Glass Ceilings and Sticky Floors

Time for the Department of Pediatrics to Renovate

to Improve Opportunities for Women in Leadership

Women in Leadership Task Force of the McGill Department of Pediatrics

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FOREWORD

As members of the Department of Pediatrics, we serve a diverse population and are committed "through excellence and leadership, to optimize the health & wellbeing of infants, children, and youth within the context of their families" (*Vision Statement*, *McGill Department of Pediatrics*). In order for our Department to maximize health outcomes through innovation, productivity and excellence, we require gender-diverse leadership to increase the diversity of perspectives, skills and styles. Although we have achieved gender parity in membership of both faculty and trainees, we still lack gender diversity in highly visible and valued leadership positions within the Department of Pediatrics.

This report aims to shed light on the issues related to gender disparity in medical leadership within academia and, in particular, within the McGill Department of Pediatrics. The information and recommendations in this report are based on input from members of our own Department as well as the literature related to gender and leadership. This document serves as an important first-step to achieving gender parity in leadership within the Department of Pediatrics and will hopefully lead the way to gender diversity within other Departments within the McGill Faculty of Medicine.

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Executive Summary

Although women comprise 59% of the faculty (assistant, associate and full professors) of the McGill University's Department of Pediatrics, there remains a disproportionately low number of women with "full professor" rank and in high level (i.e. highly visible and valued) leadership positions within the Department.

Gender diversity in medical leadership results in improved patient care and outcomes through an increase in creativity, productivity and innovation,[1-9] improved decision-making and health[1,3,4,6,9-13] and increased engagement of faculty and other health care professionals.[9] However, the increasing number of female faculty within Pediatrics has not resulted in a proportionate increase in the number of women assuming leadership roles. Women are as equally interested in leadership positions as their male colleagues, yet the leadership opportunities for women are inferior to those of men and providing what appears to be "equal" opportunities will not necessarily result in gender equality in leadership positions.[14]

Therefore, in April 2016, the Women in Leadership Task Force of the McGill Department of Pediatrics was created to develop strategies and realistic action plans that will result in an increased number of women applying for and assuming leadership positions within the Department of Pediatrics.

Barriers to Women Applying for and Assuming Leadership Positions

Through an extensive literature review, participation in the Leadership for Medical Women conference (Physician Leadership Institute, Canadian Medical Association) by two task force members, and results from the Women in Leadership Department of Pediatrics survey and focus groups, the Task Force gained a better understanding of the perceived and real barriers to women attaining high level medical leadership positions within the Department of Pediatrics. These barriers include:

1. **Image of effective leadership as traditionally "male"** due to implicit biases in both women and men which results in less women envisioning themselves in leadership roles and less women being considered for these positions.
2. **Lack of active guidance for women** in the form of mentorship and networking opportunities which results in less awareness and consideration of women for roles that will lead to career advancement.
3. **Disproportionate amount of family obligations** for women resulting in the assumption that women are less interested, dedicated or able to take on more visible roles and less time for women to actually take on leadership roles.
4. **"Distracting roles"** that women assume rather than higher level leadership roles. In other words, women disproportionately assume clinical and educational leadership roles that are less visible and valued while also being more time-consuming, and therefore impede on opportunities for leadership career advancement.
5. **Outdated organizational structure** that relies on a career framework based on the traditional man's work-life cycle (i.e. does not account for the peaks and valleys of career advancement that women commonly experience often related to family obligations) and does not ensure a family-friendly work environment, a gender diversity policy, nor tracking of gender-related data and measuring of gender-related metrics.

Task Force Recommendations

Based on the identified barriers to women assuming leadership positions within the Department of Pediatrics, the Task Force proposes six recommendations with associated action plans that the Department of Pediatrics should implement to help close the gender gap in medical leadership.

1. **Implement gender diversity training and education** through the recruitment of a diversity expert to help implement gender-diversity training of faculty members, a gender-diversity policy, and specific gender-diversity training of all leaders within the Department of Pediatrics which will result in bias-free selection and promotion processes.
2. **Track and monitor demographic data and metrics** to determine ongoing gender disparity issues and whether implemented initiatives have been effective in a measurable capacity.
3. **Adopt a renewed career framework** that would allow flexibility in work to support work-life integration and career advancement, optimizing faculty productivity and wellness.
4. **Provide active guidance for women** which includes a formal mentorship program (for both men and women), increased networking opportunities for women and increased participation of women in leadership, career-related and scientific workshops, programs and meetings.
5. **Establish a family-friendly work environment** which would aim to benefit both women and men by re-evaluating concepts (such as flexible meeting times and remote access) to allow participation of faculty with family-related responsibilities, and establishment of on-site services and amenities to facilitate work-life integration.
6. **Formally recognize departmental members' clinical, administrative and educational achievements equal to research achievements,** allowing for such achievements to be celebrated and held in high regard benefiting faculty and trainees of all genders.

Although the focus of the Task Force was on gender diversity, implementation of the recommended action plans will benefit faculty and trainees of all genders and will provide the foundation to increasing diversity across race, ethnicity, culture, sexual preference, and socioeconomic origins. By realizing the Task Force recommendations, the McGill Department of Pediatrics will be an innovative leader within the McGill Faculty of Medicine by breaking down barriers that both women and men may face related to assuming high level medical leadership positions and supporting faculty self-actualization and wellness, all of which will also translate into richer academics and better patient outcomes.

TASK FORCE GUIDING PRINCIPLES

1. **"The rise of women does not mean the fall of men."** (*Stephanie Coontz)* – The work of the Task Force is inclusive of all genders. The goal is not to minimize men, but to gain an understanding of the gender gap and to consider strategies to achieve gender parity in leadership positions. The goal is to "level the playing field", so that a male and female with equal suitability for a leadership position truly have equal access to it. Not all women will be suitable for leadership, just as this is true for men. Ultimately, the recommendations from the Task Force are expected to benefit all genders in supporting potential leaders from any gender to be successful.

2. **Diversity** – The Task Force mandate was to examine gender diversity in leadership in the Department of Pediatrics. However, many of the concepts and ideas discussed in this report apply to many aspects of diversity e.g. race, ethnicity, sexual orientation. Therefore, the Task Force is optimistic that the report will result in a better understanding of the value of diversity and that the recommended strategies will bring greater overall diversity in the Department of Pediatrics' leadership.

3. **Gender Terminology** – The Task Force recognizes that gender is not dichotomous but rather best represented on a spectrum and that, for some, gender is an artificial construct entirely. However, for the purposes of the report, we are restricting ourselves to male versus female gender, as this reflects the current literature on the subject of gender disparity.

4. **Gender Generalizations** – The Task Force recognizes that, although the report discusses generalizations about women and men, not all women and men fit these generalizations. Characteristic traits and behaviours of women and men are well-supported by the literature and understanding them is fundamental to understanding the gender gap and proposing solutions that will result in true equal opportunities. The report will discuss the negative consequences resulting from overgeneralizations and false assumptions.

5. **Leadership Terminology** – In this report, the term "medical leadership" refers to the various types of leadership roles that exist for members of the Department of Pediatrics including those related to research, administrative, education and clinical. The Task Force recognizes that the lines are often blurred between hospital, departmental and university roles, and therefore the report includes the discussion of some roles that, to some, may not be seen as purely academic.

Gender Disparity in Academic Medicine

Gender gap is defined as the "discrepancy in opportunities, status, attitudes, etc., between men and women".[15] Despite increased awareness related to the gender gap locally, nationally and internationally,[16-19] there continues to be gender disparity within the workforce and across professions with very little improvement, as noted by Canada's overall gender gap widening in the last two years.[17] In fact, based on the slow rate of improvement, it is expected that it will take at least 158 years to close the gender gap in North America.[17]

This gender gap continues to exist in academia as well. As Timmons describes, gender inequity persists in Canadian universities where, in 2016, only 23% of university presidents in Canada were women (an increase of only 18% since the mid-1990's) and only 29% of Canada Research Chairs were women.[20] Similar disparities in leadership positions have been shown in academic medicine despite gender parity in medical schools[21] and a large proportion of female residents and faculty.[22,23] Despite the existence of literature and organizations over the last three decades describing the gender gap in medical leadership and strategies to achieve gender diversity, there are still disproportionately less women promoted to full professor (compared to the gender proportion within the faculty),[22-30] in research tenure tracks[29-31] and in highly visible medical leadership roles.[3,8,18,22,23,25-27,30-37]

It has been shown that women disproportionately assume more low level medical leadership positions[3,38] (described in the literature as being of low visibility and as undervalued) such as residency program director and assistant/associate roles.[26,39] Whereas, the majority of high level medical leadership positions (i.e. Dean of Medical School, Department Chair, Division Director/Section Head) are held by men in significant overproportion to their numbers within the faculty.[24-26,32,35] When women do hold high level medical leadership positions, the scope of these positions have been found to be different from those held by men i.e. less research-intensive and for a shorter duration.[40]

The literature also demonstrates gender disparity with regards to research advancement[9,32] which is seen as leadership within its own right and often used to identify and select candidates for high level medical leadership positions. Women are less likely to receive major grants,[7,9,24,39] the grants received by women are of less value,[9,25] women are less likely to publish papers,[24] especially as first and senior authors, [39] are less likely to be on editorial boards of major medical journals[41] and are less likely to be invited as speakers at major scientific conferences.[42]

Locally, the percentage of women in the current four classes of the McGill Faculty of Medicine undergraduate medical school range from 53.7-54.8% and women hold 50% of the top medical student leadership positions (Medical Students' Society, President, Vice-Presidents, Class President). However, there remains gender disparity for the faculty with respect to some of the high level, highly visible leadership positions. There has never been a female Dean, only 1 out of 8 Basic Science Department Chairs is a woman and none of the 15 Clinical Department Chairs is a woman. In lower level positions, 78% of Associate Dean positions (which include School of Nursing and School of Physical and Occupational Therapy) and 45% of Director of Centre/Institute/Unit positions are held by women.

Women in Medical Leadership in the Department of Pediatrics

The literature supports the fact that, despite the fact that women represent over 50% of the faculty in Pediatrics in North America, there is still a disproportionately low number of women both being promoted to full professors[22,39] and holding high level leadership positions.[39,43]

Data from the McGill Department of Pediatrics reveal similar gender disparity. In September 2016, women comprised 59% of the faculty (assistant professor, associate professor, professor), however only 25% of full professors in the Department were women (Figure 1).

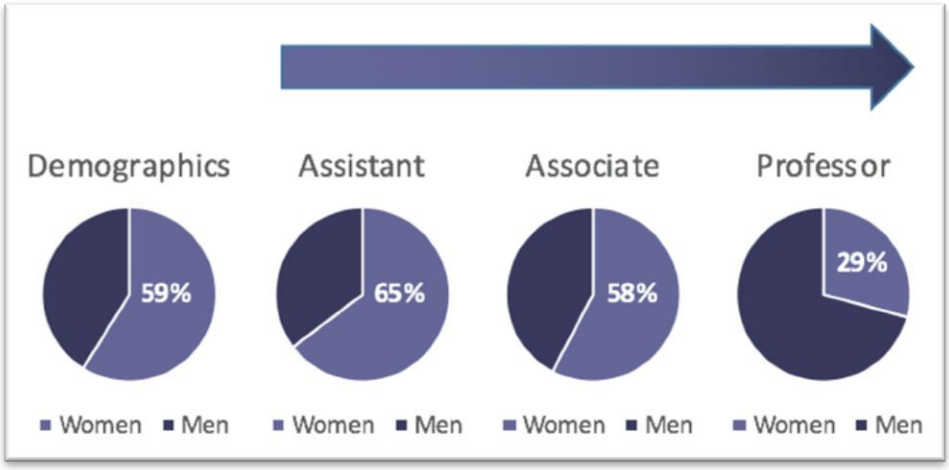


Figure 1. Faculty, Department of Pediatrics by rank and gender as of September, 2016

There were also disproportionately fewer women than men in high level, highly visible leadership positions in the McGill Department of Pediatrics (Table 1) whereby women represented only 31% Division Directors (5/12), 14% Associate Chairs (1/7), 0% Vice-Chair (0/1) and 0% Department Chair (0/1 position). Similar to what has been reported in the literature, women are overrepresented in lower level leadership positions, where women represented 71% of Clinical Program Director positions (10/14), 75% of Clinical Program Co-Director positions (3/4), and 76% Resident Rotation Coordinator positions (22/29); positions that are often seen as "middle management" roles rather than executive roles.

Table 1. Leadership Positions, Department of Pediatrics by gender, September 2016

	F	M
Pediatric Chief Residents	1	1
Pediatric UGME Director	1	0
Rotation Coordinators	19	9
Program Directors	14	7
Division Directors	5	7
Associate Chairs*	1	6
Vice-Chair	0	1
Chair	0	1

* After reappointment of the Department Chair in October 2016, three new women were appointed as Associate Chairs and two Associate Chair positions were dissolved resulting in women assuming 80% of Associate Chair positions (4/5).

Advantages of Gender Diversity in Medical Leadership

Effective leadership is not defined by a single type of leader nor should it be defined by a single gender. The benefits of gender diversity extend beyond ensuring "fairness". Diversity, as the name implies, encourages recruitment of all genders into high level leadership positions resulting in a wider pool of talent being considered for the positions. [4] This has been shown to result in:

1. **Increased creativity, productivity, and innovation** – Gender diversity in leadership results in the incorporation of different leadership styles and behaviours, which in turn result in the inclusion of more varied perspectives and skills resulting in more strategies, innovation and productivity.[1-9] Gender diversity within a group has been shown to contribute to a higher "collective intelligence".[44]
2. **Improved decision-making and health** – Gender diversity in leadership ensures that healthcare needs relevant to all genders are considered.[1,10] In other words, female leaders may better highlight the needs of female patients in both the clinical [3,11,12], and research milieu.[9,13] For example, women may propose an area of clinical research that their male colleagues would not have considered. Therefore, diversity in leadership results in better decision-making[4,6] for a wider range of problems and can lead to better health outcomes by improved representation of patients' needs.
3. **Creation of female role models** – Gender diversity in leadership encourages and inspires an increased number of women to take on leadership positions in the future.[6,9]
4. **Increased engagement of colleagues and other health care professionals** – Studies show that women are more likely than men to exhibit transformational leadership styles, demonstrating more collaborative and less hierarchical approaches which are positively associated with leaders' effectiveness[9] and engagement of group members. Gender diversity in leadership also better represents the gender demographics of the faculty which reduces the "divide" between the leaders and the faculty at large.[9]
5. **Compliance with gender equality policies** – Provincially, nationally and internationally, the importance of gender diversity is being recognized and requirements are being instituted (e.g. accreditation standards, provincial and federal equity policies). Complying with these policies reflects an effort to achieve the societal goal of gender equity.

Given the underrepresentation of women in high level leadership positions in the Department of Pediatrics (despite the female majority of faculty) and the demonstrated importance of gender diversity, the Chair of the Department of Pediatrics mandated a task force to address the gender disparity within the Department of Pediatrics.

WOMEN IN LEADERSHIP TASK FORCE OF THE MCGILL DEPARTMENT OF PEDIATRICS

The Women in Leadership Task Force of the McGill Department of Pediatrics was created in April 2016 with the aim to develop realistic recommendations and action plans that would result in an increased number of women applying for and assuming leadership positions within the Department of Pediatrics. Of note, Task Force membership was designed to reflect diversity with respect to gender, age, cultural background, race, skill sets and medical specialties.

The Task Force recognized that reasons for the paucity of women in high level leadership positions within the Department of Pediatrics were multi-faceted, and, therefore, would require multiple solutions. As such, to better understand the perceived and real barriers to women in leadership in the Department of Pediatrics and to determine strategies to increase gender diversity within high level leadership within the Department, the Task Force carried out the following activities:

1. Extensive literature review (as outlined in earlier sections as well as the "Barriers" and "Recommendations" sections below)
2. Participation in the Leadership for Medical Women conference (Physician Leadership Institute, Canadian Medical Association) by two task force members
3. Development and dissemination of a survey to Department of Pediatrics faculty and residents
4. Coordination of three focus groups of faculty and residents of the Department of Pediatrics

Women in Leadership Survey

In November 2016, we conducted a survey that was sent to all faculty and residents of the McGill Department of Pediatrics. The McGill University Health Centre Research Ethics Board reviewed the study and waived the need for Institutional Review Board approval.

GOALS

The main goals of the survey were to:

- Explore perceived individual and general barriers to women obtaining medical leadership positions and
- Surface innovative ideas to increase women in leadership roles in the Department of Pediatrics.

METHODS

The survey was developed by the Task Force and included questions that were derived from several online resources[7,38,45,46] used to survey gender-related differences in leadership and modified to be relevant to the McGill Department of Pediatrics. The survey assessed demographics, career development plans, perceived barriers to assuming leadership position as well as strategies to overcome barriers (Appendix I).

The survey was sent to the McGill Department of Pediatrics residents and fellows (n= 71) and faculty with ranks considered that reflect more active participation within the Department i.e. assistant, associate and full professors (n=207). The survey was administered electronically using Lime Survey, with reminders twice per week until there were no new responses for 3 consecutive days following a reminder. Digital data were stored in secure computer files. Data for cells smaller than 3 individuals was not reported to prevent identification of respondents. Survey respondents consented to direct quotes being used in the Task Force report and/or published data. Respondents were eligible to provide their contact information for a draw of two $25 certificates. Their contact information was not linked to their survey responses.

Data analysis was performed for the following groups:

1. Overall - female versus male respondents (Table 2)
2. "Leader" (self-reported to "have held or currently hold a leadership position within the Department of Pediatrics") and "Non-leader" (reported that "never held or currently hold a leadership position within the Department of Pediatrics") – female versus male respondents within both groups (Appendix II)
3. Career level based on years since primary degree of appointment i.e. less than 15 years since primary degree was considered "junior" level, 15-25 years considered as "mid-career", and greater than 25 years since primary degree of appointment as "senior" level - female versus male respondents within the three groups (Appendix III)

We used the SPSS (Statistical Package for the Social Science) software for all statistical analyses examining gender differences in the responses. We used t-tests and chi-square analyses as appropriate with the commonly-accepted "error rate" of 5 in 100 ($p < .05$). It is important to keep in mind the small sample size, especially when the data was sub-analyzed, which reduced the chances of finding significant results.

RESULTS

The survey remained open for 23 days. Overall, there was a 57.5% response rate (160/278). This included a 33.8% response rate for residents and fellows and 64.7% response rate for eligible faculty (132/203). Seven respondents were excluded from the survey results. Four faculty respondents were excluded since they were not ranked as assistant, associate or full professors. Three additional respondents who did not identify as male or female were excluded because this resulted in a cell smaller than three. All Divisions had both female and male faculty representation (except for the Division of Rheumatology whose faculty are only female). Of note, not all respondents answered all of the survey questions.

Demographics

Data analysis revealed that there was no difference between women and men in the number of years since their primary degree of appointment (t=1.11; p=0.27, Table 2). The gender proportion for respondents ranked as assistant and full professor reflected the actual gender proportion of rank within the Department of Pediatrics. The proportion of female to male associate professor respondents was higher compared to actual female to male proportion of the Department.

Leadership Roles

Overall, there was no difference between female and male respondents with regards to the proportion of professional time spent in administrative, clinical, education and research. However, when sub-analyzed by career level, mid-career men spent more time on administrative work than women (t=2.22; p=0.03, Appendix III). Overall, male respondents reported holding significantly more leadership roles within the Department of Pediatrics compared to women (χ^2 =11.58; p=0.003, Table 2). Interestingly, there were no reported overall differences overall between women and men holding leadership roles within McGill University and nationally/internationally. However, on sub-analysis, more male senior faculty reported holding a leadership position national/international (χ^2 =5.10; p=0.02, Appendix III). Regardless of gender, the majority of respondents did not have mentors nor professional development plans, although a few respondents recognized and appreciated the informal mentoring that they received from their Division Directors.

Despite the underrepresentation of women in high level leadership roles within the Department of Pediatrics, there was no significant gender difference between reported personal importance of leadership or the number of respondents that felt they were perceived as leaders by their colleagues. In addition, both women and men listed the same top 3 reasons for pursing leadership positions (i.e. "to effect change", "to be a positive influence for others in the organizations", and "obligation/sense of duty") (Figure 2) and the same top personal factors that contribute to career satisfaction (Figure 3).

Table 2. Survey Responses to Closed-ended Questions by Gender

	Female	Male	STATISTICS
	(n)	(n)	
Overall	66% (103)	32% (50)	
Mean # years since primary degree of appointment	18.9 (96)	21.7 (47)	t=1.11; p=0.27
# years since appointment in McGill Department of Pediatrics	12.8 (95)	17.3 (45)	t=1.99; p=0.049
Current Academic Rank			
Resident/Fellow	72% (18)	28% (7)	
Assistant Professor	74% (53)	26% (19)	
Associate Professor	68% (28)	32% (13)	
Full Professor	27% (4)	73% (11)	χ^2 =15.18; p=0.02
% total professional time spent in each of the following:			
Administrative	14.2% (91)	16.9% (43)	t=1.58; p=0.12
Clinical	57.5% (91)	57.6% (43)	t=.46; p=0.65
Educational	13.0% (91)	9.8% (43)	t=1.54; p=0.13
Research	15.3% (91)	15.7% (43)	t=1.30; p=0.20
PERSONAL LEADERSHIP			
Currently holds or has held leadership position:			
within the Department of Pediatrics			
Yes	35.0% (36)	62.0% (31)	
No	65.0% (67)	38.0% (19)	χ^2 =11.58; p=0.003
within McGill University			
Yes	29.1% (30)	36.0% (18)	
No	70.9% (73)	64.0% (32)	χ^2 =1.05; p=0.59
nationally/internationally			
Yes	27.2% (28)	42.0% (21)	
No	72.8% (75)	58.0% (29)	χ^2 =4.35; p=0.11
"Independent of my job title, my peers view me as a leader" strongly disagree (1).....strongly agree (5)	3.88 (103)	3.88 (50)	t=.02; p=0.98
Importance of a leadership position for respondent personally Not at all important (1).....Very Important (5)	3.40 (97)	3.63 (49)	t=1.11; p=0.27
CAREER DEVELOPMENT			
"I have a clearly defined professional development plan" strongly disagree (1).....strongly agree (5)	3.14 (103)	3.04 (50)	t=.58; p=0.56
Mentor and Professional Development Plan (PDP)			
I do not have a mentor nor a PDP	47.0%(48)	44.0% (22)	
I have a mentor but no PDP	23.5% (24)	12.0% (6)	
I have a PDP but no mentor	16.7% (17)	24.0% (12)	
My PDP was created with supervisor/mentor	5.9% (6)	14.0% (7)	χ^2 =6.18; p=0.40
other	6.9% (7)	6.0% (3)	
POTENTIAL BARRIERS			
"Have you experienced barriers with respect to attaining leadership positions"			
Yes	41.2% (40)	22.4% (11)	
No	58.8% (57)	77.6% (38)	χ^2 =5.24; p=0.07
"Have you specifically avoided a leadership position?"			
Yes	26.8% (26)	44.9% (22)	
No	73.2% (71)	55.1% (27)	χ^2 =6.38; p=0.17
Perception of leadership opportunities for women			
Inferior	62.6% (57)	34.0% (16)	
Same	36.3% (33)	61.7% (29)	
Superior	1.1% (1)	4.3% (2)	χ^2 =12.46; p=0.01
Perception of opportunities for informal networking for men and women			
Same	34.1% (31)	66.0% (31)	
Different	65.9% (60)	34.0% (16)	χ^2 =12.78; p=.002
"How satisfied are you with work-life balance?" Not at all (1).....Satisfied/Very Satisfied (5)	3.41 (97)	3.29 (49)	t=.53; p=0.60
I believe my professional opportunities are: completely limited (1).....completely unlimited (7)	4.71 (97)	4.88 (49)	t=.56; p=0.58
The Department of Pediatrics recognizes and rewards strong leadership strongly disagree (1)....strongly agree (5)	3.09 (87)	3.10 (41)	t=.03; p=0.97

Figure 2. Personal Reasons for Pursuing a Leadership Position in the Department of Pediatrics

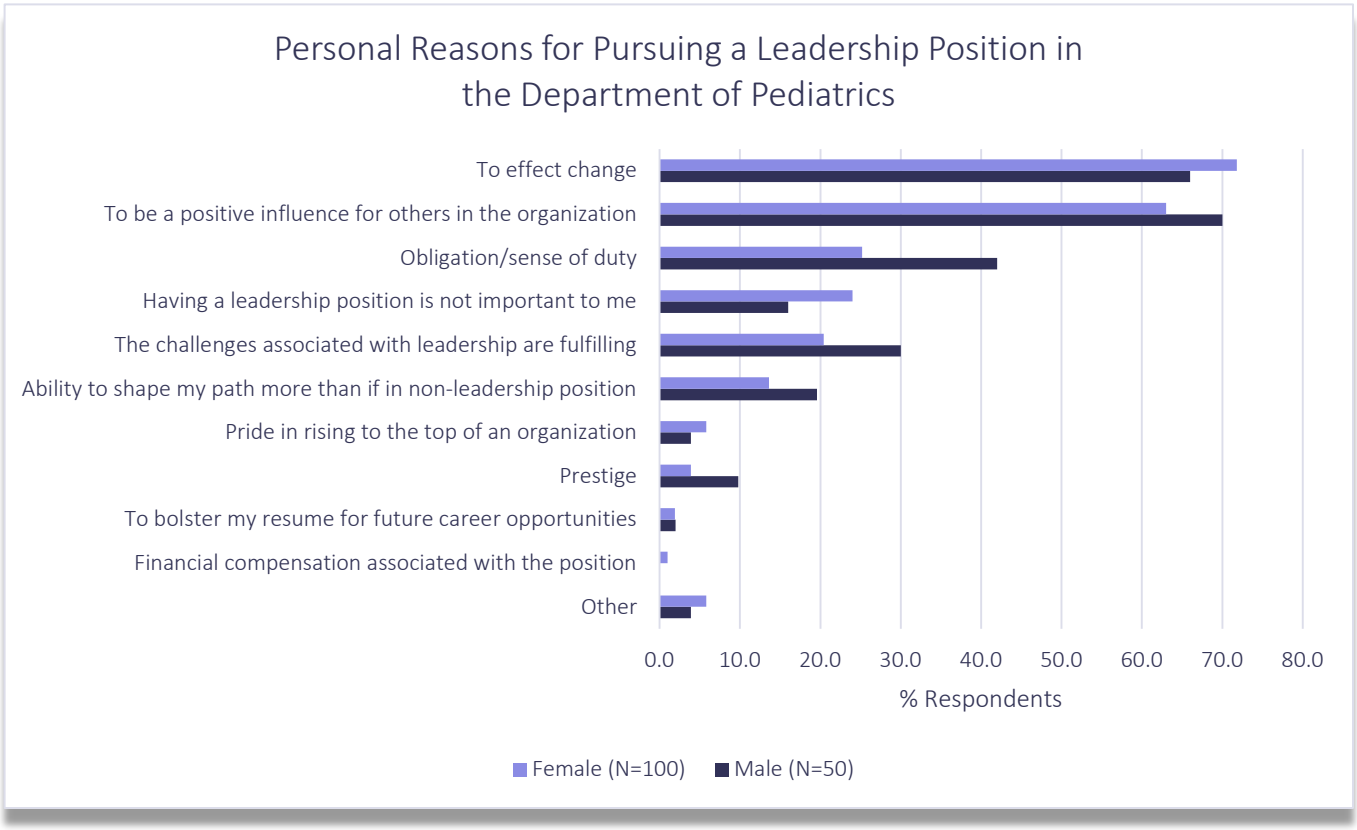
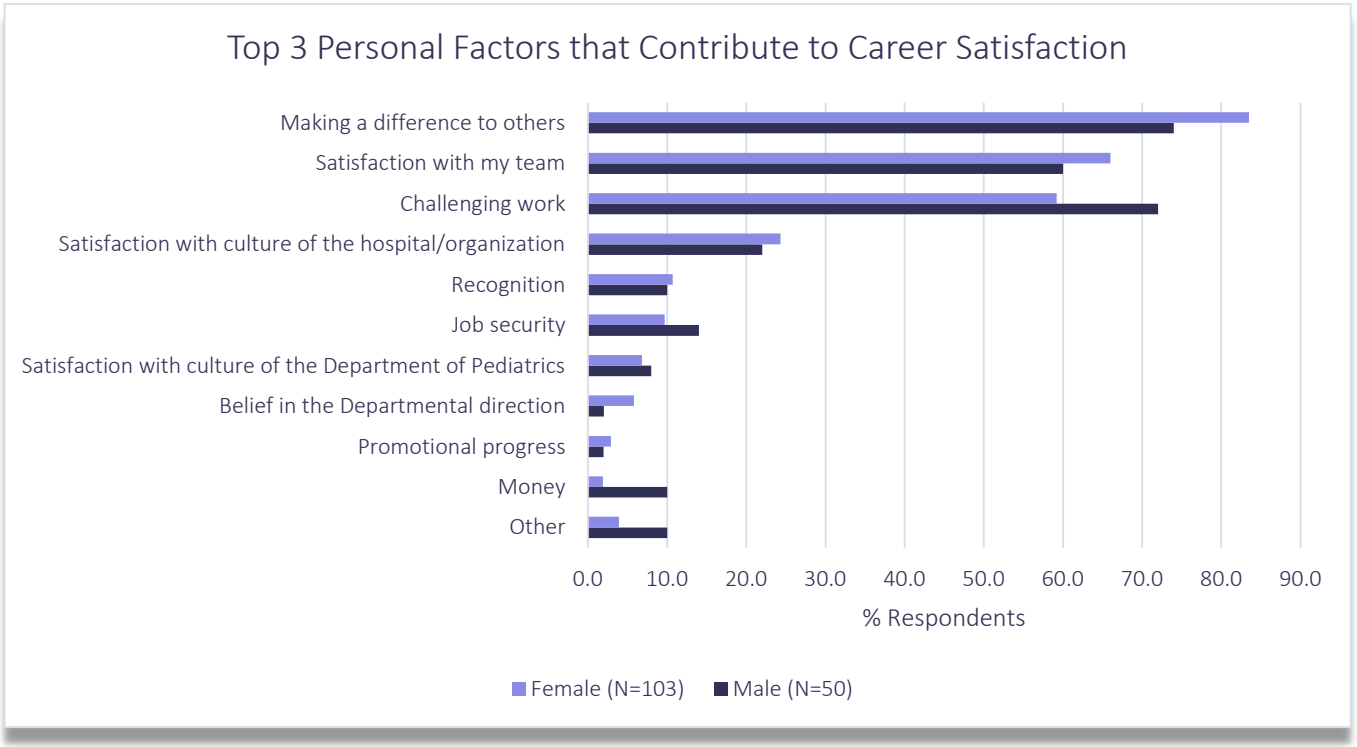


Figure 3. Personal Factors that Contribute to Career Satisfaction



Personal Barriers to Attaining Leadership Roles

Although there were no significant gender differences in avoiding or declining offers of leadership (Table 2), significantly more women than men reported experiencing barriers to attaining leadership roles (χ^2=5.24; p=0.07). Men and women reported the same top three barriers to attaining a leadership position i.e. "not identified and guided for leadership positions", "lack of mentors" and "family responsibilities" (Figure 4). Of note, 42.5% of women (more than double that of men) reported implicit biases as a barrier (fourth overall) and 30% or more of women reported political infighting, a lack of support network and inflexible hours as one of the top three barriers to attaining leadership roles. When looking at barriers reported by leaders versus non-leaders, there were no significant differences.

Figure 4. Experienced Barriers to Attaining a Leadership Position

As one female respondent explained,

> *The era where we have a spouse at home taking care of everything else is over, except for a subset of people who are still in that configuration and do get the promotions to higher levels, and the leadership positions, thereby not allowing the system to become more flexible to today's challenges…heavy family responsibilities, continuing to do a full clinical load to maintain income in addition to committing time for non-remunerated responsibilities is just not feasible with just 24 hours per day.*
>
> *Additional Quotes (Appendix IV)*

Implicit bias was highlighted by two female respondents,

> *People in leadership 'choose' who they want to see for a position [which] then ensures that the 'old boys club' has a higher chance of being selected…*
>
> *Leadership positions in the department of pediatrics are offered to people from the Chair's office. Lack of proper call for interested applicants will not make this process any different.*

One male respondent described the lack of networks for women,

> *I feel that our department and university … depend on informal networks of 'good old boys'… We need to find space for people of varied academic backgrounds…*

There was no gender difference related to satisfaction with work-life balance (Table 2), which averaged a "neutral" rating, however both women and men expressed difficulty balancing time for themselves, family and work and that the Department needs to address this difficulty, especially related to the lack of support, nursing and administrative resources which takes away time from doing important and rewarding work (Appendix IV).

Both women and men on average expressed neutrality when asked whether the Department of Pediatrics recognizes and rewards leadership (t=0.03; p=0.97) with only 37% of men and women rating "agree" and only 7% rating "strongly agree". Several comments from both men and women indicated that they felt a lack of recognition for the diverse initiatives that faculty lead (Appendix IV).

Opportunities for Women Compared to Men

Although, there was no gender difference in the belief of one's own professional opportunities, trending towards "slightly unlimited" (t=0.56; p=0.58, Table 2), women's and men's perceptions varied significantly with respect to women's leadership and informal networking opportunities compared to those for men. Significantly more women perceived "inferior" leadership opportunities (χ^2=12.46; p=0.01, Table 2) and "different" networking opportunities for women (χ^2=12.78; p=0.002).

> *The reality is that many leadership roles are too inflexible to attract excellent women candidates.* (Male)
>
> *These informal networking activities are often planned by men and fall on weekends, at times where women (and men who want to see their family) prefer to abstain and be with their family! I have tried very hard to change these meetings from weekends to weekdays, but until a woman is in charge, I am not sure it will change.* (Female)
>
> Additional quotes (Appendix IV)

Sub-analysis revealed that more female than male non-leaders perceived inferior leadership opportunities for women (χ^2 =10.43; p=0.03, Appendix II), whereas there was no gender difference in perception of women's leadership opportunities by leaders. With regards to networking opportunities, significantly more female leaders than male leaders perceived that informal networking opportunities were different for women and men (χ^2=10.70; p=0.001).

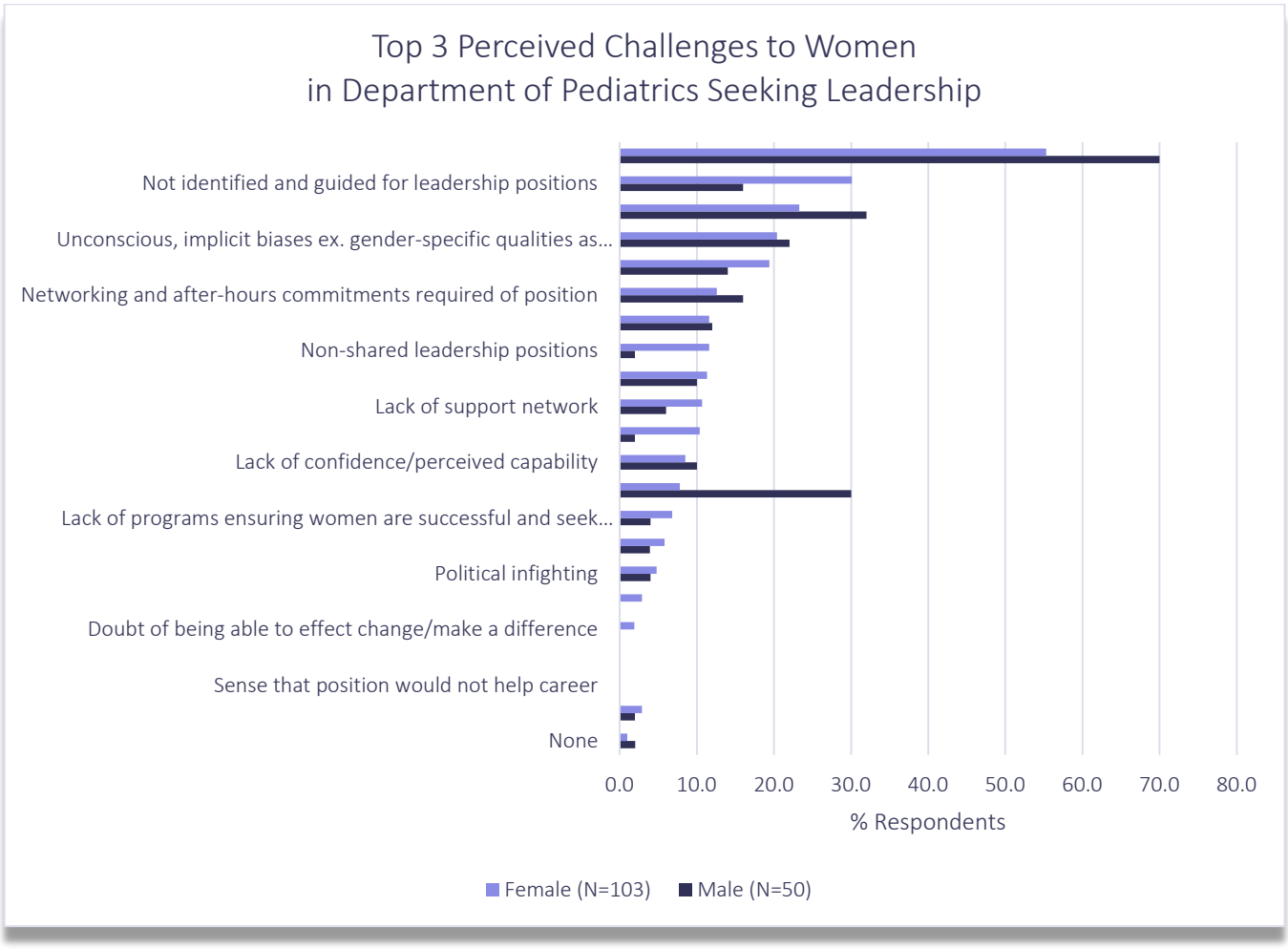
Perceived Challenges to Women Seeking Leadership Roles

Although women and men listed the same top three personal barriers to achieving leadership, there was some disagreement with respect to the top three challenges that women, in general, face when seeking leadership (Figure 4). Both women and men ranked "family responsibilities" and "concern over the position getting in the way of personal life" within the top three. Women included "not identified or guided for leadership positions" as the second most common challenge whereas men did not view this as a top challenge for women despite the fact that this challenge was rated by men as the second most common barrier for themselves to achieve leadership positions (Figure 5).

Importantly, although many comments reflected that more women than men are still expected to take on the majority of family responsibilities (i.e. a societal expectation), several women emphasized that they want to and choose to be present in their children's lives at mealtime, to help with homework etc.

> *Often harder for the mother to be absent from family routines. Not everyone has a solid network of nearby family and friends to help out. Not every father is as equally involved in day to day family management as the mother.* (Female)

Figure 5. Perceived Challenge to Women in Department of Pediatrics Seeking Leadership



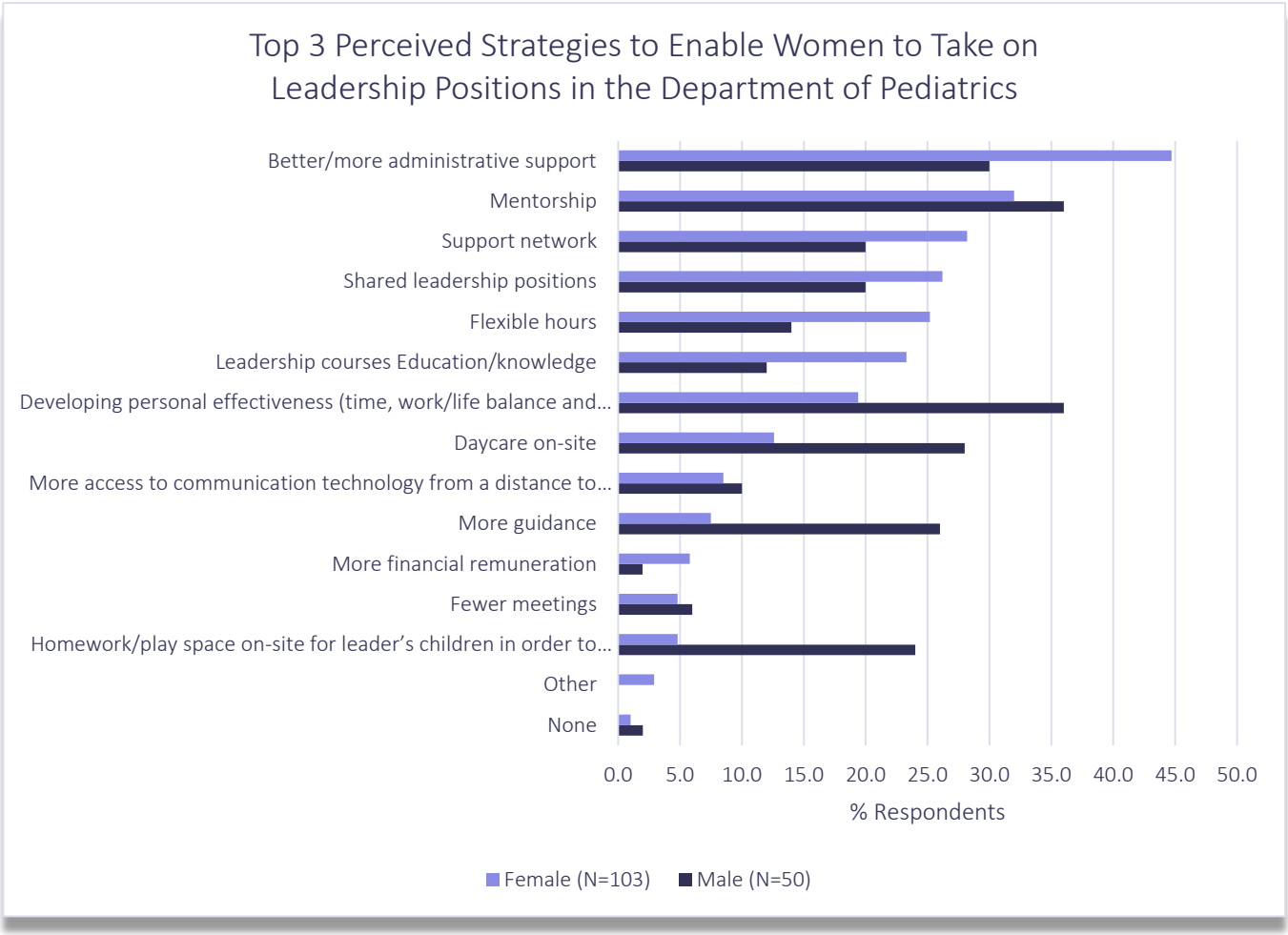
Perceived Strategies

Finally, there appeared to be significant disagreement between men and women as to the perceived strategies that would enable women to take on leadership positions (Figure 6). This is especially important given the fact that women are underrepresented in high level leadership positions in the Department and therefore, those that are in positions to make significant changes i.e. men, may not necessarily understand what is needed to help women seek and assume high level leadership roles. Although "mentorship" was highly rated by both women and men, women listed "better/more administrative support" and "support networks", whereas men equally listed "developing personal effectiveness (time, work/life balance and stress management)" and "mentorship" as the top strategies followed by "daycare on-site" and "more guidance".

Multiple comments throughout the survey underscored the need for a culture change where it was recognized "that women take a different approach to problem management and interactions with others" (Female) and where men accept and appreciate "strong women who may question their decisions "(Female).

> *The culture must change. Individuals [seem to be selected] for leadership positions not based on demonstrated leadership qualities or on the need for a diversity of views, but rather based on homogeneity of perspectives and on who [a leader] thinks he can 'work with'…or [who shares or] can be swayed to [the leader's] perspective. This may facilitate 'getting things done' but does not always get the right things done in the right way. Leaders should be selected based on leadership abilities rather than willingness to toe the line.* (Female)

Figure 6. Perceived Strategies to Enable Women to Take on Leadership Positions in the Department of Pediatrics



LIMITATIONS

Although the survey results supported the growing literature on gender disparity and diversity in academic medicine, there were several limitations of the survey:

1. Lack of high visibility leadership questions specifically related to researchers e.g. number of grants, value of grants, chair/member of a journal editorial board, plenary speaker at a scientific meeting/conference etc.
2. Low response rate of residents/fellows
3. Sub-analyses resulted in small numbers per group and therefore less likelihood to see significant differences
4. Definition of "leadership" was left to the respondent and therefore types of leadership roles could not be compared among respondents.

Women in Leadership Focus Groups

GOALS

The main goals of the focus groups were to:

- Develop a deeper insight into the barriers for women in leadership within the Department of Pediatrics and perhaps beyond (e.g. McGill Faculty of Medicine)
- Surface innovative ideas to be recommended to the Department of Pediatrics for potential implementation

METHODS

Between November 2016 and February 2017, the Women in Leadership Task Force of the McGill Department of Pediatrics organized three focus groups (one all-woman's group, one all-men's group and one mixed gender group) which were conducted at the Montreal Children's Hospital.

The McGill University Health Centre Research Ethics Board reviewed the study and waived review board approval.

Invitations to participate in the focus groups were first sent to members of the Department of Pediatrics who volunteered (via the Women in Leadership survey) to participate in the focus group. Based on the availability of the volunteers for the focus group dates, Task Force members (LP and SZ), invited additional departmental members to participate in order to ensure representation of residents, PhD researchers, and junior, mid and senior career level MDs. The focus groups were facilitated by four members of the McGill Faculty of Medicine (two male faculty and two female graduate students) with qualitative research experience. The gender of the facilitators was matched to the gender(s) of the focus group to optimize the comfort of participants to speak freely i.e. two female facilitators convened the all-women's focus group, the mixed group was facilitated by a man and a woman, and the all-men's group was facilitated by two male facilitators.

The Task Force members predetermined the general questions which initially consisted of seven open-ended questions concerning personal experiences of opportunities for leadership, and perspectives on the organization and its opportunities for female leadership (Appendix V). These questions were used for the first focus group (all men's group) and then, based on the experience from this group, were modified slightly for the second and third focus groups (Appendix V). The focus groups were semi-structured to allow surfacing of ideas and perspectives.

Informed consent was obtained from focus group facilitators and participants. Interviews were audiotaped and then transcribed only identifying speakers as male or female. Following transcription, the four facilitators analyzed the transcription searching for patterns of similarity and variation to arrive at the themes. Participant genders are indicated in the excerpts, but their focus group is not disclosed to aid anonymity.

RESULTS

Twenty-five women and 16 men were invited to participate. In total there were 27 participants of which 17 were women and 10 were men. By role there were 6 participants with PhDs some of whom were also clinicians (4 women, 2 men), 3 residents (2 women, 1 man), and 18 clinicians (11 women, 7 men). Of note, the proportion of gender of the faculty member participants (62.5% women vs 37.5% men) reflected the proportion of female and male faculty (assistant/associate/full professors) within the Department of Pediatrics. Of the clinicians, various medical specialties were represented. On average, the focus groups lasted 1 hour 26 minutes (range: 1 hour 23 minutes to 1 hour 31 minutes)

Of note, although only one or two people may have raised a particular point, this does not mean that that view was shared only by that one or two participants, and not more broadly. In fact, the facilitators frequently noted signs of agreement by other participants. In addition, in all three focus groups, there was evidence that the

participants felt comfortable to assert their opinions and disagree publically including at least one participant in each group saying words to the effect of "I disagree".

Based on the data from the focus groups, the following four themes emerged related to barriers to women advancing in high level leadership positions:

1. **Gender Stereotypes and Biases**
   Some participants did not believe that there were any factors that disadvantaged women in accessing formal leadership positions and that anyone can occupy a leadership position if they so desire and have the individual capabilities to do so.

> *I think a lot of this depends on…the personality of the individual…a person who is interested in a leadership position, who is driven, who has a capacity to be in a leadership position, has a personality [for leadership] … I don't think that there are significant hurdles nowadays to be able to stop that person…* (Male)
>
> *… all of us, throughout our lives, we have to make choices, and I think that if you really want to invest in yourself and be a true leader, and to be in a position with some responsibility, obviously you will have to make some choices at some point in your life…* (Male)

However, the majority of participants described the presence of cultural impediments to women's abilities to occupy leadership positions. Participants did claim that their leaders and colleagues were supportive, generous and well-intentioned and that any perceived gender inequality was felt to be systemic rather than due to the ill intent of specific individuals.

Some participants expressed that society continues to hold gender stereotypes, often unconsciously, for which there are male-based definitions of leadership and expected masculine and feminine ways to behave, which then act as barriers to gender parity in medical leadership. Two female participants expressed that the same behaviours are judged differently if demonstrated by a man compared to a woman i.e. a strong behaviour demonstrated by women is more likely to be labeled as "aggressive". This was underscored by one participant,

> *Gender bias… [affects how] people [are able to] express [themselves]. So if a man is more outspoken, he is a leader, but if a woman is more outspoken sometimes that can be seen as negative, … not only just by men, but I think as a society we do tend to … have a harder time with strong-willed women, [whereas] being strong-willed… for a man is a positive thing when it comes to leadership. (Male)*

Furthermore, the same types of people are more likely to be recognized as potential leaders.

> *[The] same [leaders] that are still living by [an old-fashioned] model [of leadership]) are the ones that can succeed and then get recognized and then get promoted, and then get nominated and it's a self-fulfilling culture.* (Female)

In addition to this implicit bias, multiple participants concurred that there continues to be overt gender discrimination within the medical environment. One participant expressed that, within the MUHC, there seemed to be less respect for female physicians including by non-physician professionals, compared to the francophone hospitals. Another participant's example highlighted this view:

> *If you [and a male colleague] are both talking to someone, I often find that the male … is being listened to more than the female… After … some mock codes, I've even had some nurses [say] "You're [going to] have to have…a deeper, more assertive voice, [because] they're [going to] listen to the male in the room".* (Female)

Some participants suggested that the individual Divisions within the Department of Pediatrics varied in terms of behaviours and attitudes which were supportive or unsupportive of gender equality. In some Divisions, though more so in the past, even senior female faculty had, at times, been less sympathetic to other women. Participants hypothesized that this was because these women had suffered in the same way or because of social pressures on women which led to women being unsupportive and undermining of each other, particularly in hierarchical relationships.

> *The attitude was "It's hard, suck it up!" … Proudly stating, "I took two weeks mat leave and I was back!"* (Female)

In addition, some women expressed that they did not apply for promotion or leadership roles because their own values or interests did not align with the leadership role or the reasons to apply for promotion. This may be due to the perception that effective leadership styles and roles often align with masculine stereotypes especially given that currently more men assume the high level leadership positions.

> *I don't care about the money [and it never has been the reason] for choosing particular positions... [It's different from the] traditional kind of model [of leadership]* (Female)

2. Lack of Female Role Models

Participants emphasized that the demographic profile of the leaders should mirror that of the faculty in the Department. Women in leadership positions would allow other women to "see" themselves in such a position and strive for leadership.

> *… if you look at the Division Directors… the ratio of male versus female, I don't think it represents the population as a whole. So … if you don't see women in leadership positions in your workplace, or… if you …perceive a bias …then that would be difficult for a woman, [especially] for women who have families; they will be struggling with [perceptions about] the role of motherhood and trying to advance in their professional careers…* (Male)

Having a role model was felt to be important to both women and men in order to allow them to envision themselves in a leadership role, if they so desired.

> *I think the most important thing was the role model. I could see myself practicing in a very similar fashion, mentoring other people in a very similar way…I found it beneficial and I said: "You know, that's what I want to be, that's how I want represent myself, that's how I want to help other people, so they don't struggle as much either."* (Male)

3. The Need and Value of Support and Guidance

a. Mentorship

Directly and indirectly, mentorship (being explicitly guided by another person) was frequently discussed. Mentorship was felt to be important to both women's and men's career advancement and a way of opening up possibilities.

> *I have really, really strong supportive mentors, who have been really helpful to me. I can almost trace every [stage]… in my career… back to a mentor.* (Male)

One participant pointed out that there is no formal mentoring program or leadership pathway within the Department of Pediatrics. Participants articulated that without a formalized mentorship program and without explicit encouragement by senior leaders, the current pool of leaders is recycled i.e. the same people, because of their visibility in leadership roles, "fall into other leadership positions" in a system in which leaders "just get taken from the same pot" (Female). In addition, one female participant mentioned that research has shown that men tended to nominate men for awards, but that women would not necessarily promote women. Therefore, the lack of mentorship and sponsorship may exacerbate the gender inequality in medical leadership, especially with the persistence of implicit biases, whereby both men and women are socialized to see men as leaders.

Although both women and men emphasized the value of mentorship, participants highlighted that women may require different type of mentoring compared to men such as:

i. **The need for women to have female mentors**, despite having male colleagues and seniors whom they admired and from whom they sought advice.

> *I've never associated a male as a mentor for me, just because they live a completely different experience than we do, … [like the need for] mat leave.* (Female)

ii. **A mentorship style that is geared towards women** i.e. with more prompting and encouragement. Many female participants conveyed that formal leadership roles would not have occurred to them had they not been prompted or encouraged. In addition, a common theme was raised regarding women's lack of confidence in their leadership abilities relative to men and the relative absence in academic medicine of encouragement for women to take on leadership roles. The lack of self-confidence and self-efficacy may likely be socially shaped (as opposed to related to the individual) and is further worsened by the lack of role models and the male stereotypes associated with what is considered an "effective" leader. As one female participant who has been a mentor noted,

> *Sometimes they don't think they could be potential leaders and you open their eyes to that possibility.* (Female)

Other participants highlighted the following:

> *Sometimes I need to be … more convincing with the [women]. The [men], sort of say "yes, I can see how [I could do] that", and girls say "really, are you sure?". So there's a little bit more of a convincing aspect… "I see you as this, I am looking at you, I see your potential" and [the women are] looking for ways to improve, looking for ways to work on something... the guys that I mentored just [take the advice and encouragement] really quickly… I need to be a little bit more convincing (with) the girls.* (Female)
>
> *[I've] heard a lot of [women] focusing on the "why not" instead of focusing on the "why" [regarding leadership positions].* (Female)
>
> *[Some] people … stepped forward and said, you know, "I want to do this", and because there was no infrastructure and no plan, they were given an opportunity to do that. And, I guess, to your detriment, if you weren't that kind of "go-getter" who had your own plan, you could very easily be left behind…* (Female)

iii. **A formalized mentorship process** would benefit all faculty but especially women since participants noted that women might be more reluctant to seek out mentoring.

> *…what I found dealing with women all the time is that there is a bit of reluctance to go for mentorship: "I don't know whom to talk to, I am too shy, I wouldn't even know where to begin" … [women will not seek mentorship] unless there is a formal structure that actually allows … the opportunity to be mentored by more senior faculty, … [mentorship] seems to be more of a natural fit for men, and I think women are a little bit too shy or less inclined to go there.* (Female)
>
> *The Division heads, which are mostly male here, and the Department heads at the university levels, who are mostly all male, … have a role to play in terms of looking within their groups and saying "you are potential leaders" and mentoring them in that direction. I don't think [many] of them actually think about that or do things in a formal way to help out. …women…need mentorship and guidance about leadership, in a very formal way, to make it possible to just have a vision of leadership on their horizon.* (Female)

b. Networking and Programs for Women

Participants discussed the value of networking which was felt to foster "peer support" and provide opportunities for women to share experiences and encourage each other.

> *… [networking is a] way [to] really get a chance to share… stories…sometimes horror stories, stories of success, strategies [and someone may suggest] "you know, you have to meet this person"… So in that informal setting you [get] a chance to meet a lot of people and … get … support. (Female)*

"Formal" opportunities of informal and/or social networking offers a forum share experiences and advice which participants saw as important for both the practical and cultural aspects of work. For example, one female participant suggested that it was important that women be informed and coached in promoting themselves, and valuing themselves, rather than, for example, being reluctant to discuss money.

Participants also suggested implementing a public space in local departments, divisions or units for sharing women's experiences as a way of building solidarity and support for women. This could aid in women's training to see their own value:

> *If women defend themselves … the "old boys' club" will have no choice but to see our value.* (Female)

4. Quantity and quality of roles women assume

a. Woman as the primary caregiver

Both male and female participants believed that, most of the time, women are expected to take on more of the family responsibilities at home which many agreed was due to society-wide expectations about the nurturing role of women.

> *You have to look outside in a broader society context… I've been reasonably successful in my career … I am very fortunate. I have a very supportive wife who was ready to give up her own career to raise our children … Of course I know women whose husbands have given up their career for theirs, but these are the rare exceptions. … It's the mentality of the society that has to change. … I did a lot of things that, if I was a woman, I am sure I wouldn't be able to do.* (Male)
>
> *… The second shift starts when you get home… I don't know if it's a mother thing, a woman thing, or a societal thing, but it is still the reality. …When I began my career, some people were saying… "don't do too much…" and "do you want some time off? "… "You're a young mother, you won't be able to do it." … you're frustrated by hearing that.* (Female)

Some participants said that they felt "guilty" taking maternity leave and that it was seen to be a "favour" which is now exacerbated by views that the political and organizational climate is worsening for women. This is exemplified by the replacement policies by the Quebec Minister of Health that may affect maternity leave as well as results from a survey by the Fédération des médicins spécialistes du Québec (FMSQ) which demonstrated that residents were still being asked by their organizations if they aspired to have a family.

Another female participant pointed out that roles that require attendance at early morning and late day meetings are not realistic for women with children. Another female participant added that there was also still a culture of expecting in-person meeting attendance i.e. "you have to be there on that seat … or you're not working".

Participants expressed concern about the lack of respect for the private domain of household and families in contrast with the public domain of work. Female participants also recognized that men who have family responsibilities and prioritize home life are facing consequences such as having had their position taken away from them. However, given that women shoulder extra responsibilities, the de-valuation of the caregiver role disadvantages women (more than men) in accessing leadership positions.

> *Maybe it's a Quebec thing, maybe it's a McGill thing, but somehow it's felt that [non-clinical work] should be your hobby. In other words, you are expected to do your full-time clinical job, and then … you are not remunerated for e.g. research… And this is expected to be [the case], because you're so lucky to work here … [it's a] vocation, and it is over and above what you need to do … so it breeds the [leadership] model of the person [who prioritizes work].* (Female)

The assumption and often reality that women are over-burdened with family responsibilities results in the perception, often unconscious, that women are less suitable for leadership positions than men.

b. Expectation for women to "do it all"

Two participants highlighted the expectations that women need to be able to "do it all".

> *… A lot of men that I know are okay not being all things [to all people]. … Women are having a really hard time, and it's … ingrained, how we grow up, that we are supposed to be able to do it all. (Female)*
>
> *A lot of what I hear in my everyday life is always this kind of feeling of inadequacy …* (Female)

Some female participants conveyed that, in addition to the expectation of having to do everything and being overworked, women might feel more reluctant to say "no" to particular requests, which may exaggerate their performance and role-modeling of particular tasks that are not recognized as high level leadership tasks. This is conveyed in the following excerpt:

> *It's very, very hard to say "no" to certain things. … you kind of say to yourself: "I really should say 'no'. … [But you want to make things] better, and you kind of push yourself to a point where it becomes very challenging – for your family, for your significant other, for your kids, and so, at the end of the day, there are lots of people who lose out. There are lots of people who benefit, but … I don't think that it's necessarily recognized in the same way.* (Female)

c. Less visible roles

Some participants suggested that women tend to take on more nurturing roles (e.g. education) rather than senior executive institutional roles (e.g. Departmental Chair) and these roles tend to be more informal, less valued and respected as well as less visible.

> *I [don't think we can really] ever divorce ourselves [from the] underlying social reality… of how we … see what leadership is. … Male leadership tends to be … about formal leadership roles. … The informal leadership that is taking place in [our] department … is heavily [undertaken by] women. … Significantly more women in the department … just do this sort of day-to-day, not named "chair of committee or department head," but "lived" leadership. …that doesn't necessarily get recognized or get much… applause and certainly no financial gain …* (Male)
>
> *… people have many different ways to lead, and actually the leadership that has been done by women [is] not being recognized right now. And if we just started recognizing it and talking about it more and formalizing that in some way, [for example], using vocabulary that's more appropriate … we would … see women who spontaneously choose to pursue some of the formal leadership as well…* (Male)

SUGGESTIONS

The following suggestions surfaced from the focus group discussions:

1. Promote wider use of the highly-regarded *Leadership Development Program* convened by the Faculty Development Unit.
2. Explore ways to increase the formal status of activities and roles that are currently informal or educational.
3. Introduce or promote formal support for informal networking at every career level.
4. Ensure a formal career and leadership mentorship program in divisions, units or departments for faculty and trainees and for which senior leaders are accountable.
5. Develop a policy or strategy for promoting women in leadership in each unit or division for which senior leaders are accountable.
6. Expose medicine and health professions educational students to topics of and advice for work-life balance.
7. Consider requiring each department, unit or division to have a public and accessible forum for women to discuss challenges in the work environment.
8. Develop a policy or policies for education and tangible behavioural incentives (or disincentives) in relation to equity and diversity in medical school and in clinical units, departments or divisions.
9. Develop a process to explore options for rendering work arrangements in clinical sites more flexible and family-friendly e.g. avoiding early morning or late afternoon meetings, accepting tele- or video-conferencing to attend meetings, development of policies for the intersection of home-work life, such as for family health days, which would allow personnel to take sick days either for themselves or family members.
10. Develop a policy or policies, with tangible incentives at the divisional, departmental or unit level, to render non-clinical work achievable, and paid for, within standard work hours.
11. Explore ways to ensure that there is adequate administrative support for leadership positions.
12. Sharing of leadership positions.
13. Revise the definition and “face” of leadership to include communal (e.g. nurturing and collaborative) traits as well as more “agentic” (assertive, decisive) traits.
14. Implement appropriate and feasible support such as reward system (e.g. Stanford’s *Time in the Bank* program), physician assistants etc.
15. Undertake a broader project on one or more of the themes highlighted to explore perceptions about and time spent on particular tasks.

BARRIERS TO WOMEN ATTAINING HIGH LEVEL LEADERSHIP POSITIONS IN THE DEPARTMENT OF PEDIATRICS

The results from the survey and focus groups support the current literature explaining why women are not assuming high level leadership within the McGill Department of Pediatrics. The barriers listed below were identified based on results from the survey, focus groups and literature on gender issues related to leadership.

COMMON MISPERCEPTIONS

There are several common misperceptions related to women in leadership that are important to dispel when trying to address the gender disparity in medical leadership.

1. ***Since there are an increasing number of women in medicine, there will naturally be an increased number of women leaders in time*** – The frequent suggestion that the gender gap will close naturally with the increased number of women in medicine does not hold true.[5,23] For example, in 2006, women made up 49% of the faculty of the Department of Pediatrics, yet more than 10 years later, only 29% of full professors in the Department are women and women make up only 31% of Division Directors. This persistent underrepresentation of women supports the findings from studies related to academic medicine.[5,27,47] Although there has been an increased number of women in the medical school, residency and faculty membership for decades, there has not been a proportionate increase in women in high level leadership.
2. ***Women are not interested in leadership positions*** - The assumption that women are less interested or engaged in their careers and in leadership positions than men, has been refuted by our findings which support the literature.[25,38,48-50] Both our survey and the literature clearly demonstrate that women are as interested in leadership roles as men.
3. ***Opportunities are equal for men and women*** – In fact, leadership opportunities are not equal. Our survey demonstrated that approximately 2/3 of women felt that women's leadership opportunities were inferior which supports the literature that men have more leadership opportunities than women.
4. ***Providing equal opportunities will result in gender equality in leadership*** – In fact, this is not the case. Since women and men are different, they will require different types of strategies to help them attain leadership roles. The Canadian International Development Agency (CIDA) explicitly emphasizes that this is a misconception since "gender equality cannot be achieved simply by offering the same opportunities to all genders. Rather, gender equality requires the equal valuing of both the similarities and the differences between women and men and the varying roles they play... the concept of equality acknowledges that women and men may sometimes require different treatment to achieve similar results, due to different life conditions or to compensate for past discrimination".[14] As one female survey respondent articulated, "Opportunities are the same but the ability to take advantage/accept the opportunities is different."

GENDER DISPARITY PRINCIPLES

Prior to discussion of the barriers that the Task Force believes prevents women from taking on leadership roles, it is important to recognize that:

1. The vast majority of faculty and trainees believe that everyone should have the right to realize their full potential.
2. There are gender stereotypes and biases that still exist.
3. The barriers to women in medical leadership stem from everyone, not just men.

Barrier 1 – Image of a Leader

When considering traits of an effective leader, both men and women tend to think of agentic traits such as: dedicated, hard-working, competent, strong, assertive, and decisive. Traits that we less commonly associate with effective leaders include communal traits i.e. warm, caring, sensitive, honest, nurturing, and supportive.[13,24,25,51] In addition, common gender stereotypes that persist unconsciously are that agentic traits are

typically seen in men whereas communal traits are typical traits of women.[25,51,52] This leads to an overgeneralization and assumption that men have these traits more than women and therefore the image of an effective leader is usually a man. In addition, our assumption that agentic traits are actually the traits of an effective leader is flawed. The literature demonstrated that many communal traits contribute to a transformational style of leadership which is often used by women and which has been shown to be as effective, if not more effective, than the traditional leadership styles.[53]

Despite the fact that the majority of departmental members believe in fairness for men and women, the literature shows that the majority of men and women still unconsciously perceive effective traits of a leader to include being assertive, decisive, action-oriented, independent, competent [5] traits that are typically associated with men. This results in several unintentional consequences:

1. Women don't consider taking on leadership roles because they perceive that they don't have the necessary traits of an effective leader or that their values and beliefs don't fit with what they perceive as the typical leader[7,48,49] and they don't want to become that kind of leader.
2. Other women and men don't consider women for these leadership positions because they are not believed to have the necessary traits.[7,8,18,52,54,55]
3. Women who may have many agentic traits are judged more harshly and less likeable by both women and men because they are perceived as "incongruous" with the stereotypical woman.[26,50-52,55-57] For example, men's behaviours may be seen as confident, assertive & analytical whereas women who exhibit the same behaviours are seen as conceited, aggressive, and cold.[51] Therefore, these women may not be seen as likeable enough to be a successful.[1] As Zen Liu describes, women seeking and/or assuming leadership roles are held to a specific standard and "must always take care not to appear too harsh or too soft".[57]

Most people, regardless of gender, hold these oversimplified assumptions about what women and men are like and should be like.[1] This results in implicit biases which guide decisions unconsciously even if they don't align with personal beliefs and values that both women and men should be considered for leadership positions.[1,26] These implicit biases have been woven into the academic culture for hundreds of years leading to a structure and standards that favour men for high level leadership positions and thereby, put women at a disadvantage. Additionally, people are not unaware of their own biases making these biases are much harder to change.

These implicit biases result in many more men in highly visible leadership roles which results in few role models for women. The lack of role models makes it difficult for women to envision themselves in these leadership roles perpetuating a reduced number of women considering and assuming medical leadership roles.[27,57]

In addition, selection and promotion committees are implicitly biased to choose men for these positions for a variety of reasons. Wording in leadership job descriptions tend to contain more agentic, masculine wording,[21,49] and women tend to be rated as less competent even if they have the same qualifications as the male candidates[1,50,51,58] especially if they are mothers.[51]

In addition to the implicit biases, there still remain explicit gender discriminations and micro-inequities within the Department of Pediatrics and the Montreal Children's Hospital e.g. asking a women colleagues to take minutes at meetings, men ignoring, talking over or interrupting women, and comments that women are only in leadership positions because of gender equity programs. Even seemingly positive comments such as "I love women" and "women are more intuitive" are sexist and can restrict women's promotions and career advancement.

As physicians and academics we believe that we are objective and open-minded and that medical leadership is or should be a meritocracy where people are chosen based on the merits of their work and talent. However, as a department we are selecting our high level leaders from a narrow gender pool despite the fact that we have increasing number of female faculty. If highly capable women are not in the pool of leadership candidates, we are losing significant advantages that come with gender diversity, for our patients and for ourselves.

Barrier 2 – Lack of Active Guidance

1. **Mentorship quantity and quality** - Mentorship has been shown to be important for career development of both women and men by providing guidance and facilitating opportunities.[5,7,8,25,47,59] Although our results demonstrate that both genders expressed the need and desire for formal mentorship programs, the literature describes that women receive less quantity and quality of mentoring than men.[51,60,61] The literature describes that men mentor women less often than men, are hesitant to provide direct feedback and underestimate women's desire and/or capability to lead an initiative.[51] Fewer women in top leadership roles translates into fewer senior female mentors who are often better at providing women with guidance and strategies to navigate obstacles and challenges specific to women's lives as well as encouragement for women to participate in more visible and relevant activities that can lead to higher level leadership positions.[25] Since women are less likely to have a senior mentor or a female mentor, they are less likely to gain visibility and/or encouragement which will limit their advancement.[51]
2. **Lack of Networking**[29,62] – Social networking allows faculty to develop closer relationships and to share career-related information related to opportunities, challenges and politics. This allows those who participate in networking to become more familiar with the academic environment and institution and to become better known by others, especially those in leadership positions, all of which facilitate career advancement and leadership opportunities.[26,51] However, women are inherently disadvantaged when it comes to networking because:
    a. Exclusivity of networking since network tends to occur at times (i.e. evenings and weekends) that are more prohibitive for women who still disproportionately have more family commitments[1] or occur in a setting in which women are not invited e.g. golf game[25]. In addition, there were multiple references by both men and women in the survey and focus groups to the "old boys club" network which lacks diversity and therefore perpetuates the same types of people in leadership.
    b. When women do socialize, studies show that these networks are less helpful for women's career advancement compared to men's social networks[1,25] since their networks are "less extensive, provide less support and are less likely to include influential" people.[51] Our survey results showed that over 65% of women perceived women's networking opportunities as different from men's.

    Without effective networking, women are less likely to learn less about their institution[51] and its leadership opportunities and women will be less "well known" than their male counterparts. Consequently, women will be considered less often as candidates for leadership positions,[4] especially for positions that are appointed by male leaders.[26]

Barrier 3 – Family Obligations

Women still carry a disproportionate amount of family responsibilities, which includes caring for children, partners and family members.[1,7,18,25,27,29] Unfortunately, the current work culture and framework is still based on an obsolete model which was built on the stereotype that men are in the workforce and women are at home full-time as the main caregiver. Therefore, female faculty in the Department who also tend to be the family's primary caregiver face significant barriers to assuming leadership positions, such as:

1. Women are stereotypically assumed to be the main caregiver and therefore it is assumed that they are not interested or able to take on visible positions that will help advance their careers.[7,27]
2. Women who are having children or have to tend to family responsibilities are perceived as less dedicated to their careers and to advancement,[25] regardless of the quality of their work.
3. Traditionally, high visibility roles and high level leadership role require extended hours of physical presence at work and off-hour networking which are not compatible with family obligations.[7,25]
4. Since women are expected to take on responsibility of family and work, they risk overworking and burnout, and, therefore, are forced to choose between their career and their family.[1,27]
5. Women have less "professionally mobility" which is often important for career advancement, either

because they themselves would not consider moving for career advancement or because selection committees assume that they will not move and, therefore, they are not offered the leadership position.[25,63]

The survey results demonstrated that more women saw family responsibilities as one of the top 3 barrier to their own attainment of leadership positions and both men and women ranked family responsibilities as the top challenge to women within the Department of Pediatrics seeking leadership positions.

Interestingly, some women and men participating in the survey and focus groups stated that it is a woman's "choice" not to consider and/or assume high level leadership roles. However, if we take into consideration that women have fewer role models, fewer mentors and fewer networking opportunities, that the majority of women are the primary caretakers, and that women are the ones to bear children and breastfeed, we may rethink the idea that women actually have a "choice". Regardless of whether women have the choice or not, the fact that significantly fewer women assume high level leadership positions is still an issue.

Barrier 4 – Distracting Roles

Given the implicit gender biases related to the image of a leader, the lack of active guidance for women and women's significant family obligations, women tend to gravitate towards clinical and educational roles such as Resident Rotation Coordinator, Resident Program Director, Director of a CPD activity, Grand Rounds coordinator etc. (Figure 7). These roles allow more flexibility and are seen as fitting with women's traits (nurturer, supporter, collaborator). Although these positions typically help the Department, they do not necessarily advance women to higher leadership positions because they tend to be less visible, less valued, do not include opportunities to network or develop higher level leadership skills, and are not necessarily viewed as actual leadership positions.[26] The disproportionate number of women in these positions then perpetuate the gender bias that women are good at being caretakers and supporters, as opposed to leaders and problem-solvers, reinforcing the stereotype. In addition, women may subconsciously internalize this bias and don't view themselves as leaders either.[26] These lower leadership positions also tend to be very time-consuming, resulting in less time available to spend on higher level initiatives, such as publications and grant applications, which are important for promotion to a higher rank, which is in itself linked to candidacy for higher level leadership positions.[26] Therefore, these less visible and distracting roles may hinder women's opportunities for career advancement[9,25,31,58] resulting in women remaining in lower level leadership positions throughout their career.

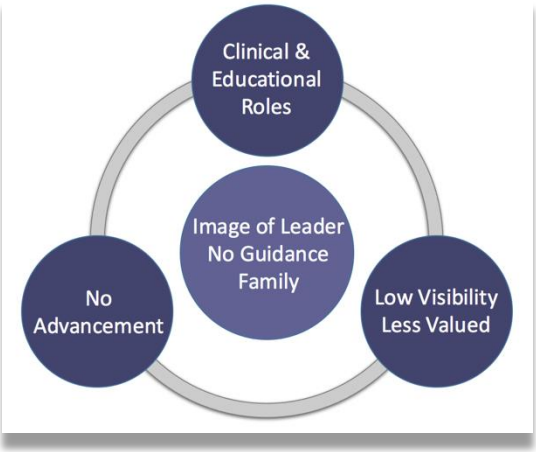


Figure 7. Distracting Role Cycle

Barrier 5 – Organizational Structure

The survey and focus group results highlight the perception that the current organizational structure within the Department of Pediatrics and Faculty of Medicine is based on an outdated model where men used to represent most of the workforce and women were the stay-at-home caregivers. This has resulted in an antiquated organizational structure that continues to disadvantage women as follows:

1. The current academic framework, in terms of career advancement, is still based on a man's life cycle i.e. a linear trajectory where men steadily advance until retirement. This model of career advancement is not compatible with the majority of women's life cycles which tend to be more "M-shaped" whereby women in their early career advance the same as men but then experience peaks and valleys often related to childbearing, breastfeeding and raising young children which impede women from staying on track and

reaching the same level of career advancement as men.
2. The lack of a family-friendly environment such as the scheduling of early morning and late day meetings, the lack of onsite daycare and gym, and the lack of encouragement for meeting participation by videoconferencing, adds to the inability of primary care-takers to engage and assume roles that will advance their career.
3. The lack of data tracking and measurement of metrics in the Department of Pediatrics and Faculty of Medicine impedes the ability to identify issues related to gender disparity and to determine if initiatives will successfully close the gender gap. The lack of gender-related data became apparent when the Task Force tried to collect demographic historical data, even including statistics from 2016.
4. The McGill Faculty of Medicine and, in turn, the Department of Pediatrics lacks a specific gender diversity policy which would demonstrate a commitment to gender diversity in leadership and help focus on specific targets. Of note, the McGill Faculty of Medicine has a diversity statement (but not a clear gender diversity policy) and McGill University has equity guidelines for Deans and Chairs to use for the hiring of ranked academic staff but not for the recruitment and selection of faculty for leadership positions.

The above-mentioned barriers lead to women unintentionally experiencing:
1. The **"Glass Ceiling"** effect whereby, despite an increased proportion of women in academic medicine, women are within sight of high level leadership positions but still face invisible barriers to assume these positions which men still disproportionately occupy.[11,24,25]
2. The **"Sticky Floor"** where more women than men in academic medicine are not promoted and/or provided with adequate resources early on in their careers and are therefore held back and get "stuck".[24,25,36]
3. A **lack of self-confidence and/or lack of self-efficacy** (the belief in the ability to succeed) that further strengthen implicit gender biases within themselves and others. As noted by one focus group participant, self-promotion and "go-getter" attitudes (stereotypically masculine behaviour and less likely to be demonstrated by women) facilitates the attainment of leadership positions. This comment supports the literature which shows that women report lower self-efficacy[48,49,56,64], and therefore, the lack of confidence and underestimation of capabilities result in less likelihood to self-promote as leaders despite actual capabilities as leaders.[7]
4. **Stereotype threat**, whereby women may experience anxiety and underperform when assuming high level leadership positions due to the awareness (implicit or explicit) that high level leadership roles are seen to be stereotypically male roles.[1,49] This results in women being less interested in the position and even being less engaged overall. The gender-related stereotype threat can even be elicited when the stereotypes are communicated more subtly through "micro-inequities" by men[1] such as dominant tone of voice or facial expression, or other subtle discriminatory comments and behaviours[25] (as discussed in "Barrier 1").

The data from our survey and focus groups supports the literature and underscores the fact that women in the Department of Pediatrics continue to face more obstacles than men,[25,29] both implicit and explicit, at all stages of their career[5] that perpetuate the gender gap[8] similar to that demonstrated in academic medicine as a whole. The academic culture, defined as "the formal and informal institutional attitudes and programs"[29] is currently still based on a traditional male model within which are male-based criteria[5], standards policies, and structures which continue to influence who is promoted and who hold leadership positions.[1] As was mentioned in both the survey and focus groups, an "old boys' club" culture and environment remains in which networking, recognition, criteria for promotion, leadership structure and institutional organization favour men.[25,29]

TASK FORCE RECOMMENDATIONS

Based on results from the departmental survey and focus groups and information gleaned from the Women's Leadership conference, all of which support the literature on gender diversity, the Task Force proposes the following recommendations and associated action plans. If implemented, these recommendations will help change the academic culture[65] to not only increase gender diversity but also to support faculty self-actualization and wellness all of which will also translate into richer academics and better patient outcomes. The Task Force recognizes that, practically, the recommendations may need to be implemented in a step-wise fashion.

It is also important to recognize that, in order to achieve gender diversity in high level leadership, we must recognize that women and men require different approaches to assume these roles. Gender-diverse leadership will require solutions that target issues specific to each gender rather than a "one-size-fits-all" approach.

Recommendation #1 – Implement Gender Diversity Training and Education

In order to begin to solve the problem of gender disparity in medical leadership, It is critical for the entire Department of Pediatrics to recognize the existence of this problem and the importance of gender diversity.[19] Therefore, the Task Force recommends the **recruitment of a diversity expert** to help implement:

1. **Gender-diversity education of faculty members** related to gender bias and importance of gender diversity. The value of bias training related to gender disparity and causes is supported by the literature[11,14,19,52,66] which demonstrates that training results in increased gender bias awareness, perceived benefits of gender diversity, increased self-efficacy and increased promotion of gender equity by the individuals.[54]
2. **A Department of Pediatrics Gender Diversity Policy** that ideally would be part of a larger McGill Faculty of Medicine policy. The policy should include targets for females in leadership positions. Although many perceive that gender-related targets eliminate a system based on merit and lead to reverse discrimination of men, implementing these targets has actually been shown to enhance a system of meritocracy by increasing the number of qualified candidates, especially male candidates.[1] This results in an increased pool of talented individuals and does not lead to favoritism and unfair advantages.[1] Gender-related targets also help to reduce implicit biases by increasing the exposure of selection committees to more female leaders which transforms the unconscious perception of a leader to include both women and men.[26] Of note, once the gender imbalance is corrected, explicit targets become unnecessary since the presence of more women leaders will result in more women applying for and assuming leadership positions (through role modeling, mentorship, sponsorship, implementation of "female-friendly" initiatives, reduction of implicit biases etc.).
3. **Gender-diversity training of all Departmental leaders -** The McGill Faculty of Medicine (through the Office of Social Accountability and Community Engagement (SACE) in collaboration with the Faculty Development Office) is offering diversity workshops to Department Chairs' to increase their understanding of and commitment to diversity. However, the Task Force recommends that diversity workshops and training be mandatory for high level leaders within the Department (i.e. Chair, Head of Child Health Research, Vice-Chair, Associate Chairs, Division Directors).
4. **Bias-free selection and promotion** should include transparent and wide-reaching communication about opportunities, creation of part-time and shared leadership position, diversity of membership on selection committees, and gender-neutral job descriptions, promotion/grant/award criteria and evaluation tools.

Recommendation #2 – Track and Monitor Demographic Data and Metrics

Establishing a gender diversity policy, will formalize a standard and vision but it should also establish clear and measurable goals (e.g. increase the proportion of women in leadership by *x amount* within *x years*) which then need to be tracked. Therefore, in order to ensure that gender diversity initiatives are being implemented and

effecting change, it is essential to collect data and measure and report the impact of the changes on established metrics.[8,19,27] This type of "accountability framework"[14] can be developed in collaboration with diversity experts using already established frameworks[9,14] as references.

1. **Tracking demographics** for all departmental activities, including department faculty members, members of selection committees, leaders, large grant recipients, salary support, first/last author on publications etc.
2. **Measurement of metrics and targets**, for example, gender representation by rank and leadership role, differences in salary support and research seed money, lead of high visibility projects by gender.[19] Measurements will assess performance on what is important to our department related to gender diversity and where the Department is at, at any defined point in time.
3. **Real-time reporting** of information gathered from this system through regular review of the data by the Department Chair and Executive Committee followed by posting of the data on the Department's website, for transparency and accountability.

Recommendation #3 – Adopt a Renewed Career Framework

Once a diversity expert is recruited, the faculty receive some diversity training and data collection has begun, the Task Force recommends that the Department adopts a new career framework which supports work-life integration, optimal for faculty productivity and wellness. It is important to recognize that the goal is work-life integration (as opposed to work-life balance) since the current reality is that "work" often occurs at home and personal life-related issues often need to be addressed while at work. Using a framework which accepts this rather than seeing work and life as being opposed to each other, will help to increase gender diversity.

There are several different suggested frameworks in the literature but the one that the Task Force believes has the most potential for the Department of Pediatrics is a program that was developed by physicians at Stanford called the Academic Biomedical Career Customization (ABCC).[27] There are two components to the ABCC:

1. **Career Framework** – This framework involves the creation of an individualized career development plan for each clinician and researcher with an expert in collaboration within their division and the Department. Rather than a "one-size-fits-all", the plan fits with the individual's different life stages based on five elements for each stage: pace (decelerated-accelerated), workload (reduced –full), schedule (unpredictable-predictable), role (contributor-leader), work-life (personal-work focus). This type of framework would support formalized career development plans which are in much need by faculty as well as support and encourage women through periods of maternity leave and childrearing responsibilities.
2. **Banking Program** – This innovative program allows faculty to earn "credits" for tasks that are either not compensated or not adequately recognized and/or that enable flexibility for other faculty, e.g. serving on a selection committee. These credits can then be redeemed for support services at home (e.g. housecleaning, meal delivery) or at work (e.g. grant writing, minute-taking, creation of PowerPoint slides). This would address the oft-mentioned comments in the survey and focus groups about the need for support related to less impactful, non-physician tasks that physicians are often required to perform which take away from the more meaningful physician-related work and higher visibility roles.

While this type of framework has many benefits, it is important to recognize that this initiative alone is not sufficient to achieve gender diversity in leadership.[23]

Recommendation #4 – Provide Active Guidance for Women

1. **Formal Mentorship Program** – Many of the departmental faculty highlighted the desire and need for formalized mentorship programs for all faculty. A formal mentorship program will require the recruitments of both female and male mentors with adequate preparation and training of mentors as to the types of guidance that will encourage career advancement, recognizing the different needs of female and male

mentees[23,51] since "a bad mentor can be hindrance to many high achieving women".[5] The type of mentorship must not only take into account gender but also stage of the mentee's career with a focus on encouragement, collaboration, learning and engagement.[5]

2. **Networking** – The Task Force recommends that the Department:
   a. **Publicize pre-existing academic women's networks** and ensure leaders and mentors encourage women's attendance.
   b. **Create a Department of Pediatrics women's networking group** with top leadership in attendance.
3. **Workshops, programs and meetings**
   There should be more explicit encouragement and support for women to participate in:
   a. **Leadership workshops, programs and retreats** – The Task Force recommends that the Department of Pediatrics identify and support at least four female departmental members per year (with a minimum of one female faculty involved in research, one female faculty involved in education and one trainee) to a maximum of $20,000 total per year. There are many different programs, conferences and workshops related to women's leadership skills for physicians at different career stages[67-70] that have been shown to increase engagement, self-efficacy, negotiation skills and leadership behaviours[5,7,23,31,47] which increase the chance that women will pursue and assume leadership opportunities.[31] Examples of such programs include: McGill Faculty of Medicine Leadership Program, Leadership for Medical Women conference (Physician Leadership Institute, Canadian Medical Association), Executive Leadership in Academic Medicine, C - Change Faculty Mentoring Program for Mid-Career and Senior Faculty (Brandeis university)
   b. **Scientific/Educational meetings** – Although the vast majority of scientists, clinician/scientists and clinician/investigators attend scientific meetings, the Task Force recommends that the Department ensures that at least 80% of clinician-educators and clinician-administrators attend a minimum of one scientific or educational meeting/conference per year, even if not presenting their own work.
   c. **Academic promotion information sessions geared for women** – The Task Force recommends that the Chair of the Department of Pediatrics requests that the McGill Faculty of Medicine provide an academic promotion session specifically geared for women offering an opportunity to educate women about female-specific tools and strategies as well as challenges when seeking promotion.[29,66] This type of session is offered at University of Toronto and offers an opportunity to discuss female-specific challenges and approaches for women related to promotion application.

Recommendation #5 - Establish a Family-Friendly Work Environment

The Task Force recommends the establishment of a more family-friendly work environment which would benefit both women and men and include:

1. **Avoidance of meeting times early in the morning or late in the day**
2. **Acceptance and availability of video- or tele-conferencing options** to ensure that faculty can participate in meetings remotely
3. **Petitioning, in collaboration with other departments and health professionals, for:**
   a. **On-site affordable child-care** with extended hours and options for emergency child care
   b. **On-site amenities and services** e.g. pharmacy, prepared meals
   c. **On-site employee gym**
4. **Creation of an open forum to enable the sharing of additional ideas** for resources that would optimize a family-friendly work environment

Recommendation #6 – Formally Recognize Departmental Members' Clinical, Administrative and Educational Achievements Equal to Research Achievements

The Task Force recommends that the Chair, in collaboration with the Department's leadership, establish methods to recognize all types of achievements which will increase the visibility of faculty and trainees and value of the various types of academic and medical roles.

APPENDICES

Appendix I – Department of Pediatrics Women in Leadership Survey

As a member of the Department of Pediatrics (faculty or resident), you are invited to participate in this survey on women in medical leadership.

The main goal of the survey is to explore perceived barriers to women in medical leadership as well as to surface innovative ideas to increase women in leadership roles in the Department of Pediatrics. The information collected in this study will be used by the Women in Leadership Task Force to develop recommended action plans for the Chair of the Department to increase women in leadership positions. In addition, results of the survey may be published. (An exemption from Ethics review and approval was received from the REB given that this is a Quality Improvement project.)

This questionnaire will take approximately 5-10 minutes to complete. The survey is anonymous and all answers to the survey, including elaborated written responses, are being collected anonymously. Digital data will be stored in secure computer files. Data will not be reported for cells smaller than 3 individuals to prevent identification. Direct quotes from comments in the survey may be used in the Task Force report and/or published data. Your participation is voluntary and you may refuse to participate without penalty or loss of benefits. There are no known risks for those who choose to participate.

All participant will be eligible for a draw of two $25 gift certificates. To enter the draw, you will need to provide your email address at the end of the survey. Your email will not be linked to your responses.

By completing and submitting the survey, you are consenting to:

1) Participate in the survey
2) Allow the use of the data and comments in the survey to be used for publication purposes.

Unless specifically indicated, the survey should be completed with respect to your experience with leadership within the Department of Pediatrics at McGill University. Examples of leadership include Program Director, Committee Chair, Course Coordinator, Division Director, Department Chair, etc.

The questions in this survey have been modified from several online resources used to survey gender-related differences in leadership. References to these resources are included at the end of the survey.

The Women in Leadership Task Force will also be conducting focus groups within the next 1-2 months. At the end of the questionnaire, you will be asked to provide your e-mail address if you are interested in being invited to one of these focus groups. Your email address will be collected independently of your survey responses i.e. your survey responses will remain anonymous.

(Questions indicated by a red star are mandatory)

Part A: THE BASICS

1. ***Gender – I identify as:**
   Male
   Female
   I do not identify as male or female
2. **Number of years since primary degree of appointment (MD or PhD; MD-PhDs should indicate years since last degree):**
3. **Number of years since appointment in Department of Pediatrics at McGill University:**

4. ***Current academic rank: Resident, Lecturer, Assistant Professor, Associate Professor, Full Professor, other**

5. **Division of primary appointment within Department of Pediatrics (include option to skip question):**

6. **Please indicate percent of total professional time spent in each of the following categories:**
   Administrative ___%
   Clinical ___%
   Educational ___%
   Research ___%

7. **Do you currently hold or have you held a leadership position …**
   a. ***within the Department of Pediatrics?**
      No
      Yes
      If "Yes", please elaborate in the comment box below
   b. ***within McGill University?**
      No
      Yes
      If "Yes", please elaborate in the comment box below
   c. ***nationally or internationally?**
      No
      Yes
      If "Yes", please elaborate in the comment box below

8. ***Please indicate your level of agreement with this statement:**
   Independent of my job title, my peers view me as a leader.
   Strongly Disagree
   Disagree
   Neutral
   Agree
   Strongly Agree

   Option to elaborate in the space below.

9.
   a. ***I have a clearly defined professional development plan that includes a set of goals and required skills and competencies needed to advance career growth and leadership roles.**
      Strongly Disagree
      Disagree
      Neutral
      Agree
      Strongly Agree

   b. ***Please check the option that best applies:**
      My professional development plan was created in collaboration with a mentor or supervisor.
      I have a mentor but not a professional development plan.
      I have a professional development plan but do not have a mentor
      I do not have a mentor nor a professional development plan
      Other

      Option to elaborate in the space below.

Part B: PERSONAL LEADERSHIP EXPERIENCE

10. ***How important is achieving a leadership position for you personally?**
    Not at all important
    Not very important
    Neutral
    Somewhat important
    Very important

11. ***Please indicate YOUR top 3 reasons for pursuing a leadership position in the Department of Pediatrics?** (Please select at most 3 answers)
    - Having a leadership position is not important to me
    - To be a positive influence for others in the organization
    - To effect change
    - Ability to shape my path more than if I were in a non-leadership position
    - The challenges associated with leadership are fulfilling
    - Pride in rising to the top of an organization
    - Financial compensation associated with the position
    - To bolster my resume for future career opportunities
    - Prestige
    - Obligation/sense of duty
    - Other

    Option to elaborate in the space below.

12. ***Have you experienced barriers with respect to attaining leadership positions?**
    a. **No**
    b. **Yes**

    If the respondent answered yes, they should then complete the following question:
    ***What are the barriers that you have experienced with respect to attaining a leadership position (choose all that apply)**
    - Inflexible hours
    - Leadership positions are not shared between two (or more) people
    - Family responsibilities
    - Lack of leadership education and knowledge
    - Lack of support network
    - Lack of mentors
    - Lack of role models
    - Not identified and guided for leadership positions
    - Lack of confidence/perceived capability
    - Implicit biases e.g. gender-specific qualities as selection criteria from leadership position
    - Lack of leadership learning opportunities ensuring women are successful and seek leadership positions
    - Formal titles are not important to me
    - Difficulty getting on leadership track following parental/medical/personal leave(s)
    - Sense that position would not help career
    - Doubt of being able to effect change/make a difference
    - Concern over the position getting in the way of personal life
    - Stress associated with the position
    - Political infighting
    - Networking and after-hours commitments required of position
    - Uncomfortable with new challenges
    - Other

    Option to elaborate in the space below.

13. ***Have you ever specifically avoided a leadership position?**
    No
    Yes
    *If yes, please indicate all categories that apply
        Administration
        Clinical
        Education
        Outreach
        Research

    Option to elaborate in the space below.

14. ***Indicate the TOP 3 factors that contribute to your career satisfaction?** (Please select at most 3 answers)
    - Satisfaction with my team
    - Challenging work
    - Satisfaction with culture of the hospital/organization
    - Satisfaction with culture of the Department of Pediatrics
    - Recognition
    - Making a difference to others
    - Belief in the Departmental direction
    - Money
    - Promotional progress
    - Job security
    - Other

    Option to elaborate in the space below.

15. ***How satisfied are you with your work-life balance?**
    Not at all satisfied
    Not very satisfied
    Neutral
    Somewhat satisfied
    Satisfied
    Very satisfied

    Option to elaborate in the space below.

16. ***I believe my professional opportunities are:**
- Completely limitless
- Somewhat limitless
- Slightly limitless
- Neither limited nor limitless
- Slightly limited
- Somewhat limited
- Completely limited

Part C: GENERAL VIEWS ON LEADERSHIP

17. ***Choose the top 3 items that you believe are the most common challenges to WOMEN IN THE DEPARTMENT OF PEDIATRICS seeking leadership positions. Please answer this question based on your perspective of the challenges encountered by women in general as opposed to challenges that you have faced personally)**
    - Inflexible hours
    - Non-shared leadership positions
    - Family responsibilities
    - Lack of leadership education and knowledge
    - Lack of support network
    - Lack of mentors
    - Lack of role models
    - Not identified and guided for leadership positions
    - Lack of confidence/perceived capability
    - Unconscious, implicit biases e.g. gender-specific qualities as selection criteria from leadership position
    - Lack of programs ensuring women are successful and seek leadership positions
    - Formal titles are not important to women
    - Difficulty getting on leadership track following parental/medical/personal leave(s)
    - Sense that position would not help career
    - Doubt of being able to effect change/make a difference
    - Concern over the position getting in the way of personal life
    - Stress associated with the position
    - Political infighting
    - Networking and after-hours commitments required of position
    - Uncomfortable dealing with new challenges
    - Other
    - None

    Option to elaborate in the space below.

18. ***In your opinion, are the leadership opportunities for women the same, inferior or superior to those for men?**

    Women's opportunities are the same as men's opportunities
    Women's opportunities are inferior to men's opportunities
    Women's opportunities are superior to men's opportunities

Option to elaborate in the space below.

19. ***Informal networking refers to ad hoc interactions with colleagues, peers, and superiors in a social/informal (e.g. business trips, sports, social after-work gatherings, etc…) that provide opportunities for mentoring or information important for career advancement and/or leadership opportunities. In your opinion, are the opportunities for informal networking the same or different for men and women?**

    The same
    Different

    Option to elaborate in the space below.

20. ***Select the TOP 3 strategies that you feel would enable more women to take on leadership positions within the Department of Pediatrics.**
    - Leadership courses Education/knowledge
    - Support network
    - Developing personal effectiveness (time, work/life balance and stress management)

- More guidance
- Mentorship
- Shared leadership positions
- Flexible hours
- Homework/play space on-site for leader's children in order to attend meetings after 3:00 pm
- Daycare on-site
- Better/more administrative support
- More financial remuneration
- Fewer meetings
- more access to communication technology from a distance to facilitate meetings
- None

Other

Option to elaborate in the space below.

21. ***The Department of Pediatrics recognizes and rewards strong leadership**

    Strongly Disagree
    Disagree
    Neutral
    Agree
    Strongly Agree

Thank you for taking the time to complete this survey. If you have any additional comments, concerns, or suggestions that you feel were not covered in this survey, please add them here or contact Laurie Plotnick (laurie.plotnick@mcgill.ca) or Aimee Ryan (aimee.ryan@mcgill.ca).

Comment box

Next Page:
Focus Group Participation
If you are interested in participating in a focus group regarding your experience with women in medical leadership in the Department of Pediatrics, please provide your email address. Persons of any gender are invited to participate in the focus groups. (Your email address will not be linked to your survey responses, which will remain anonymous)

Next Page:
Gift Certificate Draw
If you would like to be included in the draw of a $25 Starbucks gift certificate, please provide your email address. (This email address will not be linked to your survey responses, which will remain anonymous)

Appendix II - Survey Sub-analyses by History of Leadership within the Department of Pediatrics

	Leader			Non-leader		
	Female	**Male**	**STATISTICS**	**Female**	**Male**	**STATISTICS**
	(n)	(n)		(n)	(n)	
Overall	35.0% of F (36)	62.0% of M (31)		65.0% of F (67)	38.0% of M (19)	
Mean # years since primary degree of appointment	21.4 (33)	28.8 (30)	t=0.73; p=0.50	17.9 (63)	17.9 (17)	t=.02; p=0.98
# years since appointment in McGill Department of Pediatrics	12.8 (28)	18.4 (30)	t=0.77; p=0.45	11.38 (65)	14.5 (15)	t=0.96; p=0.34
Current Academic Rank						
Resident/Fellow	11.1% (4)	9.7% (3)		20.9% (14)	2.1% (4)	
Assistant Professor	47.2% (17)	38.7% (12)		53.7% (36)	42.1% (8)	
Associate Professor	36.1% (13)	29.0% (9)		22.4% (15)	10.5%(2)	
Full Professor	5.6% (2)	22.6% (7)	χ^2=4.25; p=0.24	3.0% (2)	15.8% (3)	χ^2=9.65; p=0.14
% total professional time spent in each of the following:						
Administrative	18.0% (34)	20.9% (26)	t=1.24; p=0.22	12.9% (58)	10.3% (16)	t=0.11; p=0.92
Clinical	54.0% (34)	53.9% (26)	t=.34; p=0.74	62.7% (58)	64.7% (16)	t=0.31; p=0.76
Educational	15.3% (34)	10.7% (26)	t=1.57; p=0.12	13.1% (58)	7.8% (16)	t=1.16; p=0.25
Research	13.2% (34)	14.5% (26)	t=1.10; p=0.28	19.7% (58)	17.2% (16)	t=1.08; p=0.29
PERSONAL LEADERSHIP						
Currently holds or has held leadership position:						
within McGill University						
Yes	(16)	(16)		(14)	(2)	
No	(20)	(15)	χ^2=0.34; p=0.56	(53)	(17)	χ^2=2.26; p=0.32
nationally/internationally						
Yes	(14)	(17)		(14)	(4)	
No	(22)	(14)	χ^2=1.70; p=0.19	(53)	(15)	χ^2=0.63; p=0.77
"Independent of my job title, my peers view me as a leader" strongly disagree (1)……..strongly agree (5)	3.83 (36)	3.74 (31)	t=0.41; p=0.68	3.91 (67)	4.11 (19)	t=0.68; p=0.50
Importance of a leadership position for respondent personally Not at all important (1)……..Very Important (5)	3.76 (34)	3.63 (30)	t=0.44; p=0.66	3.21 (64)	3.63 (19)	t=1.41; p=0.16
CAREER DEVELOPMENT						
"I have a clearly defined professional development plan" strongly disagree (1)……..strongly agree (5)	3.22 (36)	2.97 (31)	t=1.09; p=0.28	3.09 (67)	3.16 (19)	t=0.27; p=0.79
Mentor and Professional Development Plan (PDP)						
I do not have a mentor nor a PDP	(14)	(15)		(34)	(7)	
I have a mentor but no PDP	(10)	(4)		(14)	(2)	
I have a PDP but no mentor	(6)	(4)		(11)	(7)	
My PDP was created with supervisor/mentor	(3)	(4)	χ^2=1.02; p=0.80	(3)	(3)	χ^2=8.13; p=0.23
other	(3)	(3)		(4)	(0)	

POTENTIAL BARRIERS						
"Have you experienced barriers with respect to attaining leadership positions"						
Yes	(19)	(7)		(21)	(4)	
No	(15)	(23)	χ^2=7.00; p=0.008	(43)	(15)	χ^2=1.38; p=0.50
"Have you specifically avoided a leadership position?"						
Yes	(13)	(17)		(13)	(5)	
No	(21)	(30)	χ^2=2.39; p=0.30	(50)	(14)	χ^2=2.51; p=0.64
Perception of leadership opportunities for women						
Inferior	(19)	(11)		(38)	(5)	
Same	(14)	(16)		(19)	(13)	
Superior	(0)	(2)	χ^2=4.03; p=0.13		(0)	χ^2=10.43; p=0.03
Perception of opportunities for informal networking for men and women						
Same	(8)	(19)		(23)	(12)	
Different	(25)	(10)	χ^2=10.70; p=0.001	(58)	(6)	χ^2=4.05; p=0.13
"How satisfied are you with work-life balance?" Not at all (1)……Satisfied/Very Satisfied (5)	3.71 (34)	3.30 (30)	t=1.14; p=0.26	3.25 (63)	3.26 (19)	t=0.03; p=0.98
I believe my professional opportunities are: completely limited (1)…….completely unlimited (7)	4.33 (34)	4.90 (30)	t=1.22; p=0.23	4.89 (63)	4.84 (19)	t=0.11; p=0.92
The Department of Pediatrics recognizes and rewards strong leadership Table 4 Closed-ended strongly disagree (1)….strongly agree (5)	3.20 (30)	3.00 (25)	t=0.80; p=0.43	3.04 (57)	3.25 (16)	t=0.88; p=0.38

Appendix III - Survey Sub-analyses by Years since Primary Degree of Appointment (Career Level)

	<15 years			15-25 years			>25 years		
	Female	**Male**	**STATISTICS**	**Female**	**Male**	**STATISTICS**	**Female**	**Male**	**STATISTICS**
	(n)	(n)	(n)	(n)	(n)		(n)	(n)	
Overall	35.9% of F (37)	30.0% of M (15)		31.1% of F (32)	26.0% of M (13)		33.0% of F (34)	44.0% of M (22)	
Mean # years since primary degree of appointment	6.27 (37)	6.60 (15)	t=0.20; p=0.84	19.7 (32)	19.9 (13)	t=.05; p=0.96	35.4 (27)	34.8 (19)	t=0.27; p=0.79
# years since appointment in McGill Department of Pediatrics	3.29 (36)	4.23 (13)	t=1.04; p=0.30	12.2 (32)	15 (13)	t=1.67; p=0.10	27.2 (26)	27.8 (18)	t=0.23; p=0.82
Current Academic Rank									
Resident/Fellow	(16)	(7)		(0)	(0)		(2)	(0)	
Assistant Professor	(19)	(7)		(21)	(6)		(12)	(6)	
Associate Professor	(2)	(1)		(11)	(3)		(15)	(9)	
Full Professor	(0)		χ^2=1.11; p=0.89	(0)	(4)	χ^2=12.28; p=.06	(4)	(7)	χ^2=1.92; p=0.38
% total professional time spent in each of the following:									
Administrative	10.2% (32)	9.5% (11)	t=0.48; p=0.64	13.3% (29)	17.1% (12)	t=2.22; p=0.03	19.5% (30)	21.0% (20)	t=0.06; p=0.95
Clinical	62.2% (32)	62.7% (11)	t=0.11; p=0.91	53.9% (29)	59.0% (12)	t=0.40; p=0.69	56.0% (30)	54.7% (20)	t=0.77; p=0.44
Educational	12.7% (32)	11.4% (11)	t=0.75; p=0.46	14.9% (29)	7.7% (12)	t=1.60; p=0.12	11.4% (30)	9.7% (20)	t=0.09; p=0.93
Research	14.9% (32)	16.4% (11)	t=0.64; p=0.52	17.9% (29)	16.2% (12)	t=1.08; p=0.29	13.1% (30)	14.6% (20)	t=0.67; p=0.51
PERSONAL LEADERSHIP									
Currently holds or has held leadership position:									
within Department of Pediatrics									
Yes	(10)	(9)		(11)	(7)		(15)	(15)	
No	(27)	(6)	χ^2=5.33; p=0.07	(21)	(6)	χ^2=2.30; p=0.32	(19)	(7)	χ^2=3.88; p=0.049
within McGill University									
Yes	(8)	(4)		(7)	(5)		(14)	(9)	
No	(29)	(11)	χ^2=3.17; p=0.21	(25)	(8)	χ^2=1.33; p=0.51	(20)	(13)	χ^2=0.03; p=0.88
nationally/internationally									
Yes	(5)	(2)		(13)	(6)		(10)	(13)	
No	(32)	(13)	χ^2=.16; p=0.92	(19)	(7)	χ^2=.87; p=0.65	(24)	(9)	χ^2=5.10; p=0.02
"Independent of my job title, my peers view me as a leader" strongly disagree (1)...strongly agree (5)	4.00 (36)	3.73 (15)	t=0.84; p=0.41	3.88 (32)	3.92 (13)	t=0.14; p=0.89	3.52 (28)	3.84 (19)	t=1.07; p=0.29

Importance of a leadership position for respondent personally Not at all important (1)…Very Important (5)	3.85 (34)	4.20 (15)	t=1.12; p=0.27	3.29 (31)	3.38 (13)	T=0.25; p=0.81	2.88 (26)	3.53 (19)	t=1.70; p=0.10
CAREER DEVELOPMENT									
"I have a clearly defined professional development plan" strongly disagree (1)….strongly agree (5)	3.25 (36)	3.40 (15)	t=0.54; p=0.59	2.97 (32)	2.62 (13)	t=1.11; p=0.27	3.15 (27)	3.00 (19)	t=0.51; p=0.61
Mentor and Professional Development Plan (PDP)									
I do not have a mentor nor a PDP	(10)	(3)		(17)	(7)		(21)	(12)	
I have a mentor but no PDP	(16)	(4)		(6)	(1)		(0)	(1)	
I have a PDP but no mentor	(3)	(3)		(6)	(3)		(8)	(6)	
My PDP was created with supervisor/mentor	(3)	(4)	χ^2=5.88; p=0.44	(3)	(1)	χ^2=1.33; p=0.97	(0)	(2)	χ^2=4.14; p=0.25
other		(1)			(1)		(4)	(1)	
POTENTIAL BARRIERS									
"Have you experienced barriers with respect to attaining leadership positions"									
Yes	(12)	(3)		(20)	(3)		(8)	(5)	
No	(11)	(12)	χ^2=3.29; p=0.19	(11)	(10)	χ^2=7.36; p=0.03	(24)	(16)	χ^2=0.06; p=0.80
"Have you specifically avoided a leadership position?"									
Yes	(8)	(6)		(11)	(5)		(7)	(11)	
No	(29)	(9)	χ^2=4.76; p=0.31	(20)	(8)	χ^2=1.51; p=0.82	(27)	(10)	χ^2=4.93; p=0.09
Perception of leadership opportunities for women									
Inferior	(18)	(5)		(18)	(3)		(21)	(8)	
Same	(14)	(6)		(11)	(10)		(8)	(13)	
Superior	(0)	(2)	χ^2=6.54; p=0.16	(1)	(0)	χ^2=7.02; p=0.14	(0)	(0)	χ^2=4.80; p=0.03
Perception of opportunities for informal networking for men and women									
Same	(11)	(9)		(9)	(10)		(12)	(12)	
Different	(21)	(4)	χ^2=5.39; p=0.07	(21)	(3)	χ^2=9.28; p=0.01	(18)	(9)	χ^2=2.59; p=0.11
"How satisfied are you with work-life balance?" Not at all (1)…Satisfied/Very Satisfied (5)	3.15 (34)	3.40 (15)	t=0.67; p=0.51	3.23 (31)	2.69 (13)	t=1.18; p=0.24	3.88 (26)	3.74 (19)	t=0.35; p=0.73
I believe my professional opportunities are: Completely limited (1)…Completely unlimited (7)	4.32 (34)	4.67 (15)	t=0.71; p=0.48	5.00 (31)	4.92 (13)	T=0.15; p=0.89	4.65 (26)	5.16 (19)	t=0.86; p=0.40
The Department of Pediatrics recognizes and rewards strong leadership Strongly disagree (1)….Strongly agree (5)	3.32 (31)	3.20 (10)	t=0.43; p=0.67	2.68 (28)	3.00 (13)	t=0.92; p=0.36	3.30 (23)	3.18 (17)	t=0.53; p=0.60

Appendix IV – Additional Survey Quotes

Family Responsibilities

Although more and more men will set limits to their work hours in order to be present with their families, it is still not completely equal and I think more women still feel more responsible to be there for their family. It is also their priority i.e. it is what they want and is important for them. (Female)

I think the idea that women have family responsibilities that get in the way is the wrong way to ask. Mothers want to be home as they know it make a huge difference in the wellbeing/functioning of family. I go home early not to make supper, but to be there to see how school went and to support my kids with their homework. So I am concerned too much responsibilities would get in the way of that, of me being able to play the role I want to play at home. (Female)

To be satisfied in a job, one has to do meaningful work, feel part of the team and needs to have a challenge or opportunities to learn... (Female)

Implicit Biases

I think that women should hold leadership position because our leadership style is different. Moreover, academia is still typically a men-led world. So, need role models for the younger generation. (Female)

Departmental commitment to identify and overcome discrimination faced by demographics not shared by most of those in positions of power

Leadership Opportunities

Because of the obstacles mentioned previously, and the fact that women have less often the 'spouse at home taking care of everything' configuration, they are less often able to build a track record where they will be identified for a leadership position. (Female)

The opportunities in theory I think are the same. But I think it is more a conflict for women to miss a supper with the kids, or to arrive too late to help with homework. We miss/love the children equally, but we perceive the necessity of our presence differently. So we end up with less opportunities because a lot of the leadership positions require extra work and time way from the family. The first question I ask when I get offered a new project/position: will it require more time away from my kids, and if so, is it really worth it... (Female)

Where part of the challenge may be in our environment, is an expectation that work extends beyond the usual business hours so it seems that women (and men) without (young) children and those whose children are adult are more able to jump into projects / meetings / activities / work related travel, etc. and more 'able to engage'). (Male)

Most of the people in Pediatrics are women. It would stand that they will occupy leadership positions. (Male)

Networking Opportunities

I believe there still remains a cultural divide in informal networking where men tend to speak about opportunities in career enhancement to each other much more often than a group of women or a mixed group. (Male)

Work-life Balance

Although I love most of what I do, the work never ends and I cannot find a way to create boundaries to restrict work so that it does not overtake the personal life. (Female)
As I'm sure is the case with many working mothers, the needs of my children (health and learning) would require that I be present and more available to them. However, the work I do also requires that of me. (Female)

I spend WAY too much time doing non-medical tasks, and this takes away from either more fulfilling professional roles and personal time to achieve work-life balance. (Female)

Being pulled in too many directions. Lack of support is stifling (Male)

Sense of neglecting family demands. (Male)

Strategies

Being able to work from home (to avoid interruptions from the clinical responsibilities) and use of technology to attend meetings from a distance would also help. There needs to be a willingness at the highest level to see this as a priority, 'because it's 2016'... Willingness to explore and seek contribution, outside of the usual suspects, having a more formal and transparent call for candidacies. (Female)

Departmental Recognition of Leadership

Most leadership positions are not really valued in real ways (respect, money, or promotional progress). (Male)

… leadership positions [get] thrust upon you, with guilty appeals to one's sense of loyalty etc., no real rewards beyond a pat on the back, and occasional resentments! (Male)

Appendix V – Questions for Women in Leadership Focus Groups

Questions were adapted from Male Champions of Change Guide for Listening and Learning Forums[71]

Focus Group 1 (all-men's focus groups)

1. Thinking about your career – what are the conditions and culture you believe have helped you to perform, develop, progress and thrive?
   a. In your life
   b. Within our business / your team
   c. In society
2. What formal policies within the Department of Pediatrics do you feel may have supported or inhibited the rate of women's advancement?
3. Are there any additional barriers within our Department/Faculty of Medicine that you feel were impediments to women's advancement?
4. Are there any obvious barriers within society that were impediments to women's advancement?
5. Name one or two changes that you feel could have the highest impact on promoting leadership by women, now and in the future.
6. Think back to some of the obstacles earlier/in the beginning of your career. What support or services could have been offered (by this department) at this formative time to facilitate your movement towards leadership activities?
7. For those who select, recruit, mentor - do you modify your style to recruit, develop, manage and motivate women vs men?

Focus Groups 2 & 3 (mixed gender focus group and All women's focus group)
Based on Focus Group #1 discussion, questions were revised for focus group #2 and #3. (Questions 1-5 were prioritized.)

1. Thinking about your careers – what are the conditions and culture you believe have helped you to perform, develop, progress and thrive, at work and in life?
2. What is the expectation of women in the department? To what extent is this different from the expectation of men? How does this relate to the broader expectations and roles of women in society?
3. What is leadership in this department? (What is the purpose of the residency program?)
4. What sorts of roles do women play in in this department? How have women exercised leadership in the department
   a. (*Prompt if not mentioned*) What about promoting co-leadership?
   b. How have women supported each other in attempts to promote leadership of women?
   c. What part, if any, has role modeling played in promoting women's involvement in leadership in the department?
   d. Why has women's involvement in the department (e.g. through mentoring or as residency directors) not translated to Chair positions?
5. Think back to some of the obstacles earlier/in the beginning of your career. Name one or two changes that you feel could have the highest impact on promoting leadership by women, now and in the future.
6. What formal policies within the Department of Pediatrics do you feel may have supported or inhibited the rate of your advancement?
7. Are there any additional barriers within our Department/Faculty of Medicine that you feel were impediments to your advancement or the advancement of your colleagues?
8. For those who select, recruit, mentor – do you or they modify the style of recruiting, developing, managing and motivating women vs. men?

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