



NSERC CWSE NETWORK ADVANCEMENT WORKSHOP SURVEY RESULTS

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Objective

The objective of this analysis was to gauge the general feedback from participants of the NSERC CWSE Network Advancement Workshops over the last 10 years.

Methodology

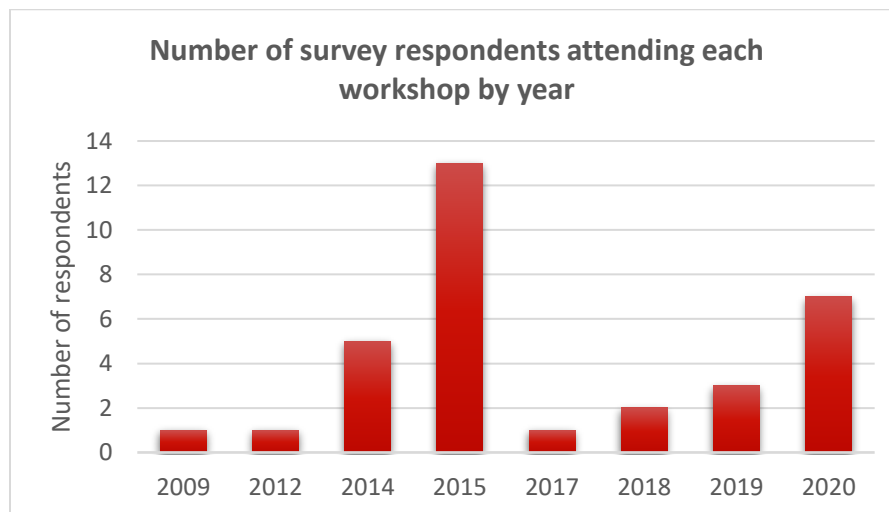
Ethics approval was obtained from Mount Saint Vincent University's Research Ethics Board (UREB #2020-109). The survey was created using SimpleSurvey software, and the link to the survey was sent by email to individuals who had attended at least one NSERC CWSE Advancement Workshop in the past. Two reminder emails were sent periodically, and the survey was closed after about a month.

Summary

This report includes a summary of qualitative and quantitative data from the Advancement Workshops Survey, run by NSERC Chairs for Women in Science in Engineering. This report displays demographics of survey respondents, the effect the workshops had on their decisions to apply for tenure or promotion, the obstacles they faced with tenure/promotion applications, and the respondents' feedback on the workshops.

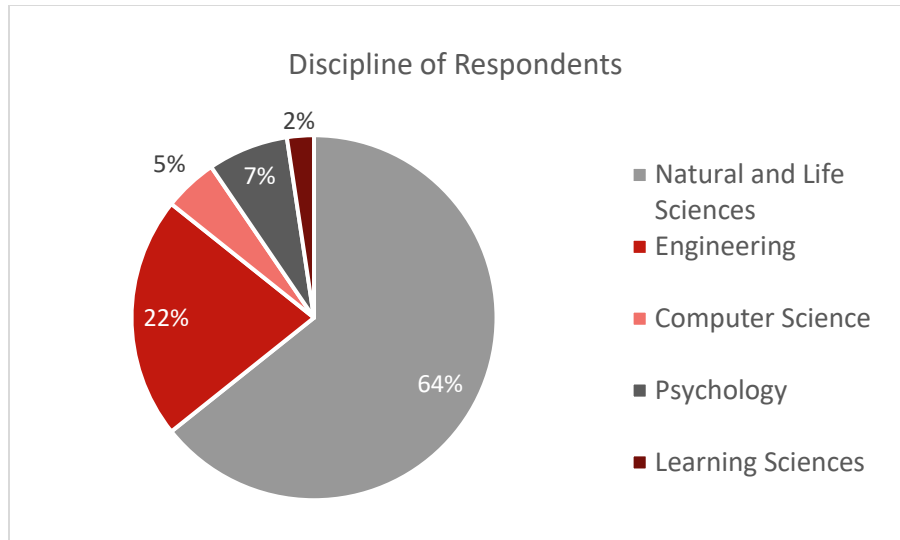
Data Analysis

The respondents attended workshops from 2009-2020, breakdown shown below. Note that no respondents attended workshops in 2010, 2011, 2013, or 2016.

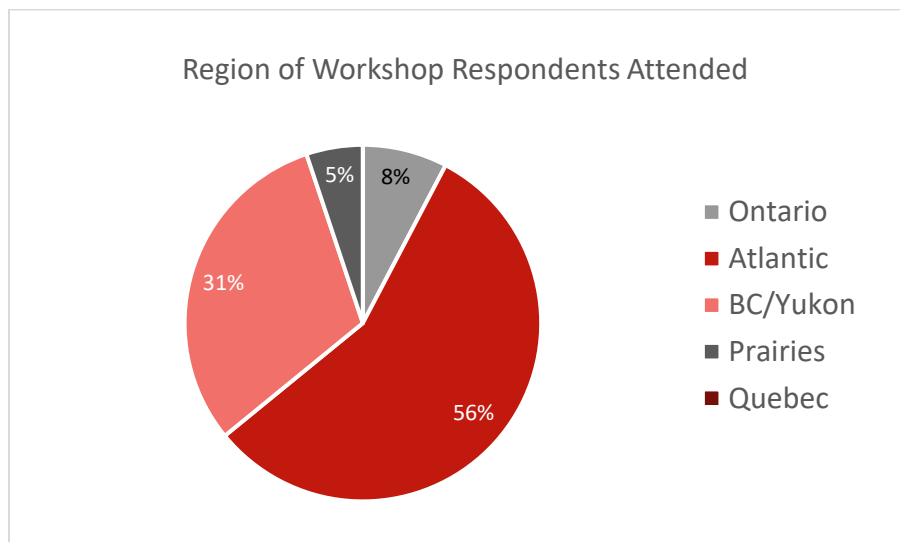


Participant Demographics

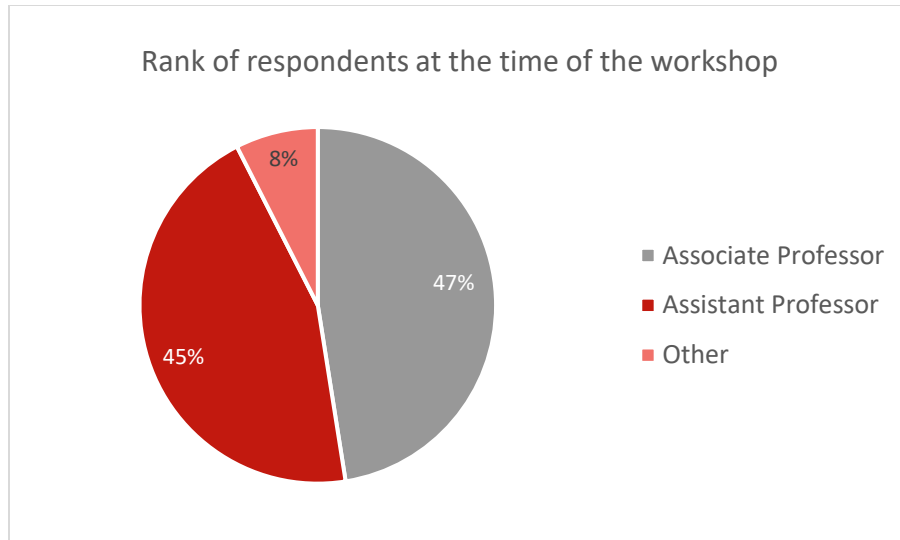
Over this period of time (2009-2020), an estimated 109 people attended Advancement Workshops. Overall, 40 people who attended the Advancement workshops completed the survey. Most respondents were in the natural/life sciences, or engineering:



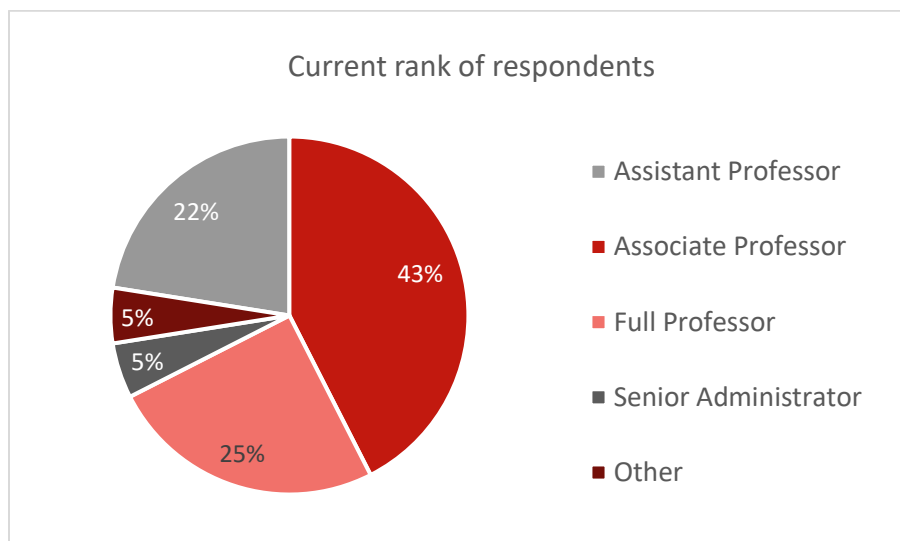
Most of the respondents attended a workshop in the Atlantic Provinces or in BC (listed in chart as BC/Yukon region, but no respondents reported attendance in Yukon). Note that no respondents had attended a workshop in Quebec.



Most respondents, at the time of the workshop, were either an Associate Professor or an Assistant Professor. 10% chose "other" and wrote in the following: postdoctoral fellow, PhD student, Assistant the first time and Associate the second, and Assistant Professor (teaching stream).



The average number of years each respondent was at this rank ranged from less than a year to 28 years, with an average of about 5.5 years.



Most respondents, at the time of completing the survey, were still either assistant or associate professors, but some had gone on to full professor or senior administrator positions. The two respondents who chose other wrote in: “asso prof but also Acting Dean right now”, and “Associate Professor, Teaching Stream”.

Reasons for attending the workshops

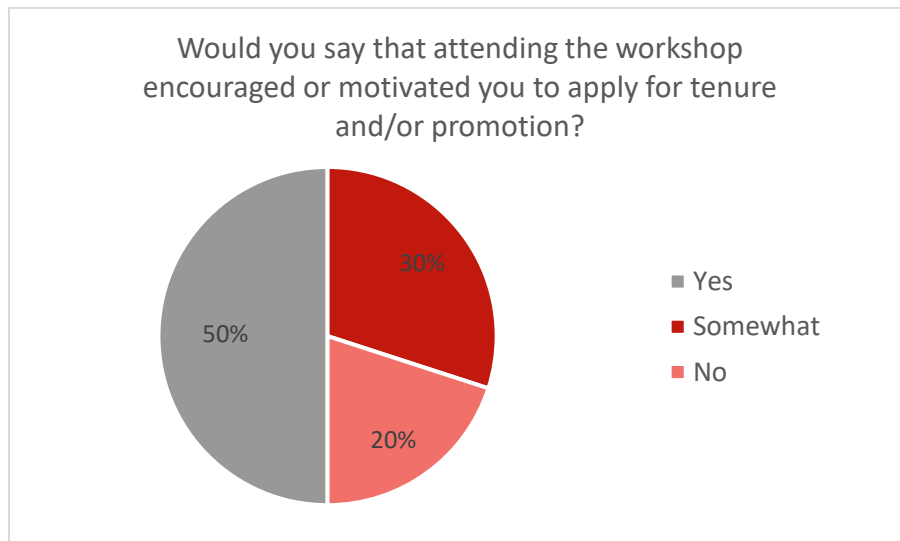
The main reasons participants had for attending the workshop included: gaining insight on the process of applying for tenure or promotion, getting tips on how to prepare for this, bolstering their tenure or promotion applications, etc. Some folks attended to meet other female STEM faculty, and some attended to gain insight on work-life balance.

“Learning best practices on how to get ready for my tenure application. I hoped to gain insight on what other profs do to achieve tenure”

“Hearing from and learning from other women in science on their best tips/tricks/magic wands on how to navigate the academic system and how to achieve the success they had achieved - it was perfect!”

“Networking, meeting other women in stem in Canada, just wanted to hear other people's stories and get a different perspective from my own institution.”

Workshop effects on motivation to apply for tenure or promotion



Half of participants said that the workshop motivated them to apply for tenure or promotion, and 30% said the workshop motivated them somewhat. **Most participants felt that the workshop increased their confidence in their ability to apply for tenure or promotion.**

Of those who said “yes”, a few felt the workshop was a key part of what gave them the motivation to apply:

“This workshop was instrumental in giving me the confidence and motivation to apply for promotion. During the workshop I wrote it as a goal, and I followed through!”

“The workshop I attended has motivated me to apply for promotion - when I have time, I will. It also has helped me to advocate for myself so that I have more time to pursue my own professional goals. It has significantly altered my path.”

“After the workshop, I started my application for promotion (I was eligible in April 2021), but then the pandemic started and I had no time to finish my application.”

“Not only did I apply for promotion to full professor, but a couple of years later I was appointed interim dean of science, and this past year I applied for and received a 6

year appointment as Dean. The workshop was one of the major events in my life that helped me gain the confidence to step forward.”

For those who said “somewhat”, some were already planning to apply but expressed that the workshop made them feel more prepared to do so, and some were not yet at the stage in their career where they would apply, but said the workshop still gave them helpful information:

“I was planning on applying for promotion anyway. The workshop helped me frame some of the work I do better.”

“Still too early in my career to think about it, but made the process seem less daunting.”

Of those who said no, some had already submitted their applications or said they would have applied whether they attended the workshop or not.

“I would have applied for tenure regardless of attending the workshop.”

“I was intending to apply anyways. The workshop enhanced my courage in challenging my department head and the system.”

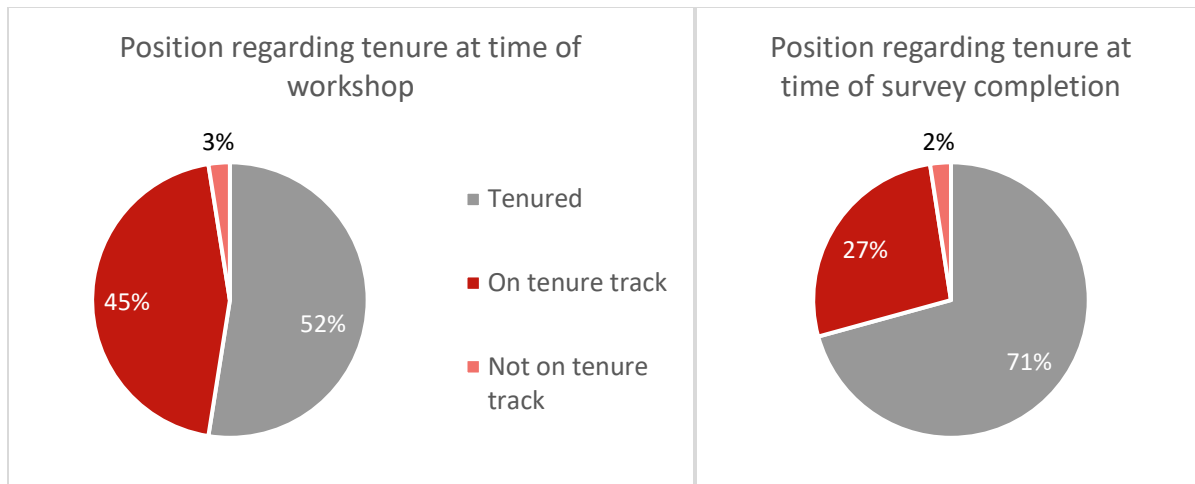
Some respondents said that the workshop made them realize they were not ready to apply.

“I realized at the workshop that I had spent too much time on committees, and I don't think I'm competitive at this point”

Overall, respondents expressed that the workshop helped them determine whether they were ready to apply, and gave them more confidence for when they did decide to apply. For some, the workshop was key to their motivation for applying for tenure or promotion.

Applying for tenure/promotion after the workshops

At the time of the workshop, 52% of respondents were tenured, 45% were not tenured but on tenure track, and 1 respondent was not tenured and not on tenure track. At the time of survey completion, most participants (71%) were tenured, 27% were on the tenure track, and 1 participant was not tenured or on tenure track.

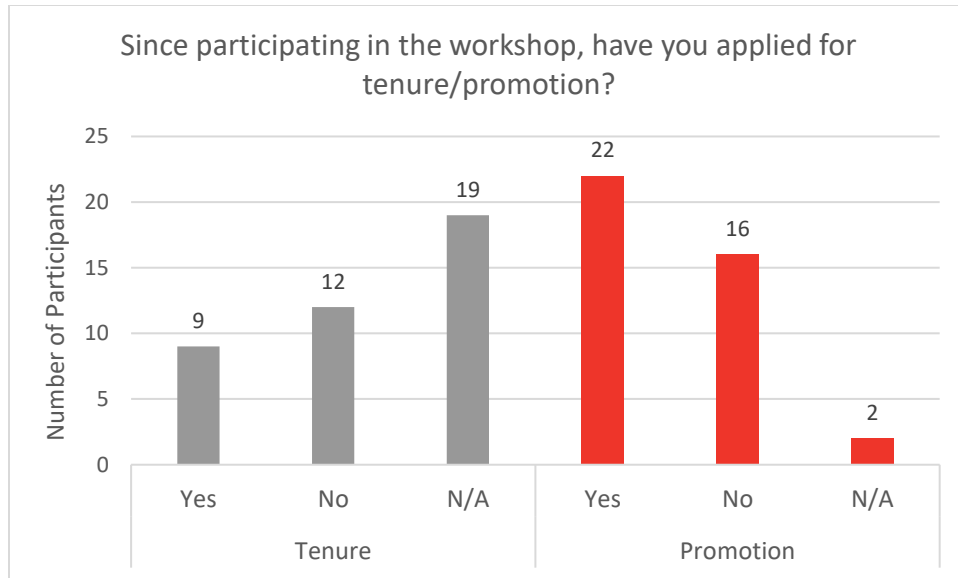


Comparing two timepoints (time of the workshop and time of survey completion), fewer respondents held the rank of assistant and associate professor after the workshop. Several respondents became full professors, senior administrators, and achieved tenure after the workshop. Most participants (62.5%) achieved a higher rank after the workshop.

Rank at time of workshop	Rank at time of survey	Number of respondents
PhD or Postdoc	Assistant	2
Assistant	Assistant	7
Assistant	Associate	10
Assistant	Full Prof	1
Assistant	Senior Admin	1
Associate	Associate	8
Associate	Full Prof	9
Associate	Senior Admin	2

Table 1. Number of respondents reporting at each rank at two time points: when they attended the workshop, and when they completed the survey. Green rows show who has advanced in rank.

At the time they responded to the survey, the below graph shows how many, out of 40 respondents, said they applied for tenure or promotion after the workshop.

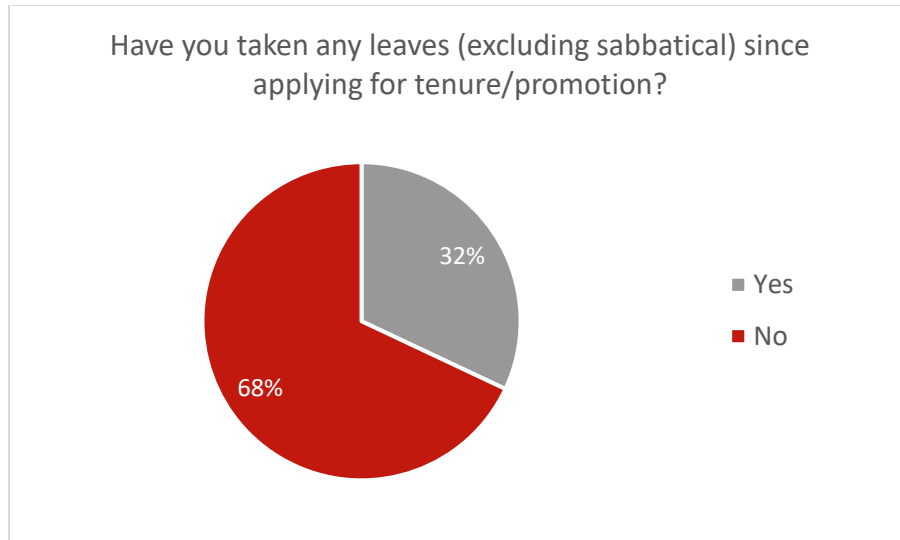


For about half of respondents, applying for tenure was not applicable to their situation because they were already tenured. Note that one person who responded “no” to applying for tenure was tenured as well. Of those who did not have tenure, 22.5% said they applied for tenure after the workshop. In contrast, more than half of participants applied for promotion since the time of the workshop. Most of those who said they did not apply for promotion since the workshop were on the tenure track, but some were tenured as well.

The average time between the workshop and applying for tenure was 2.22 years. The average time between the workshop and applying for promotion was 1.9 years. Three respondents said that they had already applied for tenure/promotion before attending the workshop. Note also that a few participants were at universities where tenure and promotion are applied for at the same time. Of those who had applied for tenure or promotion, all except one had not moved institutions since then. The person who had said the following:

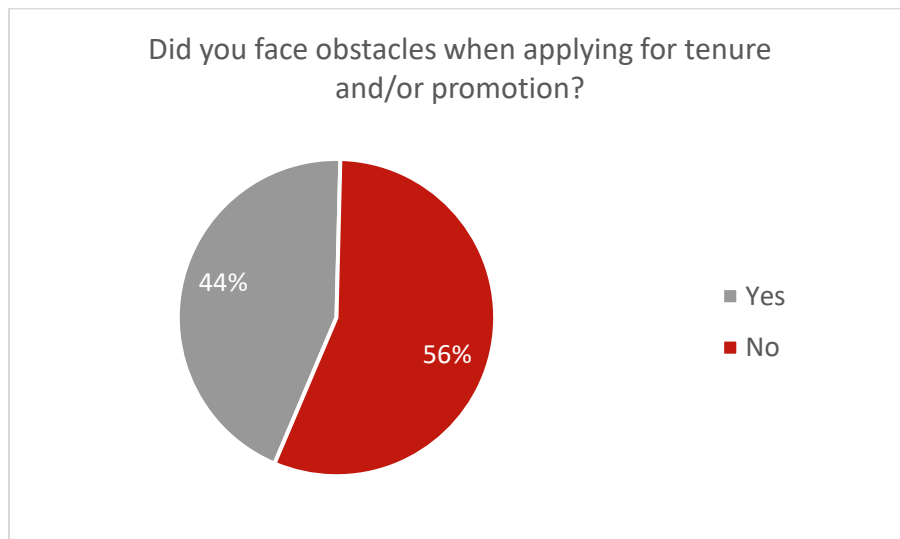
“Although highly unusual, I moved departments within my university as an Associate Professor. I was in year 3 of a 5-year exit strategy as my work environment was unhealthy and the work load unsustainable.”

Of those who had applied for tenure or promotion since the workshop, 32% (n=8) had taken a leave other than sabbatical. The leave taken ranged from 2 months to 2 years, with an average of about one year (0.94 years).



Obstacles in applying for Tenure/Promotion

Of the respondents who applied for tenure or promotion (n = 25), 44% said they encountered obstacles when applying.



When asked to explain their obstacles, respondents shared a variety of experiences. Some cited funding, parental leave, teaching load, and gender discrimination as obstacles:

“Low funding did not allow me to attract a PhD student”

“I had taken two parental leaves and wasn't sure how that was going to look on my application. I had limited publications as a result of my leaves of absence and was worried about those.”

“Gender discrimination, especially early in my career; unrealistic teaching loads (3 courses per year + 7 courses in my first 5 years); lack of research space for first 5

years; limited funding opportunities (including systematic bias from NSERC); lack of mentoring in a department where I was the only woman.”

Some others felt a general lack of support, received negative criticism, or were directly discouraged by others.

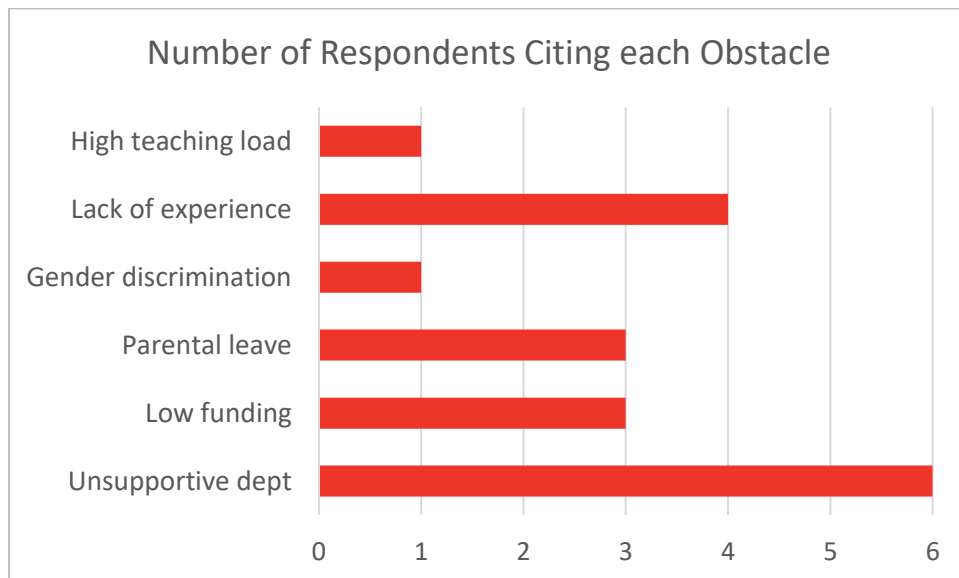
“I had someone tell me that I wasn't doing enough of my own research and too much collaboration with HQP. I also went on maternity leave for 1 year.”

“My perception was of subtle discouragement.”

“Some of my colleagues in my department were not supportive, and the initial decision by the University Review Committee was negative. However, after I presented my case the decision was unanimous in favour of my promotion.”

“Others discouraged me from applying for tenure yet so I will apply next year.”

This figure shows a summary of the obstacles cited and how many respondents cited each obstacle:



Overall, about half of respondents were tenured at the time of the workshop, but the majority of respondents applied for tenure or promotion after the workshop, and about half of those who applied encountered obstacles.

Positive Feedback

Most respondents wrote very positively about the workshop. **The main key themes they mentioned were the usefulness of the information, the boost in confidence and empowerment, and the importance of the opportunity to network with other women STEM academics.**

Useful information:

"I enjoyed the psych speakers and benefited from the speaker that spoke about food and taking care of yourself."

"Thank you for running these workshops. It was very helpful to me. I recall a short "film" was shown. It contrasted a junior female academic with a more senior female academic, both in the same situation: Their chair was trying to sweet-talk them into taking on a large administrative role (graduate student co-ordinator or something similar). Their different reactions and conversation styles were eye-opening. I plan to attend future workshops."

"It was to (sic) only place I got professional advice on how to advance my career."

Confidence and empowerment:

"During the workshop I realized that my former department had been gas-lighting me. Their negative impacts were not my imagination - their treatment of me was abhorrent and not my fault. The workshop gave me the tools and confidence to put together a strong package for promotion to full professor and to overcome my negative experiences with NSERC funding programs."

"It was super helpful to hear about others' experiences when applying for promotion, it gave me confidence and the feeling that I was not alone in my fears."

Networking opportunities:

"The informal portion of these workshops is also as helpful as the formal portion. It was great to workshop with people during the day and continue the conversation at dinner in the evening."

"The workshop was a success, I liked that I could see professors just like myself; in engineering I don't usually get to see that many female professors around!"

Overall, feedback was extremely positive.

Negative Feedback

Only 3 respondents had negative comments. One respondent (who attended a Halifax workshop, unspecified year, associate professor at the time of the workshop), in answering the question about whether the workshop motivated you to apply for tenure/promotion, said no and added "quite the opposite". In the comment boxes at the end, the respondent added this:

"I felt, and heard similar from others, that many of the foundational assumptions about the workshop were that all the participants would be, essentially, "thinking like white men". For example, there seemed to be expectations that all participants would rather leave their children in the care of a nanny and do more research and get more promotions and make more money and there wasn't space for other world-views."

Another respondent (who attended a BC workshop, unspecified year) said the workshop seemed specific to a certain university's tenure process:

"Workshop was more relevant towards faculty from that particular university I believe. It seems that each university has different tenure process."

Another respondent (attended in Halifax 2020) found there wasn't enough space in the survey box for her comment, so wrote an email to WISEatlantic afterward to explain. In the survey, the respondent said this:

"I found the workshop didn't tackle work-life balance right for me."

Recommendations

The most common recommendation was to keep doing the workshops and to hold them more often.

"Just please keep doing them! I could even do with a refresh myself!"

"These workshops need to occur more than once every 10 years. There was a lot of information and I likely didn't take it all in. Shorter more frequent workshops would be helpful."

"Keep them going! I learned more than I anticipated I would, and I even began a research collaboration as a result of the workshop. Even a virtual workshop this year could be useful."

Another common suggestion was to widen the scope, or include information more specific to certain groups:

"I recommend to advertise more to engineering, most of the people was in applied sciences."

*"Make them widely available (and not just to early-career academics).
Encouragement is always valuable."*

"Maybe some of the unique barriers for women BIPOC"

"I think having these workshops specific to each career stage is important. There are certainly different factors that influence early and mid career women in academia. I found the workshop was just what I needed when I needed it!"

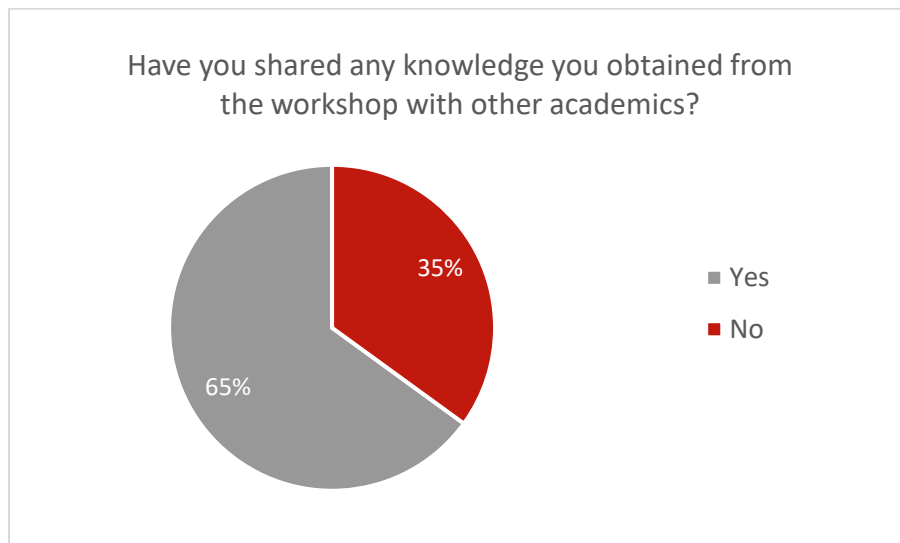
There were also a couple of more detailed suggestions:

"I think it was great as it was, so I wouldn't change the workshop I went to at all really. But I have heard that leadership/facilitation workshops are really helpful (e.g., such as those offered by <https://www.barefoot-thinking.co.uk/> or <https://www.dovetailconsulting.com/about/>) for both post docs and professors."

“Advertising to women, especially diverse women, as early as possible in their academic career (graduate, postdoc, early assistant prof positions) would be most helpful. As it is almost impossible to get back on the NSERC funding stream once off (given the limited funds to collect sufficient data), and given that NSERC does not give women or anyone else any opportunity to apply for short term funding so that they can resume research after dealing with children, aging parents, teaching and committee responsibilities, it is critical for women to be supported early on to avoid career paths that take them out of competitive funding streams.”

Sharing the workshop knowledge with others

Most participants (65%) went on to share knowledge they gained from the workshop with other academics afterward:



Of the folks who said yes, all who remembered the number they shared with answered between 1 and 10, with an average of about 4 other academics. Participants also had this to say about sharing with colleagues:

“I have shared my experience as a woman reluctant to put myself forward for promotion, and I have encouraged colleagues to apply, sharing some of the reasons that I learned in the workshop.”

“5 women, info on how to valorize our portfolio”

“I co-organized following year NSERC promotion workshop - 50 participants”

“2-3, informally (i cannot remember specific information from the workshop, more general) especially to encourage women to go up.”

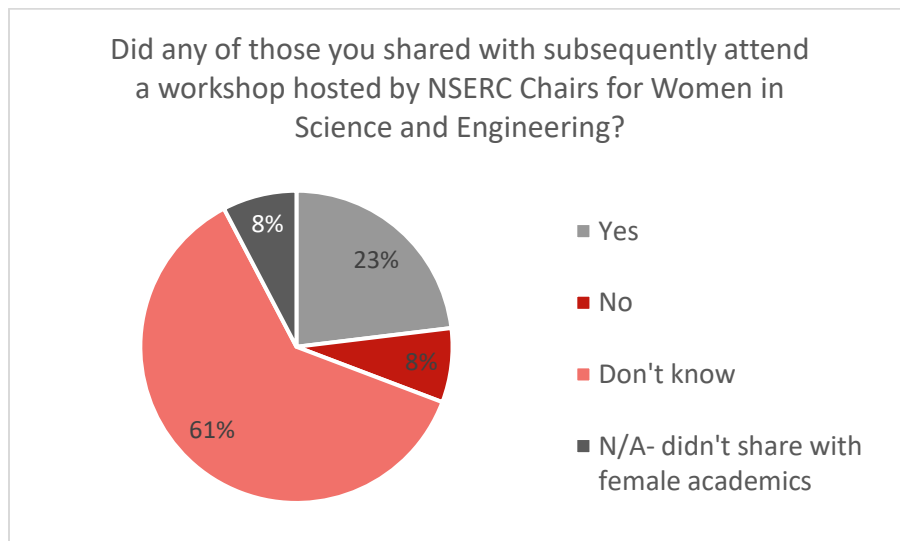
“4 - how to advocate for yourself when you are being asked to do some service work”

“I know I told people that I travelled to Vancouver from Toronto for this workshop”

“At least 5 other women as they prepared for tenure and promotion, handouts and general information”

“5-6 young female faculty in the sciences at my university; encouragement to consider themselves good enough to apply for promotions”

Most of these women were encouraging their female colleagues, and giving advice on their tenure/promotion applications. Some respondents even went on to organize their own well-attended workshops. One respondent travelled from Toronto to Vancouver for the workshop. Participants seemed to find the workshop valuable and shared what they had learned with other women. When asked if those they shared with went on to attend a workshop, most respondents didn't know, but some (23%) said yes:



Summary

In sum, the overwhelming majority of survey respondents found these workshops helpful, and many felt the workshop motivated and better prepared them to apply for tenure or promotion. Respondents also found the networking and informal aspects of the workshops very important, as seeing other women working in STEM was inspiring, and hearing their stories was helpful. Respondents suggested keeping the workshops going on a more frequent basis, more advertisement, expanding the scope of the workshops, and adding more information relevant to specific groups (such as BIPOC women).

Acknowledgements

We thank all participants for taking the time to provide feedback. We especially thank Sally Marchand for administering the survey ethics and sending the survey link to participants, and Drew Burchell for compiling the survey online and analysing the data.

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