



Canadian Natural Sciences & Engineering (NSE)
Faculty Workplace Climate Survey Results

Dr. Annemieke Farenhorst

Dr. Tracey Peter

Dr. Jennifer Dengate

Danielle Saj

Mahalia Lepage



This report was prepared as part of the NSERC Chair for Women in Science and Engineering program in the Prairie region.

Thank you to all who participated in this research at the University of Manitoba, University of Saskatchewan, University of Calgary, University of Regina, and University of Alberta.

Dr. Annemieke Farenhorst

Dr. Tracey Peter

Dr. Jennifer Dengate

Danielle Saj

Mahalia Lepage

An initiative by the NSERC Chair for Women in Science & Engineering – Prairies (2017-18)



Key Findings

- The majority of NSE faculty are satisfied with their careers; feel valued for their research, teaching, and service; and are generally optimistic about the climate of their home departments/units (p. 4)
 - However, most faculty do not have enough time to complete all of their work; and over half of both men and women are unsatisfied with their work-life balance (pp. 6-8)
- Colleagues and students are consistently considered positive aspects of academic workplaces (pp. 5-6)
- NSE departments remain mostly white, heterosexual, male-dominated spaces (p. 4)
- Female faculty are significantly more likely than their male colleagues to have no children (p.5). However, for faculty with children, women are more likely than men to take any parental leave for birth/adoption. Less than one-half of all faculty who took parental leave felt supported by their department/unit while on leave (p. 8).
- Female faculty continue to have significantly more negative workplace experiences; and there is evidence of a gendered division of academic service labour, with women carrying a heavier load than men even at the earliest stages of their career (pp. 6-8)
- In particular, substantial proportions of faculty report stressful interactions with students disclosing a variety of serious personal problems; and many feel unequipped to handle these encounters (p. 10)
- Even so, few are planning on leaving their universities in the next 2 years and even less are considering employment outside of academia (p. 10)
- Faculty strongly recommend increased financial and ideological support for each of the traditional core areas of academic excellence: research, teaching, and service.
 - This rebalancing would also, ideally, include streamlining the administration, giving power back to departments/units, hiring more full-time faculty members and support staff, and generally retreating from a governance model rooted in business principles (pp. 10-11)

■ Sample Description

A total of 421 Canadian NSE faculty from 5 universities responded to the Faculty Workplace Climate Survey (Table 1). The majority of respondents are tenured, with nearly 50% having already advanced to the rank of full professor (Figure 1).

Table 1: Participating Universities

University	Percent
University of Alberta	23.6%
University of Calgary	19.3%
University of Manitoba	32.8%
University of Regina	5.5%
University of Saskatchewan	18.8%
Total	100%

On average, faculty report having had tenure for 12 years (standard deviation, $sd = 9$ years). Just under 20% also hold an administrative position, the most common being department head/chair (28%) and associate department head/chair¹ (36%).

The majority of the respondents work in science-based faculties (55%), followed by engineering/related (21%), agriculture/related (19%), and other fields (6%), such as environmental sciences. Not surprisingly, the vast majority of faculty report NSERC-related research and teaching activities (76%). The remaining 24% work in CIHR (12%), SSHRC (9.3%), and other (2.8%) areas².

The gender, ethnicity, and age characteristics of the sample are similar to population data for full-time Canadian university teachers (CAUT 2018; Statistics Canada 2017). In addition, the gender and age distribution of the sample is also similar to some

NSE faculties, specifically (CAUT 2014). Nearly two-thirds of the sample are male (65%), 86% report being white/Caucasian, and 94% identify as heterosexual. The average age of participants is 50 years old ($sd = 9$ years, $Md = 48$ years) (Figure 2).

Figure 1: Rank

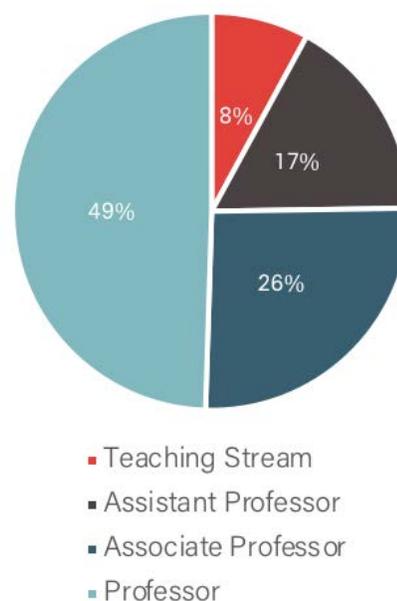
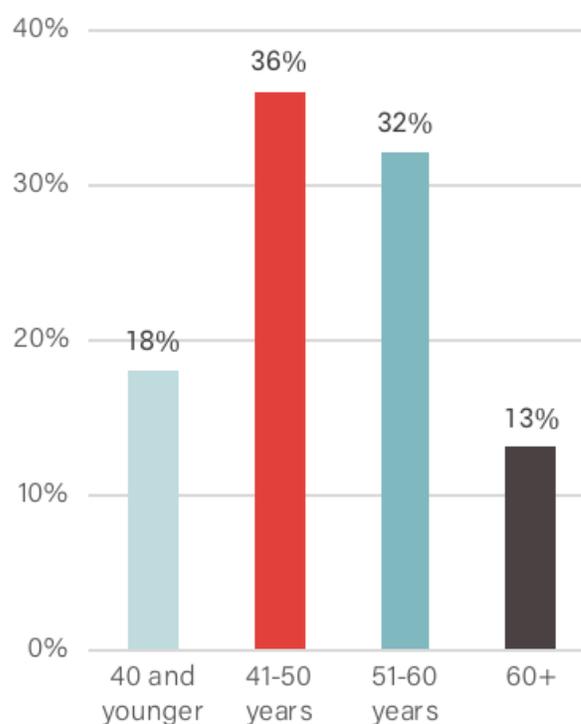


Figure 2: Respondant Age



¹No significant gender differences were found for holding any type of administrative position

²Total exceeds 100% due to rounding.

The majority are married or in a common-law relationship (79%) and have children (72%). Less than a third have children under the age of 13 (29%). Female faculty are significantly less likely to be in a married/common-law relationship than their male colleagues (71% vs. 84%, respectively); and they are also more likely to be childless (43% vs. 20% for males), consistent with population data for Canadian academics (The Expert Panel on Women in University Research 2012).

■ Workplace Climate Results

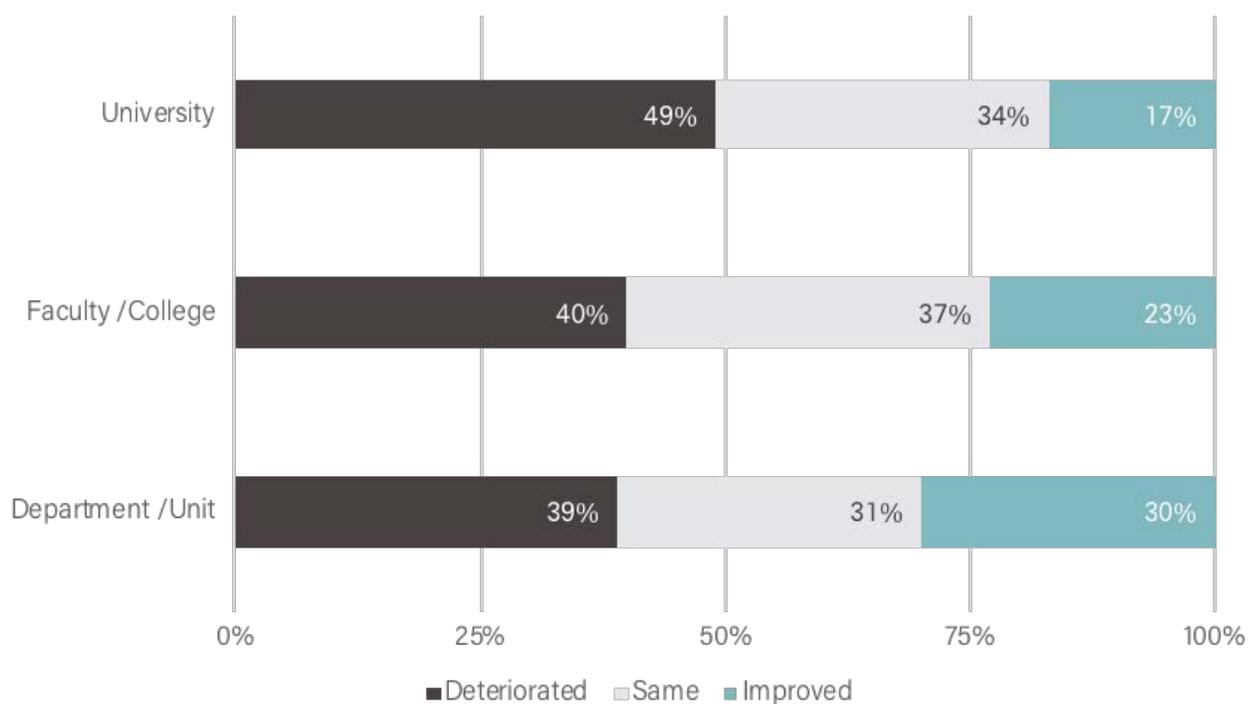
Overview: analyses suggest that Canadian NSE faculty are generally optimistic about the climate of their own departments/units relative to the overall university climate. Faculty are also generally satisfied with their own career progress. Nevertheless, the data indicate that female faculty members have more negative day-to-day workplace experiences (i.e., harassment and discrimination), and have higher levels of workplace stress.

Department/Unit, Faculty/College and University Climate

As illustrated in Figure 3, the majority of faculty (61%) indicate that the general climate of their department/unit has either stayed the same (31%) or improved (30%), yet nearly 2 in 5 (39%) feel their immediate work environment has deteriorated. Respondents were less favourable toward their Faculty/College or their University as a whole. In particular, almost half (49%) of faculty reported that the general climate at their university has deteriorated.

Most faculty feel they have access to a leadership position in both their own department/unit (71%) and within their larger faculty/college (61%); however, they were less likely to agree that the process for recruiting and appointing leaders within their faculty/college is transparent (42%). Even though less than one quarter (24%) of respondents agreed that there is sufficient gender diversity among faculty in their department/unit, most agreed that women were well represented in leadership posi-

Figure 3: Perceptions of Work Climate



tions in their faculty/college (60%) and at their university (62%). The reverse was found for racialized faculty. Specifically, only 46% of participants agreed that there is sufficient racial/ethnic diversity among faculty within their department/unit, but even less agreed that racialized minorities were well represented in leadership positions in their faculty/college (27%) and at their university (24%).

Perceived Respect & Value

Faculty were asked a series of questions on perceived levels of respect, which are presented in Figure 4. The vast majority of respondents feel respected at their universities. Not surprisingly, perceptions of respect are higher in individual departments/units from colleagues (50% strongly agree), the head/chair (61% strongly agree), undergraduate students (49% strongly agree), and graduate students (66% strongly agree). Faculty were less likely to agree that they were respected by their Dean’s Office (45% strongly agree) or the President’s Office (25% strongly agree).

Workload

As shown in Figure 5 (next page), even though 39% of all faculty agree that the amount of work they have is fair, substantial proportions of respondents also feel that they have too many research (33%), teaching (25%), and service responsibilities (33%) to do each of them well. Furthermore, over two-thirds (69%) agree that they never have enough time to get all of their work done, and almost two-thirds (65%) agree that their research and/or teaching is overloaded with administrative rhetoric.

There are several significant gender differences in perceptions of workload density, with more female than male faculty reporting that they have too many teaching (34% vs. 21%) and service responsibilities (42% vs. 27%) to do them well. It is not surprising, then, that female faculty express more dissatisfaction with their overall workload compared to men (57% vs. 42%). Women are more likely to feel emotionally drained from work (74% vs. 46%) and used up by the end of the work day (77% vs. 52%), relative to their male colleagues.

Figure 4: Perceived feelings of respect by:

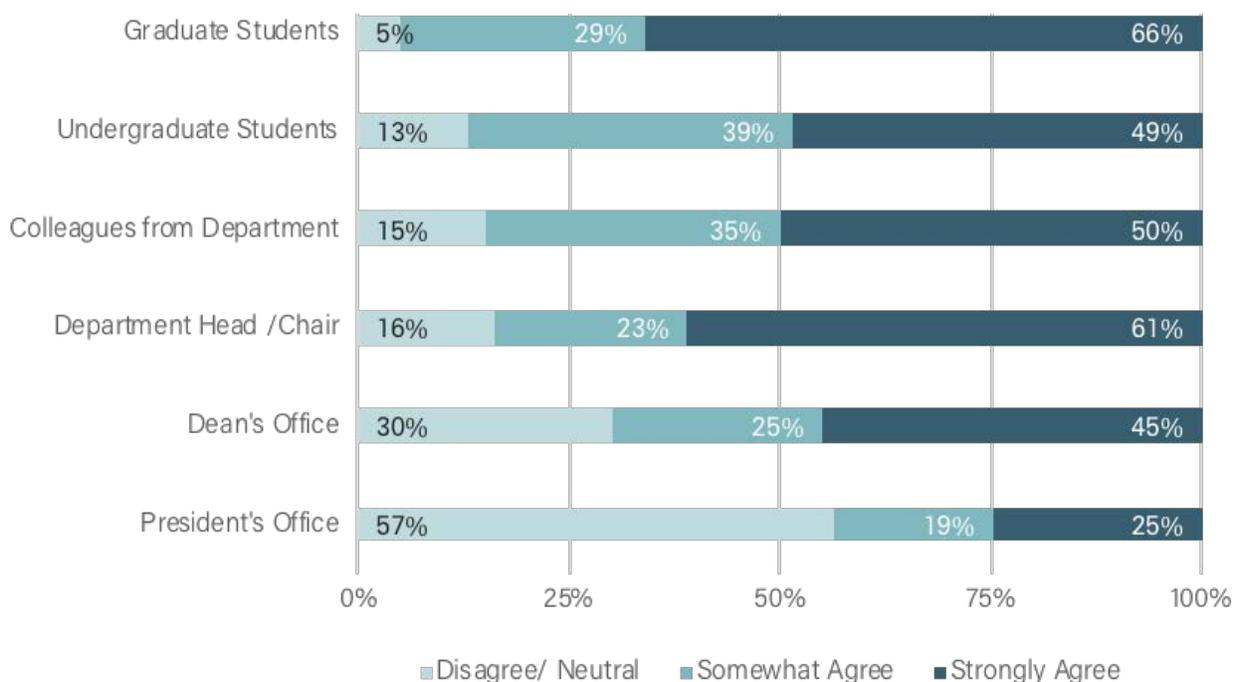


Figure 5: Workload

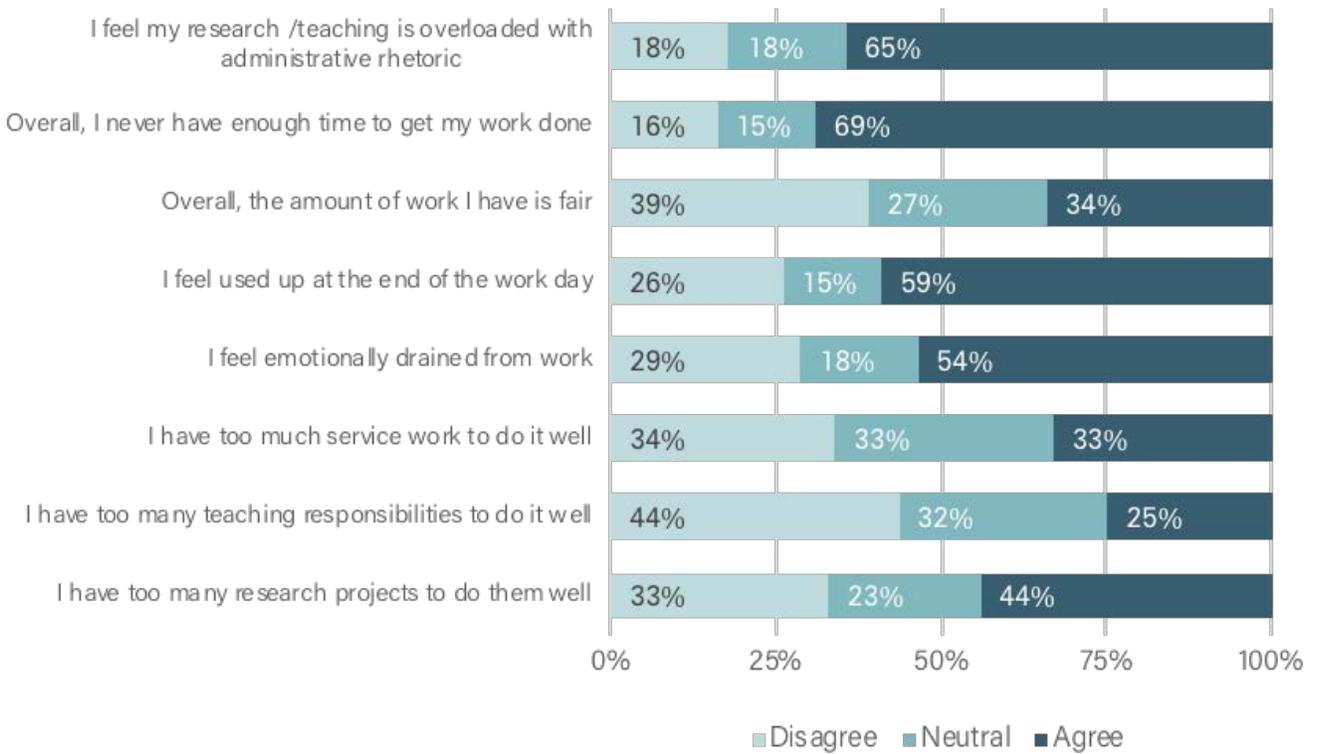
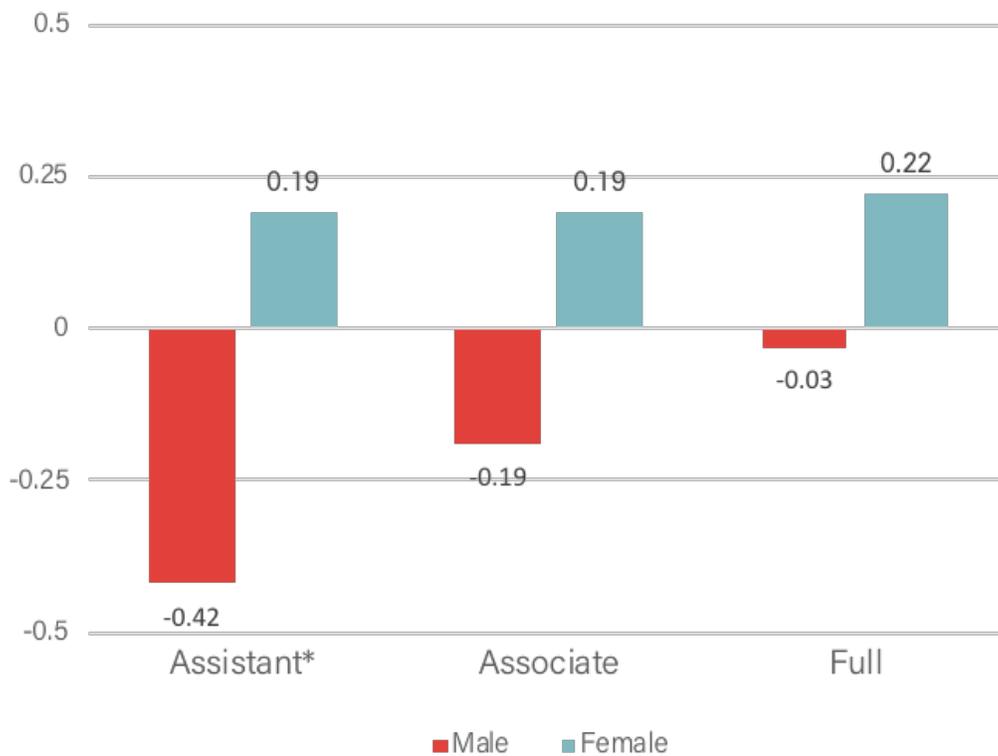


Figure 6: Service Work Index



There is also some evidence to support the existence of a broader structural gendered division of academic labour: female faculty report significantly above average service (mean = .17), compared to male faculty who perform below average service (mean = -.10); $t(281) = -2.2, p = 0.03$, Cohen's $d = .27$. Furthermore, women are found to take on more service earlier in their careers: female assistant professors already engage in significantly more service work than their male colleagues of the same rank (Figure 6 - previous page). The gender service gap persists at the associate and full professor level, though the difference is not found to be significant at these later career stages.

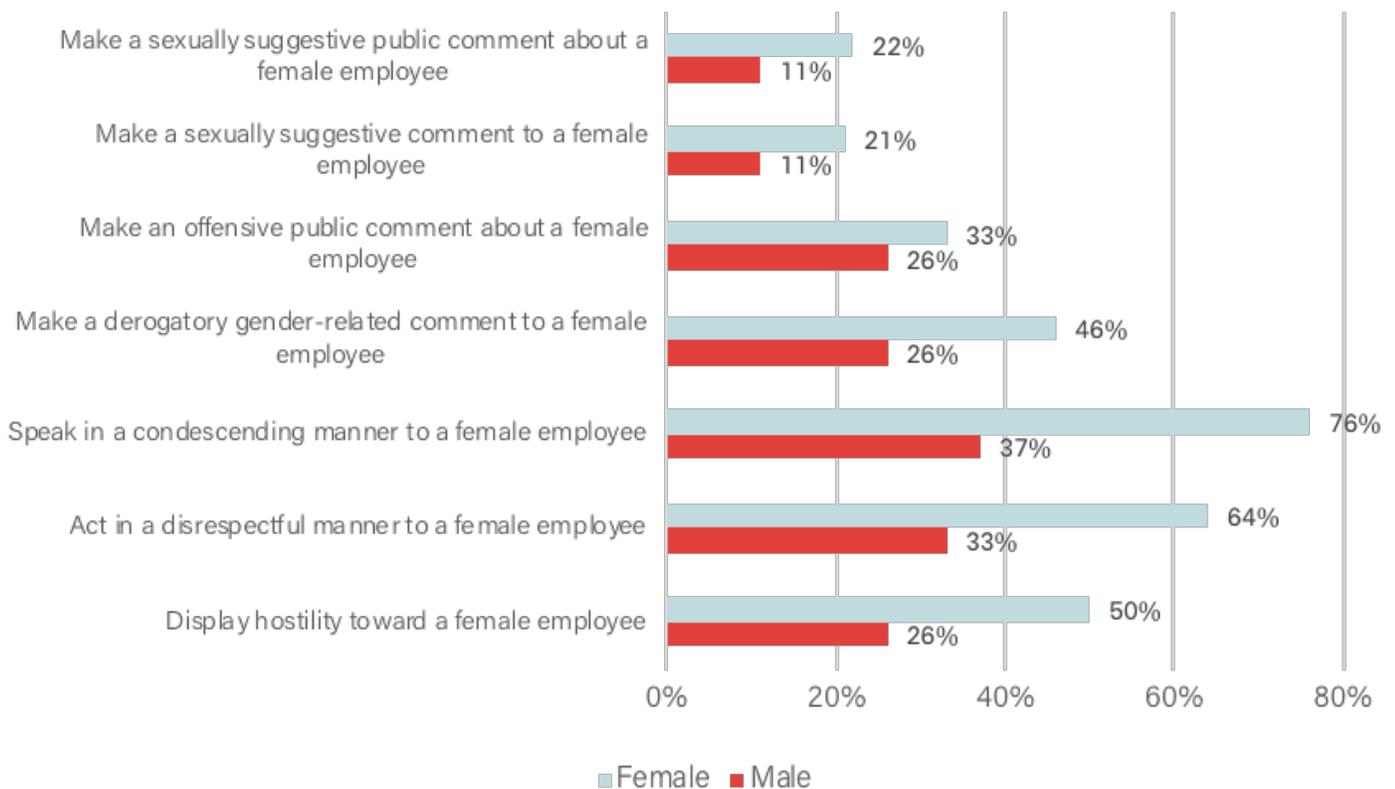
Work-Family Integration

The majority (54%) of NSE faculty agree that their colleagues are supportive when faculty members take time for family life. However, 51% of respondents feel that faculty who reduce their workload

for their family are viewed by funding agencies as less committed to their research. Similarly, 43% disagree that family demands are considered when department/unit meetings or events are scheduled, and 41% disagree that family demands are considered when teaching schedules (and other duties) are assigned.

Female faculty remain significantly more likely than their male colleagues to take any leave for birth/adoption (81% vs. 24%); and less than half of men and women who took parental leave (48%) felt supported by their department/unit at the time. Overall, more than half of NSE faculty report dissatisfaction with their work-family balance (53%) and 36% have considered leaving their job to improve it. It is noteworthy that there are no significant gender differences in these perceptions: a majority of both women and men are unsatisfied with the balance between their personal/professional lives (64% and 52%, respectively).

Figure 7: Past 2 years, observed harassment / discrimination from any faculty, staff, or administrator



Exclusion, Harassment & Discrimination

Even though some male faculty have negative workplace experiences (13%), including harassment and discrimination within their own departments and faculties, women are significantly more likely to have such experiences (29%). Specifically, female faculty are more likely than their male counterparts to report being excluded from informal department/unit discussions on multiple occasions (30% vs. 17%); and to have experienced harassment or discrimination within their department/unit (25% vs. 12%). Three-quarters of women reported that the harassment/discrimination was due to their gender.

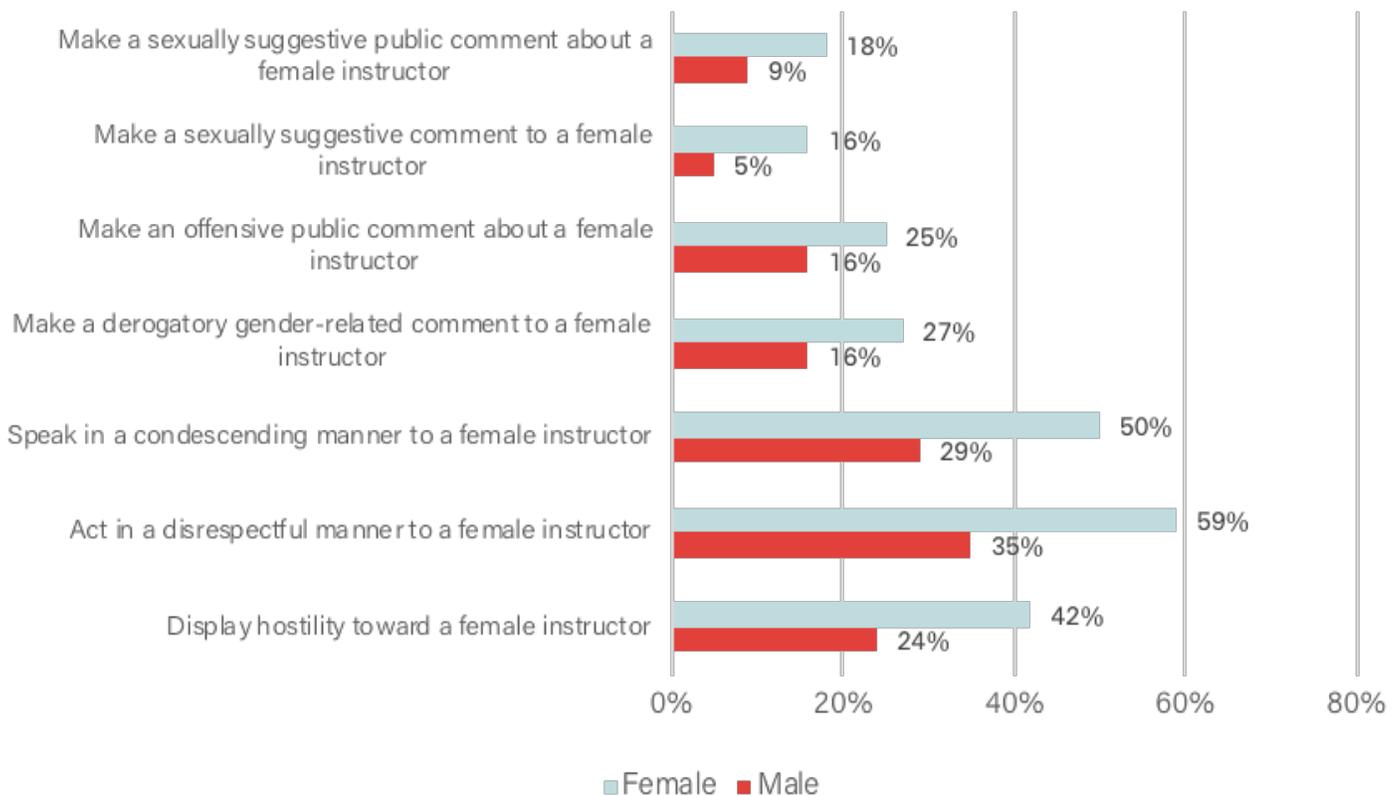
Women are significantly more likely to have observed the harassment and discrimination of other females by university faculty/staff/administration (in the past two years), compared to their male colleagues including disrespect (64% vs. 33%),

condescension (76% vs. 37%), derogatory gender comments (46% vs. 26%), and sexually suggestive comments (22% vs. 11%) (Figure 7 - previous page).

As illustrated in Figure 8, female faculty are also significantly more likely than men to report witnessing (in the past 2 years) student perpetrated harassment or discrimination of female professors including disrespect (59% vs. 40%), condescension (50% vs. 29%), derogatory gender comments (27% vs. 16%), and sexually suggestive comments (16% vs. 5%).

Thus, NSE departments still appear to be difficult work environments for female faculty who, on top of already heavy academic workloads, are exposed to additional gender-based harassment and discrimination from other university co-workers and students.

Figure 8: Past 2 years, observed harassment / discrimination from students



Stressful Student Interactions

Canadian NSE faculty describe experiencing a variety of challenging, non-academic interactions with students. Nearly 90% of respondents report having had at least one student cry in their office or lab, with 28% estimating they have had this happen with 5 or more students. Nearly a half (46%) of faculty have had at least one student disclose extreme stress or long-term mental illness, substance abuse, domestic/dating violence, sexual harassment/assault, or suicidal thoughts or behaviour. Most importantly, almost three-quarters (72%) report that these experiences are somewhat, very, or extremely stressful, and most do not feel adequately equipped to deal with these situations.

Despite the apparent commonality of these situations, there are significant gender differences. Specifically, females are more likely than males to report more than 5 students crying in their presence (44% vs. 23%); having students disclose suicidal thoughts/behaviour (35% vs. 23%); domestic/dating violence (34% vs. 19%); and sexual harassment/assault (41% vs. 24%).

Career Satisfaction

Most faculty indicate they are satisfied with the progress they have made toward achieving their career (77%), income (68%), and advancement goals (72%). Almost a quarter (23%) have been looking for employment at a different university; 15% plan on leaving their current university in the next 2 years; and one in ten (11%) are considering employment outside of academia altogether. Thus, while NSE faculty opinions are quite mixed regarding their individual departments/unit climates, workloads, and day-to-day experiences, overall, they appear to still be generally satisfied with their own professional lives.

■ Faculty Recommendations

Survey respondents provided a wide range of comments on the most serious barriers/concerns they face, as well as suggested improvements. Despite the variety, some themes could be discerned.

With respect to barriers and concerns, the perpetual problem of lack of financial support and a perception of biased funding practices by granting agencies remains common. However, equally common are reports of the growing disconnect between faculty's day-to-day realities/needs and the university administration that makes it unnecessarily difficult for them to do their jobs properly. The increase in the number of career administrators that have little connection to either research or teaching; and the larger overarching problem of universities adopting a more business-oriented operating model are fundamental problems that many faculty emphasize.

Similarly, one of the most common complaints is the frustrating “downloading of (mundane) administrative tasks” onto already over-burdened faculty; and technological/bureaucratic systems that do anything but make professors' lives easier.

It is no surprise, then, that faculty's recommendations for university improvements also reflect what is, at its heart, the debate over the purpose of universities in society and what it means to be an academic. Many strongly assert the need for universities to refocus their attention (and financial support) to the core academic pursuits of research, teaching, and service. They prefer to see financial resources reinvested in supporting research agendas (e.g., money for graduate students) and fundamental infrastructure (e.g., classroom, lab, and equipment maintenance/updating), rather than other one-off university side projects. Faculty also generally suggest that power/control be decentralized and returned to individual departments/units.

They recommend that administrators be required to have research/teaching experience and the hiring of more (gender and ethnically diverse) faculty and support staff. Perhaps most importantly, NSE faculty would simply like some workload relief and for their institutions to “stop expecting more [faculty productivity] from less [resources, support, and time]”.

Interestingly, both male and female faculty largely express the same concerns and recommendations for improvement. However, as expected, female faculty are more cognizant of systemic gender biases in hiring and evaluation, in particular. Female faculty are also much more likely to call for sexual harassment/code of conduct training, consistent with their increased likelihood of discrimination/harassment experiences; and for universities to demonstrate unequivocal support (on paper AND in practice) for increased work-life balance.

Thank you again for your participation!



■ References

Canadian Association of University Teachers. 2018. “Underrepresented & Underpaid: Diversity & Equity Among Canada’s Post-Secondary Education Teachers”. https://www.caut.ca/sites/default/files/caut_equity_report_2018-04final.pdf. Retrieved April 13th, 2018.

–2014. *CAUT Almanac of Post-Secondary Education in Canada 2013-2014*. Ottawa, ON. https://www.caut.ca/docs/default-source/almanac/almanac_2013-2014_print_finalE20A5E5CA-OEA6529968D1CAF.pdf?sfvrsn=2. Retrieved March 15th, 2018.

Statistics Canada. 2017. “Number and Salaries of Full-Time Teaching Staff at Canadian Universities”. *The Daily* (November 28th, 2017). <http://www.statcan.gc.ca/daily-quotidien/171128/dq171128b-eng.pdf>. Retrieved May 28th, 2018.

The Expert Panel of Women in University Research. 2012. *Strengthening Canada’s Research Capacity: The Gender Dimension*. Council of Canadian Academies. Ottawa, ON.