hard to juggle as a working mum and especially if the work culture demands managers 'be seen' at work rather than review how they manage their teams even if they are based remotely.”

“I find that the editorial workers are expected to work on their personal time (without pay) in order to make production deadlines. It has been suggested by management, that we should expect to work at least one weekend a month in addition to their 40/hr work week”

“Telecommuting is not considered an option for hourly employees which makes it strenuous as hourly employees are the most overworked and the press is in an incredibly high cost living area ...managers can negotiate remote hours.”

“My company only goes halfway: I can work part time to accommodate my family commitments, but my responsibilities are not pro-rated - I am held accountable to the same workload, standards and output as my FT (male) colleagues. Only my salary is pro-rated!”

“The organization is extremely lean and we are taking on more duties with no additional pay, yet additional managers are being hired. I easily put in 60 hours per week.”

“I easily put in 60 hours per week.”
"I have to travel ...and it is hard because I have a small child. However, my company is supportive and do not force me to travel, but I know it would damage my long term career if I do not so I do it."

"My manager informed me that I would need to go "above and beyond" to move up in the company. I have started bringing work home during the weekend to complete extra tasks that I do not have time to complete during the work week."

"There is an assumption that people without children of their own do not have any caring responsibilities in their lives."

"One of the major reasons I stay with my employer is that I worry that I couldn't find similar flexibility elsewhere."

"I believe work should be a part of your life helping to give it purpose and there should not be a conflict or 'opposing force' that compromises either if at all possible."

"I am able to use sick leave or vacation time pretty much whenever I choose. This provides me with all the flexibility I need to deal with family issues."

"I have not had any issues regarding co-workers or management questioning time off for personal issues such as appliance deliveries or daytime city or state personal interest meetings that I attend."

"There is an assumption that people without children of their own do not have any caring responsibilities in their lives."

"I have not had any issues regarding co-workers or management questioning time off for personal issues such as appliance deliveries or daytime city or state personal interest meetings that I attend."
“Individual managers at my company are more flexible with work/life balance, but I do not think that the company as a whole is.”

“Implementati on and practice are often influenced more by the direct management line than organizational policy.”

“It varies by sub-organization and within that by team, so even if a company has a flexible policy, that can be overridden by a strict manager. Management education is key.”

“Managers talk the talk but don't walk the walk which makes it difficult for people not to think that they will be penalised for not behaving in the same way/working the same hours etc.”

“Attitude of immediate line manager is far more important than culture in the company as a whole. I've been unlucky on that score...”
How well does your experience with your employer align with its stated diversity values?

<table>
<thead>
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<th>White Male</th>
<th>Black</th>
<th>36-50</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NO / SLIGHT ALIGNMENT</strong></td>
<td>11%</td>
<td>13%</td>
<td>11%</td>
<td>9%</td>
<td>21%</td>
<td>7%</td>
</tr>
<tr>
<td><strong>SOME ALIGNMENT</strong></td>
<td>21%</td>
<td>22%</td>
<td>21%</td>
<td>21%</td>
<td>36%</td>
<td>16%</td>
</tr>
<tr>
<td><strong>MODERATE/STRONG ALIGNMENT</strong></td>
<td>63%</td>
<td>58%</td>
<td>63%</td>
<td>65%</td>
<td>42%</td>
<td>75%</td>
</tr>
</tbody>
</table>
### Attitudes: Own Opportunities

<table>
<thead>
<tr>
<th>Measuring Agreement (weighted average, 1-5)</th>
<th>All Respondent</th>
<th>Editor</th>
<th>Female</th>
<th>White Male</th>
<th>Black</th>
<th>36-50</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am being paid fairly for the work that I do</td>
<td><strong>3.07</strong></td>
<td><strong>2.92</strong></td>
<td><strong>3.02</strong></td>
<td><strong>3.12</strong></td>
<td><strong>2.52</strong></td>
<td><strong>3.23</strong></td>
</tr>
<tr>
<td>I have fair opportunities to be promoted</td>
<td><strong>2.74</strong></td>
<td><strong>2.80</strong></td>
<td><strong>2.71</strong></td>
<td><strong>2.75</strong></td>
<td><strong>2.57</strong></td>
<td><strong>2.74</strong></td>
</tr>
<tr>
<td>Measuring Agreement (weighted average, 1-5)</td>
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<tr>
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</tr>
<tr>
<td>I believe that people of all genders have the same opportunities to be promoted in the industry</td>
<td>2.98</td>
<td>2.99</td>
<td>2.86</td>
<td>2.97</td>
<td>2.81</td>
<td>2.98</td>
</tr>
<tr>
<td>I believe that people of all ethnicities have the same opportunities to be promoted in the industry</td>
<td>2.87</td>
<td>3.01</td>
<td>2.80</td>
<td>2.88</td>
<td>2.33</td>
<td>2.89</td>
</tr>
<tr>
<td>I believe that people of all ages have the same opportunities to be promoted in the industry</td>
<td>2.70</td>
<td>2.79</td>
<td>2.63</td>
<td>2.65</td>
<td>2.33</td>
<td>2.70</td>
</tr>
</tbody>
</table>
### Attitudes: Others’ Opportunities

<table>
<thead>
<tr>
<th>Measuring Agreement (weighted average, 1-5)</th>
<th>All Respondent</th>
<th>Editor</th>
<th>Female</th>
<th>White Male</th>
<th>Black</th>
<th>36-50</th>
</tr>
</thead>
<tbody>
<tr>
<td>I believe that people of all religious beliefs have the same opportunities to be promoted in the industry</td>
<td><strong>3.42</strong></td>
<td>3.59</td>
<td>3.49</td>
<td>3.50</td>
<td>3.25</td>
<td>3.42</td>
</tr>
<tr>
<td>I believe that people of all sexual orientations have the same opportunities to be promoted in the industry</td>
<td><strong>3.50</strong></td>
<td>3.56</td>
<td>3.52</td>
<td>3.56</td>
<td>2.90</td>
<td>3.50</td>
</tr>
</tbody>
</table>
“I don't think in the industry or my company there is a specific obvious gender or diversity bias, but there are implicit barriers that lead to glass ceilings (e.g. woman's career interruptions due to pregnancy and child education breaks clearly impact careers and pay). I am not a woman or minority though, so this is how it looks from the white middle class male perspective.”

“What I'm neither agreeing or disagreeing above I'm saying that I don't know.”

“We talk a lot about diversity but do very little. And however much we value diversity of background (as we should), we very little prize diversity of opinion. We tend to reward and support the people we agree with and ignore or even openly ostracize the people we don't.”

“Hard to tell - we're not very diverse so it's difficult to know whether we're offering the same opportunities to people who are different.”
Results from the survey indicate that outcomes diverge for colleagues based on:

- Age
- Gender
- Ethnicity
- Geographic location
Advancing equity: driving cultural change

- Curbing unconscious bias
- Enabling sponsorship and advocacy
- Facilitating networks
- Changing exclusionary practices
What can we do now?
Become a Change Agent

Diverse teams are more successful

Two WE Survey takeaways:

- Blindness to challenges of others
- In-line managers have tremendous impact workplace experience

Awareness can help to curb bias

Success will come when we change minds AND policies
<table>
<thead>
<tr>
<th>Cognitive bias</th>
<th>Relevance to peer review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchoring bias</td>
<td>If the reviewer likes the lab where the principal investigator (PI) trained, for example, this will affect the processing of additional information in the proposal.</td>
</tr>
<tr>
<td>Backfire effect</td>
<td>A reviewer might hold to an initial opinion or score despite compelling information to the contrary.</td>
</tr>
<tr>
<td>Blind-spot bias</td>
<td>A reviewer is sincere in their belief that they are objective and without bias.</td>
</tr>
<tr>
<td>Confirmation bias</td>
<td>If a reviewer rates a proposal highly, weaknesses might be overlooked.</td>
</tr>
<tr>
<td>Ecological fallacy</td>
<td>Because fewer women lead large center grants, making the assumption that an individual woman is less able to lead a large program.</td>
</tr>
<tr>
<td>Halo effect</td>
<td>May result in more ‘benefit of the doubt’ for a PI at a prestigious institution and the need for a higher level of proof of competence for a PI at a lower-ranked school.</td>
</tr>
<tr>
<td>In group/out group bias</td>
<td>The alignment of discipline, social networks, previous interactions, age, gender, or race between reviewer and R01 applicant or author could influence the review of the grant or manuscript positively or negatively.</td>
</tr>
<tr>
<td>Shifting standards of reference</td>
<td>It is possible that grants or manuscripts will be perceived as being less well written if the reviewer knows the PI is a particular demographic.</td>
</tr>
</tbody>
</table>
Challenging Exclusionary Practices

A study assessed the effect of manipulating author gender of scientific papers by randomly assigning students to read the same manuscript written by an author with either the first name ‘John’ or ‘Joan’.

Participants consistently gave higher ratings to the manuscripts written by ‘John’ than to the same paper written by ‘Joan’.

**Threats to objectivity in peer review: the case of gender**
Anna Kaatz, Belinda Gutierrez, and Molly Carnes, *Trends in Pharmacological Sciences*

“Adopting the practice of identifying contributorship rather than authorship in scientific journals will allow for greater transparency, accountability, and equitable allocation of resources.”

**Is Science Built on the Shoulders of Women?**
Benoit Macaluso; Vincent Larivièrè; Thomas Sugimoto; Cassidy R. Sugimoto, *Academic Medicine*
“We’re sending our daughters into a workplace designed for our dads”

- Melinda Gates

"Written policies alone do not help unless there is a culture of support lead from the top."
What’s Ahead

**WE Survey Executive Summary**— officially released next week!

**On the Road:**
- Also this week: ALPSP Annual Conference: Simone Taylor – panelist, *Workplace Equity: The case for cultural diversity in a global ecosystem*

**Deeper dive into survey** data using multivariate analysis - Ongoing

**Compare data from WE Survey** to the industry-wide coalition employer survey results (about to launch) – 2019

**WE webinars and educational events**
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PRESENTED BY
AMERICAN JOURNAL EXPERTS

FEATURING SPEAKERS FROM
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WILEY

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