

Improving Spaces for Women First Responders:

Investigating women's occupational experiences using a comparative grounded theory

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

Background: First response work has historically been designed for and performed by men; yet more women than ever are conducting this work. Research suggests women first responders face unequal access to resources and advancement, increased mental health challenges, and unsupportive workplace cultures.

Methods: This work explores the occupational experiences of women paramedics, police officers, and firefighters ($n = 20$) from Southern Ontario. Semi-structured interviews explored the individual life course of participants, focusing on resiliency and stress, diversity and inclusion, and gender and the role of professional identity. Constructivist grounded theory and a Gender Based Analysis Plus approach was utilized to understand experiences within and across the three professions.

Results: Participants attested to significant improvements to women's inclusion in first response work, however specific challenges continue to persist. While some environments were described as highly supportive, many women still face sexism and glass ceilings. Despite this, women are deeply passionate about their work, and actively encourage other women to join the field. This investigation further examined the nuances of trailblazers, embodiment perspectives, the impacts of paramilitarism, and the intersection of promotion pathways and public opinion.

Conclusion: For recruitment and retention, women identified high-intensity work, protecting community, dynamic environments, and the power to address crisis as the best parts of their jobs. Recommendations include improving access to uniforms and equipment, on-the-job training to improve access to promotions, flexible scheduling and childcare supports, and legislating EDI training for all leaders and workers. This comparative investigation provides a unique pulse-check into the EDI goals of Canadian public services.

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I am deeply humbled by the women with whom I had the opportunity to connect with through this project. The risks they took in sharing their stories exemplifies their incredible tenacity and perseverance. I am in awe of the work they do, and astonished by the context they do it in. Whenever I thought writing a paper was hard, I only had to think of them for inspiration. In thinking about women across all time and space, I hope this work can offer a drop toward a sea of change.

Finally, none of this would have been possible without access to the land on which I live and work. The vast majority of my time has been spent on the traditional territory of the Neutral, Anishinaabeg, and Haudenosaunee peoples. The location I have studied and learned is situated on the Haldimand Tract, the land granted to the Six Nations that includes six miles on each side of the Grand River. As a white settler, I came to live and work on these Territories, but gained a profound appreciation for all of the gifts this land entails, which shall forever be part of what has shaped me. For this, I am deeply grateful.

Table of Contents

Author's Declaration	ii
Abstract.....	iii
Acknowledgements.....	iv
List of Figures.....	vii
INTRODUCTION	1
Gender equity, diversity, and inclusion in the public service	1
The population of women first responders	2
Women Firefighters, Police Officers, and Paramedics	3
Gender Demographics of First Responders in Canada	6
RESEARCH QUESTIONS AND SPECIFIC AIMS	8
METHODOLOGY	9
Onto-epistemological Orientation.....	9
Research Design.....	13
METHODS	16
Recruitment.....	16
Data Collection and Analysis.....	17
FINDINGS.....	20
Study Population.....	20
Occupational Vignettes.....	22
<i>Paramedicine Services</i>	22
<i>Police Services</i>	25
<i>Fire Services</i>	28
Experiences of Women First Responders	32
<i>Changing Professional Environments</i>	32
<i>Impacts of Performing Womanhood</i>	35
<i>Facing Resistance</i>	45
<i>Shaping and Constructing Spaces for Women</i>	53
DISCUSSION.....	57
A Comparative Grounded Theory.....	57
<i>Trailblazers, Tokenism, and the Work of Adaptation</i>	59
<i>Embodiment Perspectives</i>	61
<i>Impacts of Paramilitarism</i>	64
<i>Promotion Pathways and Public Opinions</i>	65

CONTRIBUTIONS AND LIMITATIONS.....	68
REFERENCES	72
APPENDICES	80
Appendix A: Recruitment Letter.....	80
Appendix B: Recruitment Image	81
Appendix C: LOI and Consent Form.....	82
Appendix D: Oral Consent Script	84
Appendix E: Interview Guide	85
Appendix F: Letter of Appreciation.....	88
Appendix G: Analytic Approach	89
Appendix H: Participant Demographics	90
Appendix I: Policy Document on Recruitment and Retention	91

List of Figures

Figure 1: Gender distribution within first response professions in Canada.....	7
Figure 2: Anonymized Participant Demographics	21
Figure 3: A socio-ecological model of factors producing varying levels of acceptance of women first responders	58

INTRODUCTION

Gender equity, diversity, and inclusion in the public service

In January of 2021, the Government of Canada's Privy Council Office released a call to action on anti-racism, equity, and inclusion in the federal public service to "...do better by ensuring that we are putting the full capacity of our entire pool of talent at the service of Canadians" (Shugart, 2021). Several pathways were recommended for this goal, including a call for inclusive leadership which establishes a sense of belonging and trust for all public servants, regardless of race, ethnicity, sex, age, disability, sexual orientation, or gender expression (Shugart, 2021). This message is both a signal for the continued modernization of the public service sector, as well as a sign of the persisting challenges faced by those within it. Recruiting and retaining the best and brightest individuals to this critically important work requires effective training and mentorship, as well as supportive work environments which foster the professional development of all individuals.

Workplace culture, while regarded as a protective factor against demanding and stressful occupations, simultaneously acts as a barrier to belonging and trust for individuals who exist beyond the margins of inclusion (Boyle, Inger, Waters, & Miller, 2020; Murray, 2020). Women are said to offer unique skills to the work of public safety such as emotional intelligence, a lower likelihood of using excessive force, or their capacity to drive organizational change (Williams, 2012; Brown et al., 2020). Despite these and other valuable contributions, women are substantially underrepresented in the field of first response work, and growth in recruitment and retention has been minimal (Janke et al., 2012; Gouliquer, Poulin & McWilliams, 2020).

The population of women first responders

While some research has been conducted on the individual populations of women who work as firefighters, police officers, and paramedics, few studies have focused upon them as a collective population of first responders. One notable investigation of women first responders in Victoria, Australia did just this, using a combination of interviews, focus groups, and survey methods (Boyle, Inger, Waters, & Miller, 2020). The authors identified work culture as the biggest inhibitor of mental health and well-being for their population, and explored the factors influencing help-seeking behaviours. They determined the needs and attitudes of these women at various ages, discerned how they respond to mental health challenges, and outlined recommendations for improving mental health and well-being for women in this sector. Boyle et al.'s (2020) report is most pertinent to this study, when considering both its population and research methods. It is, however, very specific to its urban Australian location, which may impact its transferability to the Canadian population, which is likely to be more diverse geographically, organizationally, and demographically.

In a US study on public safety servants, Contursi (2018) compared the experiences of women in fire services, law enforcement, and the military. More specifically, the author investigated the comparatively low number of women in leadership in the fire service, as well as its slow changing culture. In interviewing women in leadership positions from each profession, Contursi identified that while the professional and personal characteristics of her participants were consistently similar, the fire service's exclusive organizational culture appeared to favour men, leaving little space for women to fulfill leadership positions. Furthermore, promotion practices that were not based on merit were identified, as well as a lack of policies to promote equal opportunity, as factors contributing to lagging improvements for women in the fire service. The investigation called for further research to explore organizational cultures relative to gender for the improvement of persistent discrimination, and to further examine the topics of recruitment and promotion of women into these professions.

Within the Canadian context, Carleton et al. (2017) conducted an online survey assessing public safety servants and mental health. The results demonstrated that women in policing and firefighting were significantly more likely to screen positive for a mental disorder (odds ratio [OR], 1.54; 95% confidence interval [CI], 1.36 to 1.74), when compared to their male counterparts. However, these may not be revelatory findings, as they are based on self-report and are in line with the patterns of the general population, wherein women are more likely to disclose symptoms of mental disorder (Singleton & Lewis, 2003). The work did indicate positive and supportive relationships, as well as education, as resiliency factors, however these findings may likely be interacting with other factors such as wealth (Carleton et al., 2017). The authors suggested that the relatively large sample size and frequency of positive screening in their sample indicated the need for more robust assessment through the use of interviews, to explore the subject further.

Women Firefighters, Police Officers, and Paramedics

While some research suggests that women working as firefighters, police officers and paramedics might face common challenges, there are also some unique issues that impact each professional group. A comprehensive report from the US Fire Administration (2019), for instance, details some of the emerging health and safety issues pertaining to women in the US fire service, such as physical and mental health considerations, harassment and discrimination, bullying, and inclusion. The report also describes a lack of advancement on these issues compared to when they were first addressed in a previous and similar review from 1993 (US Fire Administration, 2019). The health impacts of psychosocial stressors faced by women firefighters have been investigated qualitatively by Sinden et al. (2013) and Hollerback et al. (2017), who call for improvements to recruitment and retention efforts, as well as workplace cultures, for the health of women firefighters in the US. Higher rates of tobacco use were found among American women firefighters (Janke et al., 2012), while rates of binge drinking were lower when compared to male colleagues (Haddock et al.,

2017). However, binge drinking was significantly more common among women firefighters (39.5%) when compared to women in the general population (12-15%) (Haddock et al., 2017). Women firefighters were found to routinely face ill-fitting safety equipment (Griffith et al., 2016) as well as various forms of tokenism (Batty & Burchielli, 2011; Perrott, 2016; Janke et al., 2019; Gouliquer, Poulin & McWilliams, 2020). Additionally, the examination of gendered workplace cultures described the heavily masculinized archetype of the firefighter as a white, middle class, heterosexual man who is physically oriented, altruistic and heroic, and discusses the ways in which this archetype is galvanized to professional competence (Batty & Burchielli, 2011; Ainsworth, Batty & Burchielli, 2014; Woodfield, 2016; Perrott, 2016).

Women working as police officers have also been shown to face “hypermasculine environments” (Herbert, 2001; Brown, et al., 2020) as well as discrimination and harassment which may contribute to psychosocial stress for women in the workplace (Sahgal, 2007; Somvadee & Morash, 2008; Brown et al., 2020). Gender dynamics took a central focus in some of the literature on this population. Seminal work by Prokos and Padavic (2002) described that masculinity within the police service was produced both on the job and within training at police academies as a subtext of professional socialization, while Herbert (2001) described how hypermasculine values such as “chasing the bad guys” contribute to resisting developments of the service toward more democratic community policing and de-escalation approaches. Shelley et al. (2011) incorporated feminist theory to better understand the historical and modern experiences of women in policing. The authors described the ways in which women have faced unethical control and segregation at work, as propagated by their police organizations. However, they also identified the encouragement from members of the communities they serve as a source of affirmative support for women police officers (Shelley et al., 2011). Batton and Wright (2019) also discussed the segregation of women in organizations along multiple planes, in a horizontal direction across departments, as well as in a vertical direction across ranks. Notably, Murray’s (2020) analysis of the enactment of gender roles

among Canadian male and female police officers found a comprehensive description of the masculine-coded ideal police officer as one that stems from the disparaged “old police culture” and “old boys’ club”. While the men in their sample described gender as unimportant in their workplace, the women described experiences of social exclusion, gendered work assignments, tensions between home and work life commitments, and being overlooked for promotions. Murray’s (2020) investigation called for the removal of structural barriers and cultural attitudes which continued to hinder women’s access to development within the service.

Notably, there is a scarcity of literature on paramedics, particularly when compared to the other two first response professions, the majority of which largely addresses mental and psychological wellbeing (Bennet et al., 2004; Sterud et al., 2008; Courtney et al., 2013; Lawn et al., 2020). While no investigations were found to exclusively examine women paramedics in the Canadian context, Alobaid et al. (2021) explored the challenges faced by female paramedics in Riyadh, Saudi Arabia, as the nation was attempting to recruit more women into the field, to support patient requests for respect of conservative values, as well as to increase the numbers of women in all workplaces. The authors found that social and religious responsibilities posed challenges for women paramedics, such as balancing child care and domestic work with shift work variability, however, women were highly valued for their capacity to provide services within the constraints of cultural and religious beliefs that require privacy for women (Alobaid et al., 2021). Challenges surrounding physical fitness and strength were also discussed, as well as a lack of workplace infrastructure to provide women paramedics with sufficient privacy (Alobaid et al., 2021). While this investigation was located in a significantly different cultural context, its findings are deeply relevant to the Canadian societal values currently driving gender development in first response professions. A noteworthy, yet older, American survey on job satisfaction (Federiuk et al., 1993) suggested that male paramedics were more likely to see female co-workers as less capable of performing certain aspects of paramedic work, such as lifting, controlling an emergency scene, and maintaining safety,

while a more recent Canadian survey (Bigham et al., 2014) examined the experiences of exposure to violence among paramedics of multiple genders. The majority of respondents (75%) to this Canadian survey reported at least one exposure to violence in the previous year. Verbal assault from patients was the most frequent source of violence, while intimidation from colleagues was the second most common source. Women paramedics were more likely to experience this intimidation (OR, 1.35; 95% CI, 1.07-1.70) as well as experiencing physical assault (OR, 1.36; 95% CI, 1.06-1.74), sexual assault (OR, 5.45; 95% CI, 2.74-10.84), and sexual harassment (OR, 5.95; 95% CI, 4.31-8.21) from patients, families, and colleagues (Bigham et al., 2014).

While some studies have examined women in these professional roles individually and as a collective group, the vast majority of the literature is problem-oriented, and there is no research to date on Canadian women first responders which takes a comparative approach across the emergency response professions. The present research is in response to this gap in the literature.

Gender Demographics of First Responders in Canada

In order to appreciate the Canadian context, a demographic description of the gender distribution among first responders has been provided with the most up-to-date and detailed data available at the time of writing. Visualizations of gender distributions within the first response professions follow the descriptions below.

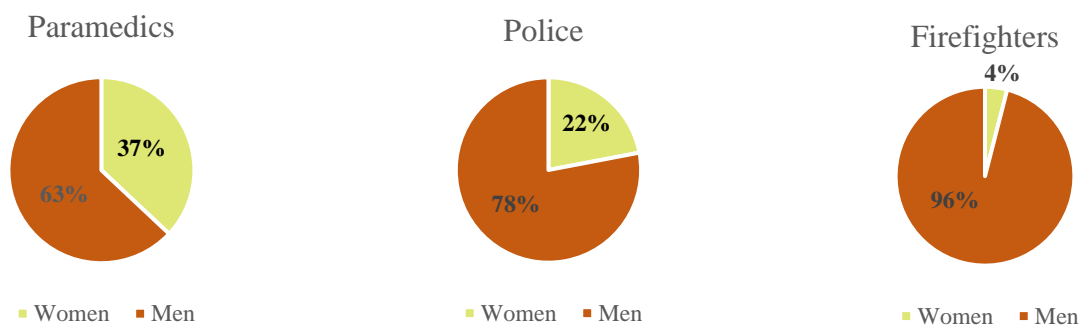
The Canadian Institute for Health Information's (CIHI) data table on Canada's health care providers suggests that in 2019, women made up 14,057 (37.6%) of paramedics across the country, based on the eight provinces which collected gender-specific data (CIHI, 2019). At the provincial level, women paramedics in Ontario totaled 3,166 (35.2%), representing a growth of 1.4% over the previous six years (CIHI, 2019).

Statistics Canada reports that in 2018, women made up 14,943 (22%) of police officers across the country (Conor, Robson & Marcellus, 2019). This figure represents a 1% increase over the previous year, and a 17% increase over the last 32 years when data on gender were first collected (Conor, Robson & Marcellus, 2019). With significant horizontal and vertical segregation, women accounted for 36% of special constables, 24% of recruits, and 71% of civilian personnel within police services. Within those civilian roles, women accounted for 91% of clerical staff and 24% of vehicle maintenance personnel (Conor, Robson & Marcellus, 2019).

Across Canada, the 2016 census recorded 34,700 career firefighters, of which 1,555 (4.4%) identified as women (Statistics Canada, 2017). The census also reported 2,535 fire chiefs and senior firefighting officers, of which 110 (4.3%) identified as women (Statistics Canada, 2017). Taken collectively, these data suggest there are, at minimum, roughly 30,000 women working as first responders in Canada. While the proportion of women is growing, demographic data on gender distribution, professional occupations, and professional roles among Canadian first responders is disaggregated and inconsistent. Furthermore, data on women’s experiences of working in these occupations remain sparse (Griffith, et al. 2016; Murray, 2020).

Figure 1

Gender distribution within first response professions in Canada



Note. Figure represents the division of men and women as a percentage of first responders across Canada, based on available data from multiple sources and years.

RESEARCH QUESTIONS AND SPECIFIC AIMS

In response to gaps in the literature, and the demographic percentages of women first responders in Canada, this study has sought to answer the following research question and subquestions:

RQ1: What are the occupational experiences of women paramedics, police officers, and firefighters in Southern Ontario?

SRQ1: What are the differences and similarities between the experiences of women working as paramedics, police officers, and firefighters?

SRQ2: Are there any lessons learned in one emergency response field which could be applied to another?

SRQ3: What are women's perceptions of diversity and inclusion within their organizations?

SQR4: What can be done to support the mental health and wellbeing of women first responders?

As such, the specific aims of this thesis project are to deepen the understanding and develop the literature on women first responders through a sociological and public health perspective. Secondly, endeavours of knowledge mobilization through conference presentations, publications in peer reviewed journals, and the circulation of a policy document outlining recruitment and retention recommendations, will work toward the overall goal of supporting efforts to improve gender equity and diversity within the field of first responders. Additionally, this work provides further insight to inform future research on the topic.

METHODOLOGY

Onto-epistemological Orientation

The choice to use qualitative inquiry in this research project is based upon the type of questions this work seeks to answer; questions which investigate a set of experiences, perspectives, and points of view, within relatively unexplored phenomena. As such, it has been important to design this investigation with space for open-ended answers and for the use of an inductive approach in combination with a capacity for explanatory power. Therefore, the use of Charmaz's (2006) constructivist approach to grounded theory is fittingly appropriate, as it is well-oriented to facilitate the generation of descriptive and interpretive theories, and to explain that which is not well understood.

While grounded theory can accommodate a broad range of ontologies and epistemologies, this particular work settles into an idealist and interpretivist territory. Idealist ontologies imply that it is only through ideas and experiences that we can access the empirical world (Giacomini, 2010). This worldview holds that when researchers study the world, they do so by way of examining their own mental, or social constructs of it (Giacomini, 2010). Interpretive approaches understand social phenomena as being made up of ideas such as symbolic systems, or socially shared meanings. Within this worldview, researchers play an active role in this social world and can therefore neither disconnect from, nor keep from mediating their findings (Giacomini, 2010). In this way, interpretive perspectives make it possible to generate diverse and meaningful interpretations of social phenomena, and regard research data as a co-constructed product of interactions between a researcher and their participants.

On a practical level, grounded theory (GT) seeks to characterize ground-level social interactions that occur among social groups and structures into larger systems of meaning (Giacomini, 2010). GT analysis involves the thematic categorization of the data, which, initially fragmented, become reassembled into an explanatory framework that describes a broader social

system of ideas (Giacomini, 2010). Originally introduced by Barney Glaser and Anselm Strauss (1967), classical GT represented a divergence from ethnography within the field of qualitative inquiry, as well as a divergence from empirical methods which sought to deduct theories from a priori assumptions (Birks & Mills, 2015). Their resulting approach, which some consider the first generation of GT, is described by some scholars as employing a positivist understanding of the world in which a researcher was meant to discover theory within a pre-existing singular reality that needed to be protected from distortion by the researcher's perspectives, for the sake of accuracy and prevention of bias (Birks & Mills, 2015). From this perspective, the researcher is instructed to set aside any pre-conceived hypotheses or previously learned theory relevant to the investigation, and simply collect the data as if one was a *tabula rasa*, and as a neutral and passive observer.

A second generation of grounded theory was developed by Strauss and Juliet Corbin (1990), who challenged the idea that theory naturally emerges from one's data, and instead set out to design a systematic approach for analytic coding. The pair also contested the recommendation that a researcher avoid previous theory prior to investigation. Subsequently, Kathy Charmaz (2006) developed this argument further, by suggesting that neither data, nor theory are items to be discovered, but rather are constructed through the research process by individuals' past and present experiences. Regarded as the third generation of GT, this relativist epistemology made space for multiple standpoints, roles, and realities, and through its constructivist orientation, calls upon researchers to reflexively acknowledge their own values and relationships with their participants, and to situate their research in the historical, social, and situational conditions of its production (Charmaz, 2014).

In response to the range of onto-epistemological approaches within the generations of grounded theory, this particular work leans toward Charmaz's third generation of GT, through taking a constructivist lens which acknowledges the granular subjective interpretations of individuals, and

the ways in which these interpretations of reality may or may not overlap with other's experiences, which collectively contribute to a larger shared, or conflicted, sense of reality.

Given that this project is situated within the professional field of Public Health, it strives to embed pragmatism within its goals and outcomes. Pragmatism asserts that practical problems, rather than methodological or theoretical priorities, determine how a researcher defines their focus of interest (Giacomini, 2010). Furthermore, it obliges the researcher to fashion their findings in terms of utility, to be presented in accessible and actionable terms (Thorne, 2008). With values that are rooted in "workability" (Dewey, 1929), the action-oriented goals of pragmatism can also be seen to align with neoliberal priorities which elevate outcome-driven research findings amenable to economic rationalization, which are situated within the knowledge economy (Rose, 1996; Rossiter & Robertson, 2014). While this particular work is situated within the context of accomplishing a series of tasks and skills centered on the acquisition of a Master's level of education, these goals also speak to my personal desire to support women in the daily challenges of their lives. In this way, employing the explanatory power of constructivist grounded theory meshes well with the ontological priorities of pragmatism and Public Health, through seeking to improve the lives of the healthcare and public safety workforce and, in turn, the larger population that they serve.

As called upon by Charmaz, I recognize that I bring my own experiences, perspectives, and assumptions to the design and interpretation of this investigation. Those include the way I see myself in the world, as a white, middle-aged, working class, feminist-pacifist, queer woman, with advanced education in the field of public health, in addition to some of the professional experiences I have had working in the male-dominated fields of farming and cooking. Furthermore, my time as a chef has also sensitized me to the structures and cultures of paramilitary workplace organization, and the ways that it can shape occupational experiences, such as through the power dynamics of chain of command.

Prior to investigating the literature at the outset of this project, my anticipation of what I might find in conducting this research was rooted in assumptions surrounding the professions of paramedicine, policing, and firefighting, as secure, well-paying, government-funded occupations. As such, I suspected that women would describe how they transcended the historical challenges of women in workplaces, and that I would have little tension, or conflict to report on. I see now how those assumptions were both over-simplified and under-informed.

My experiences in conducting interviews also followed a trajectory of refinement over time. Initially, I conducted interviews which were largely dyadic, with turn-taking questions and answers, and without much elaboration or development of ideas. I relate this, in part, to my naivety of the subject of first response work resulting in little opinion or additions to contribute, as well as in anticipation of creating lengthy transcripts that would require hours to review and code. As I continued to conduct interviews, I began to assemble an analysis through the act of reflecting in memos on the recurring and novel ideas being discussed. As my understanding grew beyond the position of a novice, the quality of the data also began to evolve as I asked my participants about the ideas that were taking shape, to see if they had things to add, refute, or edit. Over time, conversation structures also adapted, in which I would ask a question, and listen to the response, and then follow up with the presentation of an idea that was developing on that subject, and ask if this resonated with their experiences, or simply asked for their feedback or opinion. In this way, the data became more and more co-constructed, as I began to draw in all previous interview data into each following conversation. When ideas did not resonate with a participant, this provided the feedback that the concept being developed was more complex than originally considered. This approach to theory “testing” is a core component of grounded theory, which will be described in detail below, and exemplifies the importance of conducting the analysis phase in tandem with the data collection phase.

Research Design

Applying a comparative analysis framework has facilitated a unique approach to understanding women first responders, providing the opportunity to preserve complexity within each of the fields while creating the capacity to assess trends in the larger picture of first response work. While comparative analysis is regarded as an age-old approach to assessing information used across many scientific disciplines, this framework continues to generate unique perspectives when one concept is considered against another (Azarian, 2011). In this particular project, the comparison framework has also been an ideal dance partner to the constant comparative analysis components of grounded theory, in which all data are considered against one another for variations, similarities, and differences (Charmaz, 2006).

As a result of its widespread applicability, comparative analysis typologies have been developed over the years to provide nuance toward leveraging this method in developing a theoretical understanding of the social reality (Azarian, 2011). As described by May (1993), this approach has been able to “highlight the particularity” in the data, such as developing findings from individual-level experiences, and helped to situate this localized phenomena within a broader context of the first response workforce, to highlight what may appear as everyday mundane events often taken-for-granted. Additionally, this approach reveals “convergences and deviations” when considering a phenomenon across different settings, revealing diverging formations and prompting questions about why it may be so (May, 1993). A limitation of this approach includes the influence of comparison upon perception, colouring the lens with which each of the individual professional fields, as units of comparison, are considered. For example, recognizing a particular problem as less extreme in one case when compared to another may work to diminish the importance in this first case, despite the fact that it is nonetheless present. In an effort to mitigate this limitation, an important step in the analytical process has been to first approach the data by professional group, and follow up with cross-field comparisons secondarily, in ways which add to a larger picture of women first responders.

Lastly, taking a Gender Based Analysis Plus (GBA+) approach to data collection and analysis has provided a platform for the consideration of how gender and other social factors may have impacted workers' experiences (Government of Canada, 2021). GBA+ draws on the insights of intersectionality by recognizing the complex composition of factors that shape and influence experience (Crenshaw, 1991). However, as Bowleg (2008) suggests, it is not merely a collection of disaggregated data, but also the considerations of power structures and sociohistorical contexts which classify and constitute an intersectional inquiry. GBA+ calls upon the researcher to question who is being studied and asks if the existing research presumes a homogeneity in its population, when the phenomenon indeed affects women, men, and gender-diverse people (Government of Canada, 2021). As such, this project has endeavoured to both cast a wide net and preserve granularity in its considerations of gender, as well as through acknowledging the sociohistorical contexts within the first response professions.

As much healthy debate continues on the boundaries and utility of gender definitions (Hines, 2020; Morgenroth & Ryan, 2020; Webster, 2021), this project has aimed to recruit any individual who self-identifies as 'woman', as this investigation is concerned with the implications of this gendered social structure. While it is likely that transgender women first responders, or other minority groups, have uniquely different experiences from their cisgender women colleagues, the external social performance of "doing" this gender (Goffman, 1959; West & Zimmerman, 1987) is generally oriented toward a similar larger social understanding of the concept of "woman". Employing the GBA+ lens in concert with a comparative analytical framework has helped to bring the context of the persons being interviewed into the analysis stage and facilitated a consideration of intersectional forces which may be impacting the experiences of an inclusive population of women first responders. When deciding upon the gender boundaries of this investigation, it was also considered that non-binary and transgender men are likely to be impacted by gender norms and expectations in these occupational settings, as suggested by the literature (Perrott, 2016; Gouliquer,

Poulin & McWilliams, 2020; Angehrn, Fletcher & Carleton, 2021). While these populations certainly merit further research, this investigation is concerned with the occupational experiences in the context of performing womanhood, and as such their inclusion is beyond the scope of this study.

Each of these methodological approaches were brought into this project because of their individual strengths and insights. However, taken together, they have been used to generate a novel understanding of women first responders. The analytic process required much contemplative strategizing to arrive at an approach that pragmatically “fit together” and employed the benefits of each approach. At the onset of the analysis phase, the original intention was to generate three grounded theories imbued with GBA+ sensitivities, with one for each profession, after which comparisons could be made across such theories. However, as the process developed, it became clear that there were many overlapping factors across the three professions, and that the original approach imposed an unnecessary and irrelevant structure. In response to this realization, an analytic pivot resulted in approaching the data in a cumulative fashion, yet also sequentially by profession. This led to the generation of a singular grounded theory which was shaped by and included comparison, that was tested and retested against each of the professions throughout the coding and analysis phases; a process which is outlined in greater detail in the recruitment section below. This approach has ultimately enabled the development of a grounded theory that encapsulates the elements influencing women’s experiences, both within and across the three professions. This approach has also laid groundwork for a deeper consideration of some of these influencing elements which merit further exploration, as described in the discussion section.

METHODS

Recruitment

As previously alluded to, the inclusion criteria included individuals who self-identify as women, including cisgendered as well as non-binary and transgender individuals. Participants were currently working in Southern Ontario as a police officer, firefighter, or paramedic, or were on leave or recently retired within the last three years.

A multifaceted recruitment approach was taken, beginning in October of 2021, with outreach to key contacts in each of the respective professions, in order to create a communication pathway with workers. Recruitment was initiated through email ([Appendix A](#)) accompanied by a digital poster ([Appendix B](#)). This outreach entailed a request to share this invitation package through internal communication channels that would reach workers. The recruitment flyer asked interested individuals to contact the student researcher directly, so that the desire to participate remained undisclosed to the original key contacts who may have some organizational authority over participant volunteers.

Individuals who expressed interest in participation were sent the letter of information and consent form ([Appendix C](#)) to provide further study details. Further questions were answered and upon deciding to participate, an appointment to conduct the phone/video interview was arranged at a mutually agreed upon time. Consent was obtained from participants either in advance, or at the onset of the interview with an oral consent script ([Appendix D](#)).

The process of acquiring internal ethics approvals from first response organizations resulted in a significant time delay. As such, by the end of November, 2021, the recruitment poster was shared over social media (Facebook, Instagram, Twitter, LinkedIn) to the researchers' personal networks, with a request from readers to share widely. This approach led to the recruitment poster being posted to an Ontario paramedic group on Facebook, where the majority of our paramedic participants cited learning about the study. By the end of December 2021, a wave of firefighters volunteered to participate, and by February, 2022, a wave of police officers volunteered to participate. At the end of

each interview, participants were asked if they would be willing to share the recruitment materials with anyone they might think would be interested in volunteering. As thematic saturation began to be recognized, participants were specifically asked to consider if they had interested colleagues who identified as a visible minority of any kind, as well as upper-ranking professionals. The decision to stop recruitment was guided by thematic saturation within the data, in combination with recognizing the time and labour constraints of the project.

Data Collection and Analysis

This study initially set out to recruit 5 to 7 participants from each of the three professions, however, employing GT sampling approaches led to recruitment beyond those amounts, in order to strive for thematic saturation. As such, twenty single-point interviews were conducted either by phone ($n = 4$), or Zoom ($n = 16$), at the choice of the participant. Interviews lasted on average 80 minutes, and ranged from 53 to 167 minutes in length. The interview guide ([Appendix E](#)) consisted of both demographic and open-ended thematic questions, providing a flexible yet comprehensive framework for addressing the topics important to the study goals while preserving space for a diverse range of participant responses.

Participants were reminded at the outset of the interview that they may skip any questions they might find uncomfortable, or choose to withdraw from the study, or take breaks at any time. It was also communicated to participants that any quotations drawn from transcripts will only include details most relevant to the topic being discussed, in the interest of protecting their confidentiality. For this same reason, any accompanying demographics pertaining to the participant were intentionally altered to reduce the possibility of reconstructing participant identities. These approaches will also be extended to any research outputs derived from this study, such as conference presentations and published articles.

Furthermore, to preserve as much confidentiality as possible, all interviews were conducted in the researcher's private office, behind a closed door. Phone interviews were audio recorded using a speakerphone function in conjunction with the Dictaphone app on a separate iPad. Audio recordings were immediately transferred to the researcher's personal computer and subsequently deleted from the iPad. Zoom interviews were conducted with the researcher's personal computer, and were audio and video recorded, due to the bundled design of Zoom recording options. Participants were invited to turn their cameras off should they desire it, some of whom did, although most remained on camera. Following these interviews, recordings were exported from the Zoom app and stored to the researcher's hard drive. After each interview, audio recordings were transcribed using Otter.AI software, and transcripts were checked for accuracy, after which point all audio and/or video recordings were deleted, from both Otter.AI and from the researcher's computer.

At the end of each interview, the researcher offered a copy of the final thesis to participants, all of whom expressed interest in the offer. As previously stated, the researcher also asked about recruitment support at this time, and invited participants to stay in touch, should they wish to make any changes to their interview answers. Shortly after the interview, participants received an emailed letter of appreciation ([Appendix F](#)) for their contributions and to provide follow up contact information, should they desire it.

The writing of memos was conducted after each interview. These included the researcher's personal reflections on the interview and noting of relevant information that would not be captured by a transcript, including the overall mood and tone, environmental context such as details about the participants' location often being either at work or at home, or if they were also attending to pets, children, or spouses during the interview. These memos also offered opportunities to record ideas, or points that were important to participants, and to reflect upon new and emerging themes and the researcher's evolving understanding of the data.

Coding and analysis of the data was conducted with NVivo Pro 12 software for the organization and visualization of thematic results. Significant decision-making was required in the development of the analytic approach, through considering the requirements of grounded theory and how they might interact and integrate with a comparative analysis framework. The following includes a description of how that process unfolded, which is further detailed below.

Grounded theory suggests that data collection and analysis be conducted at the same time, to facilitate an iterative process that allows initial findings to inform and shape subsequent data collection, and to begin developing theory which can be continually tested against all the data collected (Charmaz, 2014). As such, after conducting a little more than half of the interviews, inductive line-by-line grounded coding was conducted using gerunds, with the first two paramedic transcripts. These codes were shared with members of the thesis supervisory committee, and based on feedback and on the research questions, the codes were collapsed into focused codes and analytic categories. The remainder of the paramedic transcripts were subsequently coded with the ensuing codebook, and new focused codes were added when a novel topic arose. Additionally, the initial two transcripts were reviewed again, to see if any of the new codes applied.

Throughout this process, analysis memos were also written to focus on points of inquiry and begin forming more developed ideas around the thematic findings. This writing led to the question: “What is the bigger picture that my participants are telling me?” When reflecting upon the data, it was clear that the answer was multifaceted, leading to a collection of key ideas that began to develop a narrative. This became the orientation for the last phase of analysis, where components of this narrative became the organizing force, and where analytic buckets began to tell pieces of this larger story. The remaining police and firefighter interviews were coded with this last iteration of the codebook, again adding new codes to ensure that all the data were being represented. This process is visualized and expanded upon in [Appendix G](#).

FINDINGS

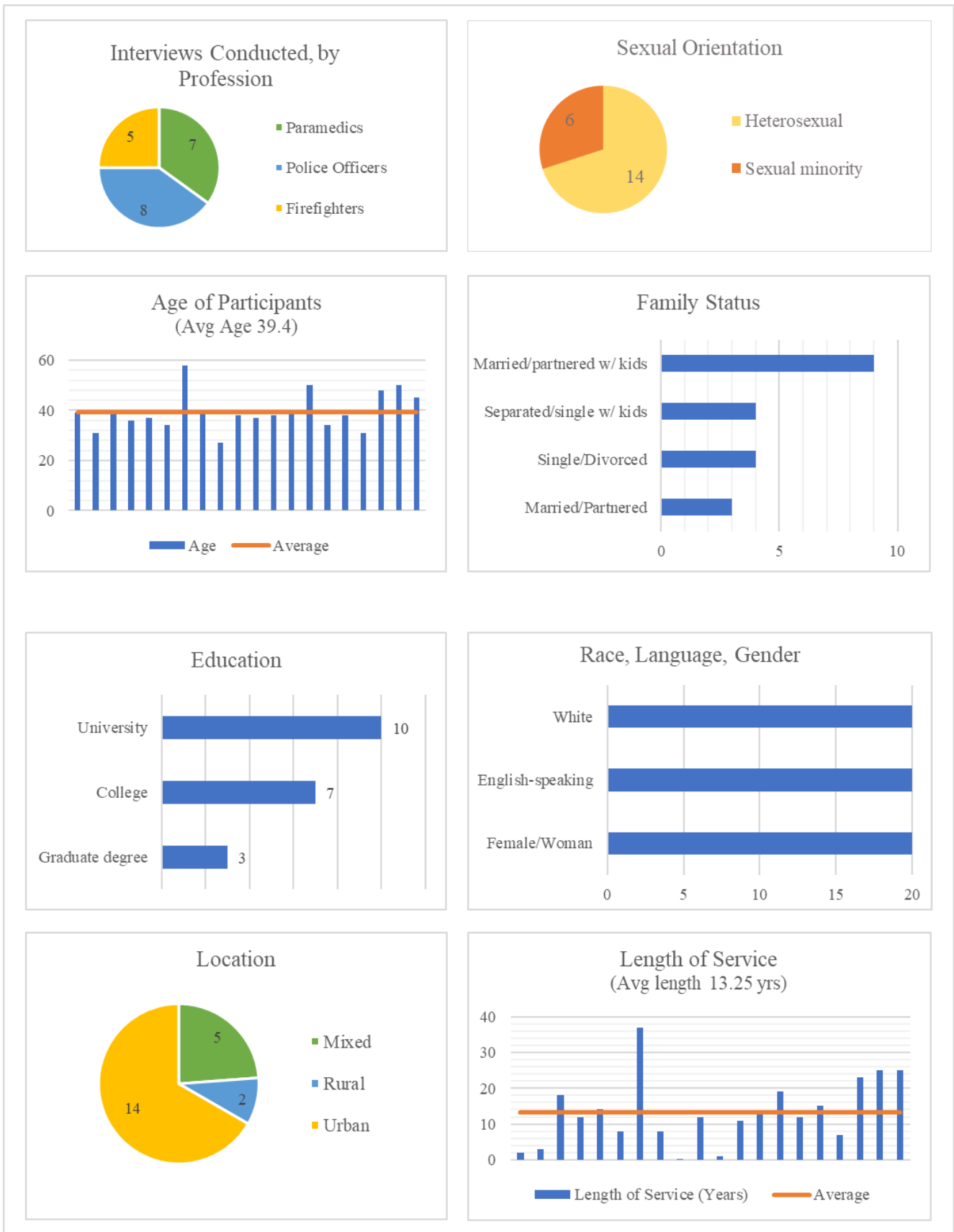
Study Population

The collection of demographic data provided a considerable amount of personal information and context from participants. This information was exclusively used to consider the diversity of the sample of first responders and to provide context when interpreting the data. Many participants expressed concern for their anonymity and we recognize that, in many cases, women took real risks in participating in this study and in trusting us with their experiences. As the anonymity of our participants is of the utmost concern and priority, the information in this section represents an aggregation of our sample with limited details, in hopes of preventing identities from being revealed, or reconstructed.

The division of the professions within the 20 interviews include 35% paramedics ($n = 7$), 40% police officers ($n = 8$), and 25% firefighters ($n = 5$). The average participant age was 39 (27-58) and 30% of participants identified as a sexual minority ($n = 6$). There was a diversity of family status among participants, with 45% identifying as married, or partnered with children ($n = 9$), 20% as separated, or single with children ($n = 4$), 20% as single or divorced ($n = 4$), and 15% as married, or partnered ($n = 3$). All participants attended some form of post-secondary education (college, $n = 7$; university, $n = 10$; graduate degree, $n = 3$) and all participants identified as “female” gendered, English-speaking, and white. Participants worked a variety of ranks, from probationary to senior level management, with an average length of service of 13.25 years (range = 0.38-37 years). Of the participants, 70% identified as working in urban locations ($n = 14$), 10% in rural locations ($n = 2$), and 25% in mixed locations ($n = 5$). This information is represented visually on the following page, as well as organized in table format, in [Appendix H](#).

Figure 2

Anonymized Participant Demographics



Occupational Vignettes

The following includes high-level descriptions of the three professions, from the perspectives of the participants from this study. Descriptions include aspects related to training and applying to work in the field, the context and content of the work, how the work has changed over time, key components contributing to workplace cultures, and the structures of career progression. The following information is not intended to represent a complete description of these subjects, but rather to act as a composite representation of organizational factors which have been gathered from participants from various regions across the province, to provide insight into how they understand their current work environments and to highlight some of the key contextual factors within which to situate the study's findings.

Paramedicine Services

When training to become a paramedic in Ontario, participants described the relatively short college programs available, however many applicants often have university degrees in health-related topics, such as biology or kinesiology. To make a competitive application to a service, community volunteer experience is generally expected, in addition to the completion of a mandatory comprehensive physical test. Some paramedics noted that getting hired is less competitive currently, when compared to ten years ago, when significant healthcare funding cutbacks impacted the number of positions available.

The work of paramedicine is performed primarily in pairs, which often evolve into a consistent partnership through accruing seniority. This partnership often develops into a very strong bond due to exposure to the content of their work, sometimes referred to as “trauma bonding”, as detailed by this paramedic who works in a large urban environment:

“I think, just because of like, our city, and what we have to deal with is a lot different than people who work in (smaller regions), [or] like up north where it's a

little bit more peaceful and you're got a lot more downtime, whereas we're constantly just like, sifting through shit. ...Like constant trauma bonding! Like, what did you do today that was super crazy? And (I'd) be like, Oh, I got vomited on. Oh, I got bedbugs. Oh, I picked up this other person, and whatever..." - PM-01

Additionally, she also connects the pace of the workday as shaping this relationship. Most paramedics described their work context as very busy, with multiple calls always queued up throughout the shift, and where missed breaks and overtime work are commonplace. Over the last several decades, the work has also become much more complex. Paramedics explained how they are regularly being mandated by the province to administer more medications and offer more services, such as advanced defibrillation and inserting IVs. Community outreach programs have developed in some regions as well, which proactively offer wrap-around social services to high-risk community members.

In some jurisdictions, regional authorities have consolidated EMS stations into their local firefighting facilities, to conserve physical resources. Participants, such as this primary care paramedic, described how pre-existing firehall layouts have contributed to significantly less space, facilities, and resources compared with their neighbouring fire service:

"...when the cost of EMS was all downloaded onto the municipalities like, at least in (my region), they put us in the fire station, but they put us like, in the closet. Like... if you walked into a station, and you saw where the firefighters were versus where EMS was, it's like, yeah, it's like the, the house belongs to fire and you have the attic. And it's not finished space or super nice. So yeah..." - PM-04

Some participants described the downstream impacts of these limited facilities as resulting in women paramedics having an even smaller fraction of space for themselves, where they are able to change and have gender-specific privacy.

When considering workplace culture, participants often described their team dynamic as a dysfunctional family and discussed a deep culture of gossip among colleagues. Paramedics also described being known for their use of “dark humour” as a method of distancing themselves from the emotionally challenging work content they routinely face, as well as a strong “us-vs-them” mentality between paramedics on the streets and managers and dispatchers in the offices.

Career progression for paramedics was described as slower and with fewer opportunities for development compared to the other two professions, where oftentimes paramedics remain at the entry level designation of Primary Care Paramedic (PCP) for their entire career. For those who do progress upward, the next rank is the Advanced Care Paramedic (ACP), which places the paramedic in a leadership role when they are called upon to take over complex or difficult emergency scenes to make use of advanced skills and knowledge. As this PCP describes, this advancement requires taking a full-time course that is paid for out of pocket, during which the learner likely works only part time, or not at all, to complete the heavy workload:

“So like, if I wanted to become an advanced care paramedic, I would have to go back to school for that. And people ask me all the time, like, are you going to go? And like, no, it's twenty grand and I say to them, like I'm on the mommy train, like I'm done with my education basically, unless it's something that they're going to provide to me, like I'd be training, but I'm- that's it. ... there's women who have done their advanced care education when they're off on mat leave, crazy women. (both laughing) Like, I'm like, No, I'm- good for you. But, you know, an extra four bucks an hour isn't worth it for me.” – PM-03

As alluded to here, in many jurisdictions there is only a marginal increase in remuneration for the ACP position, compared to the PCP role. The remainder of the ranks in paramedicine include the

Critical Care Paramedic position, which works exclusive in air transport, and the senior level leadership and management roles which represent the final tier.

Police Services

Similar to paramedics, police participants reported that trainees are now more likely to have university degrees. Furthermore, they explained that applicants currently do not have to pass the comprehensive physical testing to the degree that was required in the past, as a response to dramatically decreasing numbers of applicants. Participants who had worked for several decades described that previously, during periods of higher competition, it was often more likely for an applicant to be successful when another member of their family was a police officer or involved with the organization, and that the application process would have taken months to years. Efforts to expedite this process are currently in place.

Police officers explained that all successful applicants across Ontario begin their training in a 3-month long intensive program near Aylmer, Ontario, where trainees eat, sleep, and train to become officers. Trainees learn the basics in firearms, physical training, and legal statutes, as well as how to communicate with people. Participants, such as this detective constable, also described how trainees become acquainted with the paramilitary aspects of policing:

“...it was really everything I expected it to be in terms of how regimented it was, down to polishing your shoes, making sure your equipment was in order, having all of your T's crossed and your I's dotted, you know, making sure that you followed the letter of the law and the rules and how you addressed people, how you walked, what side of the hallway you walked on, when you went for lunch, what side of the line you went in. They were, it was very regimented, and I absolutely thrive on structure like that.” – PO-06

This highly structured program exemplified some of the most extreme paramilitary features in the field of first response work. Furthermore, the centralized nature of the program represents a uniquely singular opportunity for the entire province's collection of police services to indoctrinate their servants with organizational values and expectations of performance.

Once graduated and sworn in, participants recounted their experiences as Recruits in Training, where they return to their local platoons and gradually develop their independence over the course of several months, through one-on-one training with coach officers. This work begins with frontline policing on patrol, which becomes an autonomous task after the training phase, which for participants usually lasted several years.

The work of policing was described as primarily being conducted by single individuals. However, officers were always part of larger units which they can rely on for support and backup. Officers described the many different departments within the service, and how they would generally spend a few years at a time in a role. Workloads and workplace cultures were depicted as varying widely from one department to another, as were the experiences of day-to-day stress levels, team sizes, and gender ratios.

Perhaps more than other professions, participants described a clear distinction between civilians and officers. When considering the context of policing within society, participants described an ongoing shifting of public perceptions surrounding policing. They tied this to recent social and conventional media coverage of police brutality within BIPOC communities, as well as organized calls for defunding of police services. In response, this is said to be contributing to a widespread sense of lowered self-esteem throughout the service, as well as a conflicted sense of frustration with the public, as this police officer describes:

“A lot of it is media driven, where I'm just like, Dear God, please just let me get through this. I can, I have never heard so many people say they just can't wait to retire. We have people quitting and leaving and going to the OPC or to OPP. We

have a lot of people trying to get out right now... And all of us tell our kids do not, you're not allowed to be a police officer. That's a huge thing... Everybody I know. There's a few, couple of older guys have had their kids join on. But for the most part, all of us tell (our) kids, absolutely not, do not do this job. And it's from the media and the public scrutiny.” – PO-07

When considering policing at the broadest level, officers described the service as undergoing a transitional phase that entails the re-evaluation of the role the service plays within society. As policing responds to public demands to reducing the use of force, participants described how services have transitioned their image, such as changing the language of a “police *force*” to a “police *service*”. Through this transition, organizations are increasingly associating themselves with descriptors commonly regarded as feminine, such as communication and care work, or connecting and collaborating with communities.

As previously alluded to, workplace cultures within the police service varies considerably from one unit to another, with some having reputations for excessive sick day use, and others for unattainably large workloads. Participants described a range of management styles, as well as the nature of the work being done, such as the slower and more meticulous investigative work, or the high-intensity exigent nature of patrol work. The environment where policing is conducted was also described as highly variable, such as which office location one might be in, or if their day’s work entailed a 12-hour stakeout in a vehicle.

Paramilitary influences were also attributed to the formation of numerous ranking levels within the service, in addition to a wide variety of positions. Thus, career progression pathways in policing can involve many different positions across the career timeline, where officers tended to work in a unit for an average of two to five years. Officers and other human resources were described as regularly being shuffled to accommodate changes to available funding, maternity and other types of leaves, and dynamic community needs. When discussing career advancement, participants

explained that until recently, transfers and promotions were conducted with a process that was regarded as exclusively responsive to the needs of the organization, and as driven by senior leaders in management, conducted behind closed doors. In an effort to improve transparency and reduce favouritism, formalized transfer processes, regarded as HR-driven, are being established where officers must make an explicit application that demonstrates their skills and abilities, and an open competition will take place for the position. This transition was described as gaining varying degrees of acceptance among officers, where older generations often lack experience with rigid evaluation categories and the types of interview questions that younger generations of applicants tend to be familiar with, given the common use of grading rubrics in educational settings.

Fire Services

Most firefighter participants we spoke with that pursued a position as a career firefighter completed at least a pre-service firefighting training program at the college level, if not a university degree, in addition to a comprehensive physical test, prior to applying to local services. By contrast, the volunteer firefighters completed a less-vigorous physical test, and some described paid training which corresponded to the same national standards that college programs must abide by. Volunteer firefighters explained they were required to live within a short distance from the fire hall, and described having full-time jobs that have little or nothing to do with firefighting, however, they needed to be jobs that can be dropped at a moment's notice when a call comes in. Both career and volunteer participants described positions as competitive, with an application process that often involves applying to multiple regions to secure a position. Once hired as rookies, they completed further on-the-job training, and when certain skills were attained and approved by the chief, they were cleared to attend calls.

The work of firefighting was described as very team-oriented, and compared to the other two professions, it tends to exhibit the strongest group relationships. Participants attributed this to the

amount of time firefighters spent with one another, such as on 24-hr shifts, or the organization of down-time, such as shared meals and maintenance duties. These relationships were also said to be strengthened by the nature of how the work is organized, where platoons of 4-8 people respond to each call, and each person has a role to play in the response work, as guided by the chain of command. As a result, and given the extreme risk involved in some cases, firefighters described relying heavily on one another to abide by safety precautions, where, at times, they would genuinely hold the life of their co-workers in their hands, in the way that police officers sometimes do during critical events.

Over time, the work of firefighting has been adapting to the larger success of fire prevention efforts. Nowadays, many of the calls that fire services respond to are medical in nature, and very few are related to fighting fires. With strong support from the public, fire services often leverage their positive reputations toward educational outreach and fundraising. Yet many in the fields of paramedicine and policing hold resentment toward the fire service when comparing levels of public support, as well as workloads and work-life balance. Some paramedics, such as this PCP, also view their professional territory as being threatened, in response to fire services' attempts at increasing the medical services and procedures they provide:

“It's just, there's this view that the fire department is like a creeping vine and they're just spreading out and taking over. And they almost use the fact that they have this huge budget and they have very minimal call volume that like hey, well, we're, we're just sitting here anyways, why don't uh... Well, maybe if some of your money went into our side, we would have- because if you look at the calls that the fire department does, they're responding to medical calls, they're not responding to dumpster fires, or structure fires, or carbon monoxide detectors, or hydro lines. Like, it's crazy, like 80% of the calls that they do are for unconscious people or cardiac arrests or like things that they don't belong at. ...where they say like, Hey,

we're already sitting here. And but nobody looks at it like, WHY are they sitting there? Maybe we don't need twelve firefighters and two trucks at every station.

But it's even, it's enshrined in like the bylaws that you need to have these fire stations every so far apart throughout the city, but there's nothing like that for your own health care. So when you see the big picture of it, it just makes you angry a little bit. And then there's nights, where yeah, they don't go out at all. They're just there the whole night long, just paid to be available, which sometimes I am too and I won't complain. It's nice feeling but, but yeah, it's really lopsided in terms of the response. And that's, I think, where some of the, the bad blood comes from.”

– PM-04

As this paramedic explained, the impression of success within firefighting has impacted the interprofessional dynamics between other first response professions.

When workplace cultures in firefighting were discussed, participants recounted the closeness of their relationships with co-workers, where pranks and practical jokes were played on one another, or through the hazing of new trainees. Conversely, firefighters in larger cities described that when covering a shift in another platoon, they would sometimes feel like an outsider to a very tightly knit team. In rural areas, volunteer firefighters were well-recognized and deeply embedded in the communities they live in and serve. However, when unsuccessful in their work, volunteer firefighters sometimes described knowing the victims and their families personally, and how difficult it can be to get psychological distance from the event, as this firefighter recounted in her experience of a failed rescue:

“And, you know, we didn't make the save so it's not like we're high fiving each other. It was a shitty morning... And then after everybody still had to go to work, and do a full work day afterwards. And then, because it's a small town, everyone's

got Facebook. And everybody's Facebook is just flooded with posts of this person, because she was (well known in the community). And so your whole timeline is just pictures of this person's face. So after, um, I don't remember whose idea it was, but after work, everybody went to the bar in town for a drink, everybody that was on the call... And, um, and then when we were drinking the, the waitress comes up to the table and says, Oh, somebody at the bar wanted to buy your table a round because they recognize who you were. And they know that you had a rough morning. Because it was all over the news, right? [Yeah.] And so that was really nice too. Like, hey, you didn't win this one. But you know, we'll get the next one. So that was good." – FF-04

While both career and volunteer firefighters described be revered by their communities, the volunteer firefighters also cited feeling burdened, at times, by the depth of personal knowledge they carried of community members' intimate affairs, a knowledge gained from the personal nature of their work.

Descriptions of career progression for firefighters varied considerably by region, but generally followed a path along very clear, paramilitary-influenced roles, along the chain of command. Participants described that many firefighters remain at the entry-level position throughout their career, and how oftentimes in larger urban services, the base-level position is graduated into four tiers, with a test and the attainment of specialized skills required to pass each level. In some locations, this progression was described as almost automatic, where tests can be repeated however many times are needed to pass them, setting an active upward trajectory as an expectation of the career, in a similar way to policing. This pathway was described in most circumstances as feeding into leadership and management roles. In rural volunteer services however, firefighters depicted much less progression through different roles after training. This was explained by the fewer gradations of ranks and significantly less funding often observed in rural services, leading to fewer positions and

members who remain in their roles for much longer periods of time, in addition to the fact that this work generally does not represent a volunteer's primary career focus.

Experiences of Women First Responders

The following section presents a collection of four themes drawn from the data: Changing professional environments, impacts of performing womanhood, facing resistance, and shaping and constructing spaces for women. These four ideas capture various aspects of our participants' experiences as first responders, encompassing individual actions, organizational structures, and transitions across time.

Changing Professional Environments

Beginning first with some of the key factors related to the work environment, organizations within the field of first response have been, and are continuing to undergo, significant transitions related to gender equity. The majority of our participants were able to share their insight from having worked in their respective professions for more than ten years, and many for more than twenty years. While they described that very few women hold leadership and upper-management positions, participants shared how many more women colleagues they now have, compared to when they first began their careers. Some participants also spoke about increasingly accessible uniforms that have been designed specifically for women's bodies. Attesting to this change, a participant who has worked in the police service for more than twenty years shared: "*The uniforms have come along- I won't say a long ways, (but) they've come along.*" (PO-06). Some women described having to make personal amendments to uniforms to accommodate their growing pregnant bodies, while others described no issues with fitting into uniforms, which they explained was due to their body already

being larger, wider, and taller than the average woman's body. However, many women did describe feeling unprofessional, or unsafe when having no other choice but to wear poorly fitting uniforms.

Paramedics and firefighters also described improving access to equipment for women, such as stair chairs with longer arms to accommodate space between the seated patient and a paramedic's chest, or in the case of firefighting, oxygen face masks that have narrower sizes to accommodate women's often more narrow face shapes.

Participants also described changes to workplace cultures, such as improvements to the often casual, yet common, sexist commentary, or harassment that regularly took place. Expectations of what work women are performing, and how it is being carried out also appears to be changing. Several paramedics explained how firefighters used to routinely assume all the lifting work on an emergency scene where women paramedics were working, which was described by this advanced care paramedic as insulting and revealing of challenging interprofessional dynamics:

“So, yeah, ...the firefighters were the first kind of, like, eye opening experience, like wow, they really think I can't do this JUST because I'm a woman. 100%.”

- PM-03

Thanks to the development of mechanical stretchers, as well as the insistence by women that they are capable of lifting, this paramedic described this presumption as generally no longer the case.

Workplace cultures experienced at the day-to-day level are also shaped through the impacts of an organization's policies and procedures. However, workplace cultures can also communicate the values of an organization, through the presence, absence, or the specific impacts of women-focused policies. Police officers and firefighters recounted that historically, when women disclosed their pregnancy to their organization, they would get immediately pulled from public-facing positions and redistributed into, often dreaded, administrative roles. Some police officers identified the current standard of when a pregnant woman no longer fits into her policing uniform she must relinquish her

use of force. However, in most cases, it was described that women have relatively more autonomy over how long into their pregnancy they might remain in their current role, and how re-deployments are often lateral or even upward professional opportunities.

While these changes have been taking place in a top-down fashion, participants have also described the trajectory of their own resistance to harassment and discrimination at the interpersonal level. As a paramedic who has been in the field for just a few years, this participant describes how her willingness to address sexist comments has evolved over the course of her career so far:

“...when I first started my career, I was very quiet and subdued about it, and all haha, like, you know, laugh and smile and like, kind of take it on the chin almost, and kind of just brush it off. And I don't do that anymore. I, last two years, I, it's probably gonna get me in trouble at some point, [laughs] my attitude towards this, but it's... like, this isn't okay. It's 2021. Not that it was ever okay a hundred years ago, but it's definitely not okay now.” - PM-02

Many participants also connected the risk of speaking up against unwanted comments or gestures to their career stage and level of self confidence, such as the police officer quoted below, who has worked for the service for more than a decade:

“So yeah,... It's interesting to go through your career and until you feel comfortable to stand up, until you have enough, um, confidence within yourself and your abilities to actually stand up to people like that, it's tough.” - PO-03

As described by PO-03 and others, many women have to endure harassment and discrimination in the early parts of their careers, and it is not until they develop sufficient professional rank and strong professional reputations that they may feel able to stand up for themselves and their women colleagues. As such, when women continue to develop and succeed professionally, they increasingly

become more empowered, personally and professionally, to shape work policies, practices, and cultures into spaces that are supportive for women. When reflecting on the stories that participants shared, it was clear that women appreciated the organizational developments that have been accruing over the last few decades to accommodate women's bodies and unique needs, as this police officer describes:

“...and I kind of hope, and feel it's better today. Like policing today is not the same as it was 20 years ago. And yet, there are still little snippets and little pieces here and there, that I see that, I think, maaan, have we really come that far? Or are we still in exactly the same spot we were 20 years ago?” – PO-02

Having conducted this work for more than twenty years, this participant had a significant source of comparison to appreciate the historical depth of gender advancements witnessed over the course of her career. While these participants were happy to report increasing numbers of women colleagues, and improving access to resources and technologies, they also agreed that there is still much room for improvement.

Impacts of Performing Womanhood

Participants in this study described how being a woman can be an asset in some situations, but remains a liability for them, in many others. Communication and de-escalation skills, commonly identified as abilities that are intrinsic to womanhood and innate to all women, were described as highly regarded by colleagues, and the participants themselves, in all three of the professions analyzed. A firefighter who worked in a large city service described the value of connecting to patients and taking flexible approaches to problem-solving, which she attributes to the gender scripts of being a woman in the following way:

“I would say, in general, our bedside manner is quite good. Just because ...like we just need to communicate little bit better. Maybe naturally a little bit more nurturing, a little bit more patient and understanding, a little bit more empathetic, sympathetic, ... I think our character is just, you know, not everyone is maternal and paternal and nurturing and whatever. But I think, in general, I have noticed that we just have that little bit more, we seem to establish a connection with our patients a little bit more, and just offer that like, ‘it's okay’, and figure out how to chat with them and connect and whatnot. ...I see that like, ability to process really quickly, evaluate really quickly, create... an approach, and then switch from plan A to plan B, to plan C, as needed. Where maybe our (male) counterparts are just a little bit more tunnel vision... And, I mean, it's a blessing for them, too, because they're, they're very confident. ...And they're like, that's how you do it. And then I'm like, I'm like, maybe that was not the best approach? But you seem to feel that way.

And that's okay.” – FF-01

Regardless of confidence, participants valued these abilities which they felt they positioned women as experts in this work, and at times, as having an advantage over male colleagues, as this police officer describes in the context of handling a high-intensity call:

“...speaking from my experience, women are better communicators. We can do the job without it becoming physical. Nine times out of 10. 99 times out of 100. And I've been to calls where, you've got the call in hand and your male counterpart shows up and all of a sudden you're in a fight and you have no idea how that happened. So you know, I think in a lot of ways women bring different things to the job than men do. I know, (in) hand to hand combat with a guy, I'm gonna lose. That's why I

have a tool belt. That's why I have use of force options. But that's primarily, my communication skills, are what's going to keep me out of those situations.”

- PO-06

As noted here, women acknowledged a growing plurality in how the work is being accomplished, and recognized the variety of skills and tools available to facilitate their success in the work.

Participants also described how their colleagues commonly defer to women first responders when patients and clients are pregnant women or children, or are members of the public who prefer to receive help from women first responders only. Furthermore, participants described that both clients and colleagues simply felt safer to disclose their vulnerabilities to women, such as when a patient is recounting an experience of assault, or when a colleague is divulging their mental health struggles. Some women first responders also felt well-positioned, based on the challenges they have experienced in their own personal lives, to advocate for women clients accessing healthcare and social service resources.

Yet, as participants listed these strengths, they also described how being a woman can introduce further challenge to their work. Women in our society are still largely regarded as responsible for raising children and performing domestic duties, and bearing the weight of balancing family demands with their careers. Many participants, such as this primary care paramedic, described how women first responders are no exception to these expectations:

“Like I was mentioning earlier, like being the, the life givers. And going through the kind of additional things that might make it complicated when you've got children, and usually it's just the way society is organized, that you're still like, I'm still the Alpha and the Omega in my house, like managing the kids' schedules, and whatever the hell they're going to eat and stuff like that.” – PM-04

Negotiating the demands of work and home life was clearly a burden for many of our participants. A firefighter who worked in a larger organization, observed that the presence of children at home was not the sole contributing factor to generating stress related to work-life balance:

“Yeah, I know like, I work with a crew with, you know, all the guys have young kids, and it’s a break for them, coming to the hall, because it’s like, their lives are definitely, you know, difficult. But I do actually know a few women who, had a baby, and, have been off on mat leave for quite a few years. And it’s very hard to manage all of it.” – FF-05

As this firefighter clarifies, the stress of work-life balance was a gendered experience. From this perspective, it can be seen how work can help to balance home-life stress for men with children, which stands in contrast to the ways women with children describe their additive or accumulating experiences related to work and life demands. Women, such as this probationary firefighter who parents alone, can see work and life as competing, in ways that force women to choose their priorities:

“So, ...you want to balance being able to move up in your career, if you want to become a captain or something like that. That’s, it’s balancing that or like, you know, even being a single parent and wanting to work overtime and stuff. Like I don’t do any of that just because it doesn’t work right now with little kids and all that. So, yeah. Or being part of more committees or that kind of stuff. Because you don’t have another person at home... So, yeah, that would be the biggest challenge.

Absolutely.” – FF-03

Unlike some other professions, organizations within the field of first response work rarely provide formalized support for childcare, exacerbating the burden for single mothers such as this participant. Furthermore, the ratios of men in the field may likely reduce opportunities for collegially-supported

child care. Among all of our participants who cared for children, each one described how challenging this can be while working variable shift work schedules, such as this paramedic whose partner also worked a rotating shift schedule:

“And like, the hot button issue of childcare in general. So what some of us have tried to set up on our own, but it's really challenging, like for me, like a nanny has really worked out. And I'm fortunate that that's something we're able to do, but even like a nanny share between moms and other groups, because when I first went back to work with my daughter, I put her into daycare, because what else do you do? And I just felt like such a garbage mom, because we- like, my husband and I were both working at that time. But if I was working a day shift, he was working a night shift, so we would have all our same days off together, which was nice. But then like, yeah, I just like get my, you know, one-year-old out of bed at like, quarter to six in the morning to drive her across town to the only daycare in the city that's going to tolerate these wacky hours, because mostly everything is like an eight to four kind of mentality. So, drop her off. And then for my husband to come and get her, like, oh god and then she'd just be there for like 12 or 13 hours, like goodness! So yeah, I ended up on like, a Tinder for nannies (website). It was great. And we found this like, and she's been with us the whole time. I don't know what I (would) do without her. But yeah, the typical lady issues of childcare and money. It would be great to have some additional direct support there, yeah.” – PM-04

Many women explained how they struggled to navigate their childcare, and described that pooled daycare services for first responders was a common suggestion. However, women, particularly in policing, often stated they would struggle to trust this kind of service. This was explained as being related to trusting the individuals doing the care work, or that it was considered risky to gather the

children of many police officers in one location, for fear of heightening the visibility, or vulnerability of their children.

Turning upstream in the process of creating and managing families, the participants who had previously become pregnant when working as a first responder described labouring on the decision of when to stop working, and/or when to seek accommodations, if available, and when, or if, to return to work. This primary care paramedic described the conflict women face in this decision, and the judgement that can come along with it:

“Um, women are the free labour force of the world, right? We stay home and watch children for free. I think that's changing a little bit but obviously not quickly enough. I mean, I know we have mat leaves and stuff in Ontario, which is fantastic. But yeah, at some point, you have kids and you have to go back, right? Back to work. Or you make the decision to stay home. It's like, you can't win. You get judged (either way). Yeah, there's definitely different, different dynamics (between genders). I know some, like male co-workers that have taken pat leaves and stuff, to kind of help out. But yeah, we are the free labour force of the world. So it's yay for us for doing both right?” – PM-02

The description of this paramedic also conveys a sense of accumulation, rather than balance, when considering the double workload of career and domestic life; a recurring sentiment among the women we spoke with. Given the wide variety of professional roles within first response work, there too exists a wide range of standards to guide women through changing or leaving their work due to pregnancy. Some participants discussed convoluted, or undefined processes for accessing maternity leave, and as a result, women's personal decisions can be subject to moral judgement in the absence of more structured occupational supports.

The ratios of gender in the workplace, both historic and at present, seem to influence levels of occupational supports available to women within an organization. In the cases of paramedicine and police services where more women have been part of the workforce for longer periods of time, more space has been created in their organizations for women's bodies, perspectives, and approaches. For example, this paramedic from a medium-sized city described the ways that women are taught to leverage their body mechanics to succeed at physical tasks:

“I was doing so well in school. And then I got to that point where I had to learn how to pick up the stretcher, and I couldn't do it. And I was- got so frustrated, and so down on myself, because I was like, What do you mean, I can't lift this up? And it wasn't until that female teacher came in, that I finally learned how to do it.”

– PM-06

Organizations, including education programs, with higher ratios of women tend to have a greater need, as well as a justification, for identifying adaptive strategies or for providing supportive technologies for women to succeed in their roles. Some organizations described as more progressive, recognized the value of a diverse team, who also hire for endurance, strategy, and skill in handling equipment, along with the ability to employ leverage and technique to accomplish physical tasks. Due to the increasing reliance and use of technology, participants described a lessening need for extreme strength and size, when compared to historical standards. Adapted equipment and uniforms designed for women's bodies, such as a female police officer's MOLLE vest, which has more space for breasts and is shorter compared to its original design, is just one example. In these cases, it is clear that the organizations are doing the work of adapting to the women they employ.

Alternatively, in many fire departments, there remain very few women at all levels of the organizations. This ratio positions individual women to do the work of adapting to their environments, in which they must become “one of the guys” in order to be successful in their work.

This first-class firefighter recognized that colleagues were trying to be respectful, but preferred the safety of sameness among her team:

“...in the beginning, it was like one or two people would be like, ‘Alright guys! So-uh... and, girl (spoken sheepishly), we’re going to...’ It only happened like twice and to the two people that did it, I was like, don’t do that shit. You’re making it weird. And so they stopped. But it’s always been like, Okay you guys, or you bastards, or you fuckers, or whatever, right? Like it’s never been, nobody’s ever made it weird. I’ve always just been one of the guys. [Right, right. And do you like that? Like, is that where you’re comfortable?] Yeah, for sure. Because... that’s... like that’s the status quo, right? Like, why? I don’t want to be treated any different.” – FF-04

Maintaining a sense of belonging is particularly important in firefighting, as FF-04 describes not wanting to be singled out or differentiated from her team members. Gestures and actions to communicate one’s sense of membership can be a form of labour that becomes intertwined with identity, as this firefighter from a rural community describes:

“I spent a lot of my life trying to live up to the image of being one of the guys, right? That you sort of do lose your identity. I found I lost a lot of my identity and who I was and just trying so hard to fit in. And I fit in. Like I was, the guys love me, you know, I- But I work very hard to fit in. And you know, drink like them when they would go out, and party like them, and firefight like them, and lift weights like them. Like, I was always trying to (fit in)...” – FF-05

The degree of effort described here provides insight into the costs of not belonging, such that it takes precedence over an individual’s own identity; a sentiment that is possibly not limited to women

within the service. This sentiment was noticeable at times within the police service as well, as described by this officer who worked in the service for more than twenty years:

“So, um, I think I was fairly well accepted on my shift. You know, I think generally speaking, the guys respected my work ethic, they respected, that I WOULD get into a fight with them, you know, that I wasn't shy that if something happened, they could count on me to have their back. And even having said that, I know there were comments and remarks and things that went on behind the scenes. So...” - PO-06

The value of belonging is also equated with safety, as this officer suggests, who connects acceptance with reliability and trust, in the face of threat. While some participants described feelings of self-betrayal in order to assimilate, some women also described no inner conflict whatsoever between being “one of the guys” and their sense of self. Several firefighters described very localized support for women in fire, where they found enduring acceptance among the fraternity of their immediate peers. In these cases, it was not until they worked with other teams, or interacted with other ancillary professions or even the public, that they would identify the “constant uphill battle” of needing to continually prove themselves in their role. The need to defend one’s reputation was present across all the participants we interviewed. When speaking about mentoring other women, this senior-level police officer describes the precarious nature of women’s reputations in her field:

“Yeah, I think one of the common phrases, and I’ve said it to other female colleagues is that, we have to prove ourselves EVERY SINGLE DAY. Whereas a man goes out and does a good job once, and they’re accepted. The other flip side of that coin is, as a woman, if you mess up, that’s what you’re known for, for your entire career. As a guy, if you mess up, and then the next day you make up for it, that’s forgotten, and you get to move on. There’s definitely a double standard there. And I do think we have to work, I wouldn’t say 10 times harder, but probably twice

*as hard to maintain the same kind of status and um, reputation, that the men enjoy,
just by being men.” – PO-05*

The regularity and routine of needing to manage one’s status means that these women are never fully relaxed and always on guard, contributing that extra layer of labour to their workload. As this officer describes, the constancy of this task is almost analogous to performing her gender, and is indeed a part of her daily work as a woman in this profession.

Women in professions where they are regularly outnumbered by men are more likely to be subject to aspects of tokenism, such as increased visibility and scrutiny from their colleagues and management. This ratio can contribute to precarious reputations, and may result in women having to perform tasks which may not be adapted for their bodies, in uniforms and with equipment that is also not adapted to their bodies. This volunteer firefighter described her luck in having access to backup women’s bunker gear:

“I was lucky enough that there was a set of spare gear that fits me perfectly. But, had there not been a female on before me at some point... And the name inside of the gear says Beth, and nobody’s ever heard of Beth! (laughing) So we have no idea where this gear came from! But had that gear not been there... Would I have been in a disadvantage? Absolutely. Because it's all huge men sizes. I would- it, it would have been a nightmare.” – FF-04

Given that the presence of this backup gear was attributed to luck, rather than to sufficient planning and organization, speaks to the daily challenges that some women continue to face at work with decision-making that de-prioritizes women’s safety and inclusion. In the absence of such supports, women persist by attending to their own needs and often find creative ways of assimilating and succeeding in male-dominated workplace cultures, such as using disposable paper funnels designed to facilitate a woman in urinating without having to remove her clothing or sit down. Across these

examples, it is clear that the performance of women's gender is fluid and adaptive, and responsive to gains and risks. While women find ways to leverage their skills and abilities for success, they continue to navigate colleagues, environments, and cultures which challenge their participation in first response work.

Facing Resistance

Women described experiencing a social resistance to their presence and their work. This resistance was performed by colleagues, particularly among paramedics and police officers. While many women described feeling well-supported by their immediate co-workers, they also noted a culture of specific language used to define women as separate from the rest of the workforce, as described by this primary care paramedic who worked in a rural service:

“It's, yeah, don't, don't call women ‘oh them girls’, ‘those girls’. Like, we're women. We're paramedics. We're not, we're not children. Yeah, I've gotten that a few times. Ah, just the lack of respect, I guess it's, you know, it- I know there's a lot more women in the career now, in the field. But I don't, I don't know if the mentality has changed a whole lot.” – PM-02

As PM-02 clarifies, the mere presence of more women is not always a sufficient factor in changing individuals' actions within persistent workplace cultures. The ways in which leadership dynamics can interconnect with unquestioned cultural perceptions of gender was described in this conversation with a high-ranking police officer:

“...one of the terms that, when I first started was popular was PW, which is ‘police woman’. And I hate that phrase. And some of the men that I work with now, even still, who have been around for 20 plus years, use it. And I will say to them every time, please don't call it that, like, ‘police officer’. That's all you need to say. You

don't need to differentiate between police woman and police man. Because oftentimes when the guys would say PW, it was derogatory. It was, oh here comes another PW. ...So one of the guys ...came to me and said, you know, I don't think we need any more PWs on our shift, we have enough. And... I looked at him and I said, Who are you talking to?! Like, who are you talking to? Because surely you're not talking to this PW! Telling me that we have enough PWs on our shift! Like, and we probably had, four, or five, versus 15 men. Like, I just really wanted to smack him upside the head and say like, what are you thinking?! Like, where did that come from?! How? And how do you think that you're entitled to come to me, as your female supervisor, and tell me we have enough women on the shift? It's just, asinine! ... Like, you would never have said that to a male supervisor about more men. Can you imagine, a woman going to a male supervisor to say, Hey, boss, I think we have enough guys on the shift. Could you get me some more girls? ...It's just, the liberties that they take, um, I think sometimes, I'm still surprised at some of the things that people say. Like, ...I can understand talking to your buddies about that. That's, that's the place where you expect it to happen. But to go to your female supervisor and express, that's how you feel, that we have enough women already on shift? (loudly sighs)" – PO-08

From this perspective, it is clear that power dynamics across gender and rank are also shaped by male hegemony. Participants also described being congratulated by their male colleagues when performing masculinity. Job tasks that were particularly associated with masculine traits, and yet otherwise standard performance expectations, garnered women special attention. This constable described receiving accolades for getting physical with someone during an arrest:

"You would think that that would be, uplifting. But it was completely condescending to me. Because I felt that that was not a conversation he ever would

have had with any of the male officers. And it's, it's interesting, I will never forget that, my entire career. And I, I even think he meant well. You know, I think he was trying to pump my tires. I think he was trying to, you know, say 'good job'. But, that was not something any male officer ever would have been congratulated for doing. So, it's always that kind of a double edged sword, right? Like you're getting a compliment, but it's a backhanded compliment.” – PO-02

As this officer appreciates that the comments may be innocent and even well intentioned, she reflects on a gesture which reinforces the relationship between gender and performance standards, as one that echoes in her memory as deeply insulting. In addition to being challenged by their co-workers, participants described resistance from other first response professions as well. In discussing the work of being an advanced care paramedic, this participant describes the dynamics of delegating to multiple professionals on an emergency scene, and how gender influences perceptions and the co-construction of identity:

“But in terms of being an advanced care- as a female advanced care paramedic, you got to kind of be, at least I try to be- I don't want to say delicate, but I'm always wary of how I come across to my peers. Because I don't want to come across as a bossy bitch, right? [Yeah.] Unfortunately, if I were a man coming in and saying the same words, in the same tone as I am, I'm now conceived, I'm perceived as bossy bitch. And they are perceived as, wow they're doing a great job taking-

They're a LEADER!” – PM-02

In response to this resistance, participants expressed concern for their professional relationships and for their reputations, and shared the need to challenge and defend their suitability and merit when applying for and garnering promotions. In turn, women may walk on eggshells when giving direction to their staff and employ participatory leadership styles as a tactic for reducing confrontation in their

daily work. Furthermore, women who were navigating career advancement in conjunction with pregnancy and maternity leave described employing strategies such as taking on training during maternity leaves, or returning from maternity leaves prematurely, to ensure promotional opportunities were not missed, or to guard against the risk of being perceived as someone who does not care about their career. From this perspective, it can be seen that women are consistently navigating gender scripts when striving to advance their careers.

Amid increasing pressures to improve the number of women in leadership roles, participants described equity-driven promotions which have contributed to improving vertical gender distributions. However, these promotions have come with a number of consequences that have largely impacted women's reputation. Across all professions, our participants described how women's promotions have been contaminated with the possibility that they are unfounded and unearned, and simply a result of gender distribution-based decision-making. It was described that individuals of all genders are becoming increasingly skeptical of woman in leadership, and believe there to be a lack of merit as a baseline, until the women leaders prove otherwise. Women who garnered promotions also disclosed that they experience a deep, though often quiet, sense of self doubt about the merit of their accomplishments. Further exacerbating this situation is the public nature of policing. Many police officers described observing equity promotions, where women were clearly promoted without the necessary skills and abilities, and described watching these women inevitably fail in their role, both personally and publicly. The increasing personal accountability and professional risk in conducting police work was identified as contributing to the reducing status of policing as a "good job" particularly for women.

Social resistance was also described as coming from clients and patients, particularly when hearing from paramedics, and at times from police officers. Women paramedics described regularly being scrutinized by patients who vocally question their skills and abilities. In conversation with this paramedic supervisor, she describes how the public often struggle to perceive women as experts:

“...let's say your family member is quite sick, and the PCP's now calling for an ACP. You know, if a male ACP walks in the door, I think it's very different than if a female walks in the door. Especially if they're an older couple, especially if, given their culture, women are not in that kind of a role. It kind of goes (inaudible), and they start at questioning, and they start, you know, making doubts, and and, so I mean, in that sense, I kind of feel a need to really, I don't want to say step up my game, but I really need to know, clinically, what I'm doing. And sometimes I have to reason more with patients and family members as to what I'm doing, as opposed to men, because they just inherently trust men more than women.” – PM-07

In this situation, social resistance is associated with a clients' cultural and/or religious beliefs, where in some circumstances women paramedics may not enter a facility through the front door, speak directly to heads of households, or visually inspect a man's unclothed body. At other times, social resistance is connected to generational differences, where more conservative beliefs may shape older clients' perceptions of women's roles in society, by understanding women as mothers and wives rather than as workers and leaders. Police officers described being underestimated by the public as well, but to a lesser degree, as this dynamic was likely blunted by the power and authority that a police officer possesses over members of the public.

Many participants also discussed barriers related to the environments in which they performed their work. Access to washrooms was often a challenge for women firefighters who described strategies such as bringing urination tools that allow women to expel urine while standing. These challenges also arose when faced with menstruation, as described by this second-class firefighter:

So in our gear bag, I also keep ziplock bags for the used tampons. [Oh smart.] I put them in my bag. And like, wet wipes. Baby wipes. But they have, do you know what a She-We or a Go-Girl is? (funnel-shaped devices that women can use to urinate

while standing) [Yep, yeah.] So they make disposable ones that are made of cardboard, which is great, because I'm not trying to put a pissy funnel back in my bag and have it like, touch my things. So yeah, ...and then I'm going to get back to the hall and wash it in the bathroom?! Like it's just- we'll let it dry?! So I just, they have disposable ones. So I buy the disposable ones. Because again, you're at a fire scene for hours. And you have to hydrate. If you do not drink 20 bottles of water, you're gonna pass out, because it's SO hot. It is 400 degrees. And you're wearing a giant oven mitt. [Kelly laughs] It is! It's an oven mitt that you're wearing. So, and you can't take it off. First of all, it's got suspenders. So, now I have to take my fucking jacket off. And then the suspenders. And then like the boots are up to- it's just, it's a nightmare. I'm not- it's not gonna happen, especially in the winter. So, this little funnel... – FF-04

Through the combination of limited environmental supports in addition to uniform design, this firefighter explains how women find strategies to cope. However, in this professional context, participants explained that a firefighter's uniform which becomes soiled with carcinogens, hazmat materials, or biological contaminants such as blood, must be sent away to be professionally cleaned. Some of the firefighters interviewed described having access to only one set of bunker gear, and shared that if it becomes soiled with menstrual blood, they would spend time spot-cleaning their uniforms, rather than lose their gear, and thus their ability to perform their work, for the time it required to have it professionally serviced. Environmental factors also posed challenges for women who work as police officers, such as needing to remove bodily-worn gear, like a gun belt, and finding a sanitary place for its temporary location while going to the washroom: "*Where does it go? On the floor?!*" (PO-08). The work of policing can also require remaining in a stakeout vehicle for extended periods of time. In these cases, women described how challenging it was to urinate into a bottle or other vessel, as their male colleagues did, and in several instances, women described simply not

applying to positions that require this type of work, given that that was a known expectation accompanying the role.

All three professions commonly referred to generational differences as a contributing factor when discussing social resistance among their colleagues as well. Many of the examples presented above were often justified by differences in generational expectations for the work itself, as well as for who conducts it and how. This paramedic uses generational differences to explain gendered challenges related to performing delegation and leadership tasks:

“So (as an ACP) I might show up on scene to, you know, a dually male crew, you know, ...most men that I deal with are respectful, and, you know, appreciate my being there and listen to what I have to say. But, you know, when you get those older men who've been around a while, they don't- they DO NOT like to be told what to do. So I definitely have to kind of tiptoe on how I- I initially will tip toe, and if they don't listen to what I need, then I will have to kind of escalate it.” – PM-06

These generational attitudes, values, and expectations are representative of differences in generational cultures that individuals carry with them and enact in their daily lives. From the other side of the relationship, this firefighter described the power that older superiors held over her career development, and the ways that generational similarities and differences were mediated by gender:

“Um, with my colleagues, yes (they supported me), like with my, my counterparts that were of the same rank as me. But with some of the captains and like the old school, older chiefs? Absolutely not. It was terrible. It was terrible. In terms of lack of opportunity, discrimination, derogatory comments from, from the older fellows. Lack of opportunity. Did I say that one? Because I'll say it again, for sure. And I worked hard to get more certifications than my counterparts, my, my male counterparts, and they were still getting much more opportunity, to the point

where, like, THEY were saying something as well. So they were very supportive.

The guys that were on the same status of me, were awesome. But there was some, some older mentality. Yeah, for sure.” – FF-01

Many participants painted the picture of “old school” workers who have been in their careers long enough to have personally experienced significant developments in the field. They were described as men who long for “the good old days” where the public revered police officers, where firefighters rode on the tailboard of the truck through town, or when women were only being saved, rather than doing the saving. Furthermore, as described by this firefighter and others, it was clear that generational differences also crossed gender boundaries and affiliations. Women in senior roles who had worked in the field for several decades also tended to express less support for accommodations for women or support for mental health. These opinions were often justified by describing how they succeeded themselves in the absence of such supports. Particularly in the field of first response work, opinions and beliefs related to mental health often represented clear distinctions between generations.

Impacts of workplace cultures and paramilitary structures were also topics of conversation among participants. Participants described paramilitary influences, such as the chain of command, with a wide range of positive and negative adjectives, at both a localized platoon or unit level, as well as at a larger organizational level. On occasion, participants described sharing an opinion that was different from their chief, and how it threatened their future job security and negatively impacted their perception of being part of the team or “one of the guys”. This firefighter who began volunteering at a young age describes the advice she was given on how to succeed as a female new recruit:

“And I was told that that, you know, I remember words, the words, you know, when I was 16, that, you know, you’re the only chick in the firehall, just keep your mouth shut. Don’t say a word. Don’t complain. Don’t, you know, like... [Yeah] That was

regimented into me from a very young age, you know? Like, it wasn't, they weren't, he wasn't wrong. He knew how women would get treated, if you open your mouth, if you didn't fit in, if you didn't, you know? Like, you would get treated like shit or you'd just be gone. So I said, you know, I never talked and never kept my mouth- I always kept my mouth shut. It didn't matter what they did. You know what I mean? [Yeah] Like, no matter how bad their initiations were, or whatever, you just kept your mouth shut. You know? So over the years, you just... to the point where... you know..." – FF-05

Workplace cultures intersect with gender and rank for this firefighter, at a time and place where initiating new recruits was part of “earning your stripes” and necessary for gaining the respect of your team. She also describes how she carried this subordinated tone throughout her career as a strategy for belonging, with unsustainable consequences too painful to name.

When considering the stories of women across all three professions, it becomes clear that being socially included is deeply important for one’s mental health and mental safety, one’s access to resources such as mentorship, and to career development success. The degree of significance and importance of these factors is equal to the degree that women are willing to challenge the resistance they face, accepting risks as individuals and as professionals to drive gender and cultural advancements in their field.

Shaping and Constructing Spaces for Women

Despite being faced with enduring and multifaceted challenges, so many participants repeatedly described how much they loved the work they do, and the teams of people they do it with. When asked about the best parts of the job, this firefighter described the brotherhood she felt a part of:

“I think also the camaraderie, like the Brotherhood and the- I’m really lucky in that, my department, like save for like, I don’t know, two guys that are douchebags, they would be douchebags regardless of where we worked... that’s just their personality. So aside from that, like there’s definitely a fraternity... and it’s because you’re placed in those situations, where you literally put your life in each other’s hands, you... it’s just a natural, like you are a family. Like, shared trauma is such a strong bond, you know?... And nobody else gets it. Except those guys, because they were right there with me. And they saw it too.” – FF-04

The family dynamic was a common metaphor among firefighters, likely due to the larger teams and home-life structures designed into their work contexts. However, this participant explained the relationship as a product of the work content, and the intensity of the work experience as the glue that bonds the team. Many participants appreciated how the history of women’s inclusion into their teams has not developed evenly across the field, such as this firefighter who recognized her particular department as exceptionally invested in her success:

“I think our department’s unique compared to other ones, so like, I know there’s different challenges in other departments, kind of thing, because I’ve heard, (I’ve) been part of like, the women’s organizations and stuff and hearing their experiences (are) very different than my experience. Like, I’ve been in a culture that’s very encouraging. Very helpful.” – FF-03

When probed further about her experiences of support, this same firefighter described the reactions that her male colleagues have expressed when recognizing one of their team mates is not being treated well:

“One part that I do find interesting is like, my male counterparts gasping, like, DID THAT PERSON REALLY JUST SAY THAT? Because they know me as me.

And they're just like, oh my gosh, like, I never thought that you girls would have to deal with that. Like, they're just like, gobsmacked by it. Because, you know, they understand our capabilities. And that we're here for a reason. But like when they hear it second hand or, or like, you know, hear it from our point of view, they're just like, they're baffled. Which, which is, is kind of good, because it's like, yeah, this, this is how it goes often. [Yeah, yeah, this is pretty much my daily life, guys.]

Exactly. Yeah.” – FF-03

Other participants described how their male colleagues would offer support, such as “Do you want me to go talk to that guy?!”, when observing poor behaviour, and women recognized these as gestures as proof of a genuine alliance across genders.

When discussing their careers, women often explained how they cannot imagine themselves doing anything else, and how much they wished to encourage other women to join them, as this constable-ranking police officer described:

“I mean, again, it's just, I'm the only female in this unit. Would it be nice to have other women? Yes. Do the people here make me feel excluded? Not at all, like 100%. These guys are very awesome to work with. And, yeah, I can't ask for much more than that. Other than I wish that I had other females (to work with). But yes, they, as far as inclusion, like there's never been any issues whatsoever. I've always been included in everything. I think it's a great bunch of people to work with.”

– PO-02

As women appreciate what they have, they also recognized the work that remains. While some participants described difficult relationships with their female co-workers, most discussed the positive experiences of mentorship they had with women leaders, who provided them with examples of what is possible for women to accomplish. As this primary care paramedic suggests, many women

first responders seek to mentor and defend one another when needed, and try to lead by example with strength and perseverance:

“So there definitely are still issues between what women will have (to face) in the workplace that men probably don’t, just based on a vulnerability thing and society always thinking that women are supposed to put up with this bullshit. But I like to think that I’ve become the person who makes that stop and becomes a good example for other women to feel strong and supported as well. So that’s how I feel-like I’m trying to be better, and then also kind of represent that to other people as well.” – PM-01

Participants specifically named the actions of women trailblazers, who were the only women on their teams at each step of their career, and are now in professional positions of power, as those who are making impactful change at the organizational level for other women. Participants described that the more women reach down to pull other women up through the ranks, the more lower-ranking women reach up for help to achieve their goals.

During each interview, participants were asked to identify their favourite part of their job, in the interest of understanding how to strengthen recruitment and retention strategies for women first responders. Women often cited the high-adrenaline moments of driving at high speeds with lights and sirens, and fighting injustices in defence of their communities. Participants also described how their ever-changing work environments meant they were never bored, and the sense of power they felt when genuinely helping someone through a crisis. Women first responders often described feeling deeply connected to their communities and being nourished by the constant intellectual challenges in their work.

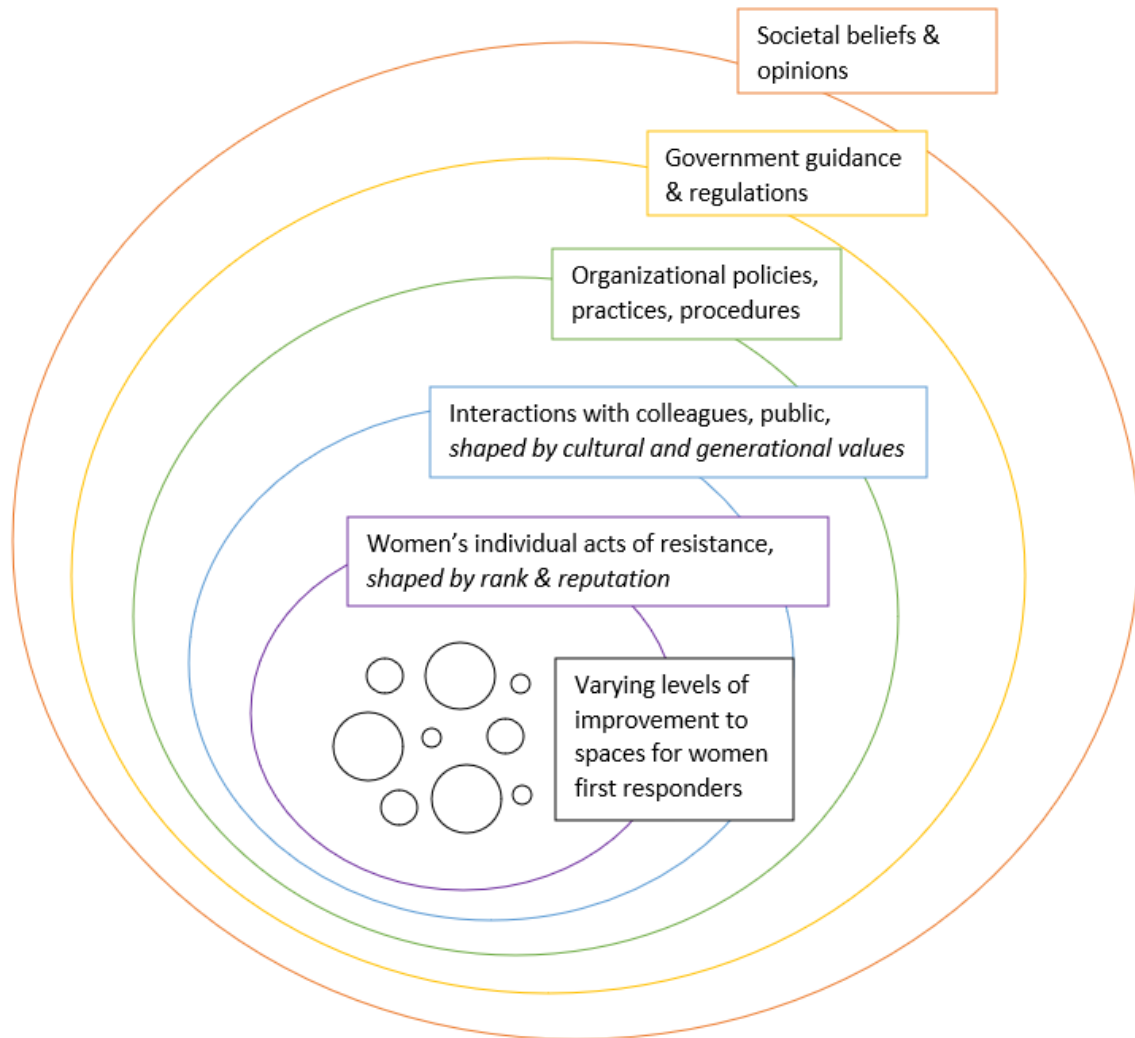
DISCUSSION

A Comparative Grounded Theory

The primary goal of this investigation was to explore the experiences of women first responders. As such, this study has provided significant insight into the factors shaping these experiences. An array of findings has been organized and understood through the development of four individual themes. However, when taken together, these themes connect to form a theory about women's experiences, which encompasses their accounts of change, struggle, success, and growth. This theory suggests that the significant improvements to women's inclusion in first response work has distributed unevenly across the field. As such, while some women are working in highly supportive environments, many women are still facing sexism and glass ceilings. Despite this challenge, women are deeply passionate about the work they perform, and actively encourage other women to join them. This theory speaks to each of the professions individually, as each is experiencing its own trajectory of development, yet it also holds relevance to the collection of women first responders in Ontario, who perform vital services for members of the public. The factors contributing to this varying development across the field are represented in a socio-ecological model (Bronfenbrenner, 1977) (Figure 3). As depicted in the figure, each nested level of factors may be producing both facilitators and/or barriers to acceptance of women as first responders, generating a range of improvements in creating spaces for women first responders across the field.

Figure 3

A socio-ecological model of factors producing varying levels of acceptance of women first responders



Note. Structural, interpersonal, and individual level factors which may act as barriers or facilitators, contributing to varying levels of improvement to spaces for women first responders.

Throughout the analysis phase, it became clear that a number of components which made up this theory would merit further discussion. These components tend to exist at the intersections of multiple factors, some of which are interpreted through the lens of pre-existing theory and literature, and all of which are contributing directly to persisting challenges previously outlined. The following discussion will explore these phenomena in further detail and contrast them to pre-existing literature.

Trailblazers, Tokenism, and the Work of Adaptation

In interviews with participants, we spoke with several first responders who were the very first women in many of the roles they assumed throughout the trajectory of their careers. Their specific experiences can be understood through previous research on the notion of gendered workplaces. Acker (1990) defines ‘gendered institutions’ as the ways in which gender is present in the processes, policies, and practices of organizations, as well as within their imagery and ideologies, shaping distributions of power, within and beyond the organization. In this context, women’s participation in occupations that are said to require ‘masculine’ traits, such as those within first response work, challenge the relationship between men and these traits. As described by Reskin and Padavic (1988), women’s very presence in such occupations punctures the ideology of inherent gender differences that seek to justify patriarchy and undermines the work as a measure of manhood.

In her classic study of a US corporation, Kanter (1977) established the term tokenism, a status associated with heightened visibility leading to amplified pressures to perform well, social and professional isolation from colleagues as a result of differences being exaggerated or amplified, and performing gender-stereotyped roles within one’s organization. All of these categories were experiences described by our participants in various forms, such as women’s precarious reputations, the policing term “PW”, or women being regarded as experts in the care of children. Kanter (1977) identified the small number of women as the primary source of these tokenistic experiences, however, this was later challenged by studies of men in female-dominated professions, in which men tended to benefit from their minority status through wages, promotions, and reputations (Williams, 1992; Lupton, 2000; Simpson, 2004), highlighting the significance of gender and patriarchy, and their intersection with minority status.

Several participants described the women trailblazers they worked under as being unhelpful and unwilling to connect and associate themselves with other women in the organization, sometimes identifying them as “nasty” or ‘territorial’; a finding which stood in contrast to many accounts of

women being supported and mentored by other women who would not have otherwise been classified as trailblazers. When considered through the work on trailblazers by Remington (1983), Kanter (1997), and Murray (2020), the logic of this behaviour may be attributed to the tokenism these women experienced, through the heightened visibility and precarity of reputations that trailblazers are subject to as the first, and therefore only, woman at their professional rank. As the experiences of some of the firefighting participants might suggest, a common success strategy for women in the face of tokenism is to adapt and blend in with one's co-workers, given that the measures of professional success are based upon men's approaches and opinions. In performing gender (Goffman, 1959; West & Zimmerman, 1987), the act of two women connecting socially is a common gender script associated with womanhood, and as such, the work of being recognized as "one of the guys" would be undermined by an alliance with another woman, akin to the ways that Reskin and Padavic (1988) describe the puncturing of masculine ideologies when women perform masculine traits. Given that masculinity is in part defined by its comparison to femininity, it requires clear boundaries between the two groups, in order to communicate a clear performance of gender. In this way, the unwillingness of trailblazers to support and connect with other women can be viewed through the priority of protecting one's precarious reputation, which must be regularly and actively proven as deserving of the position. This may be one factor contributing to inconsistent improvements to women's inclusion across first response professions. However, as succeeding waves of women follow in their paths, these impacts should become lessened over time.

Embodiment Perspectives

The physical body plays a pivotal role in accomplishing the work of a first responder among all three of the professions analyzed. Participants were often acutely aware of how their bodies differed from the majority of their masculine colleagues', and many conversations in interviews surrounded the approaches taken to assimilate, or make uniform, one's body in the work and the work environment. Theoretical considerations of the body originated in understanding the physical form as a tool, or object over which we exercise deliberate agency when accomplishing tasks in life. However, Merleau-Ponty (1962) challenged this perspective by describing the experience of life as 'embodied', in which corporeality is an irreversibly interconnected mediator of experience and identity. Feminist critiques further contribute a gendered perspective to the discourse of embodiment in which a post-Enlightenment divide associates the notions of culture and masculinity with the mind, and associates nature and femininity with the body (Battersby, 1998; MacCormack and Strathern, 1980). These perspectives provide some explanation for societal beliefs surrounding the perception of women as caregivers rather than as workers or leaders, and thus also underpins the foundation of understanding hypermasculine workplace cultures. Adding further to the discourse, Foucauldian perspectives define the social production of bodies through discursive practices, such as medicine, and express concern for how sources of power in society can influence the body to shape one's perspective of themselves (Butler 1990; Grosz 1994). Indeed, participants described how their bodies aligned with, or diverged from, the masculine idealized physical form upon which markers of professional success and belonging are based. It is through the combination of these perspectives that the following discussion of women's bodies and identities can be more deeply explored as they navigate and negotiate hypermasculine environments.

Participants described an acute awareness of how their bodies function differently from their male colleagues. Tending to biological processes, such as menstruation and urination, presented challenges for women first responders. Work environments without dedicated washroom facilities

meant that women either arrange their own accommodations, such as bringing tools and equipment to urinate or wash up with, or in the case of policing, women may simply avoid applying for positions where they may spend twelve hours in a stakeout vehicle. These environmental factors can directly impact the horizontal distribution of gender across organizations, as well as across professions. Furthermore, the police officer's gun belt, or the firefighter's suspended pants, can pose extra barriers when dealing with these bodily processes, regardless of the environment. In these circumstances, the ways that women have been socialized to tend to their bodies' needs (e.g., requiring a private space to sit down and urinate) runs up against uniforms and equipment that were designed for bodies that were socialized as men. Some firefighters described being allocated only a single uniform set, as a result of limited funding or managerial support. In the context of the team-oriented workplace culture, and their personal drive for conducting the work, women whose uniforms become soiled with menstrual blood, described spending their time cleaning their uniforms, in order to continue conducting the work of running calls in their communities and with their teams. In the absence of what might reasonably be deemed as sufficient access to resources, uniforms in this context, can restrict full participation in the work, or translate into a burden of extra labour carried out by women first responders.

Some women whose bodies more closely resembled the masculine standards which uniforms have been designed for described having no issues with fitting into uniforms. In these cases, women whose bodies aligned with the power structures of masculine hegemony, more effectively "fit" into their hypermasculine environments. However, many women associated negative feelings related to professionalism and safety when wearing uniforms that did not fit their bodies. Furthermore, in first response work, the body acts as a landscape and vehicle for transporting tools and equipment. Having a smaller body, as many women do, translates into less real estate to house the necessary tools for the job, like radios, cameras, gloves, scissors, a flashlight, or weapons of defence, reflecting yet another

example of how salient the body is to first response work, and how that bodily work is performed in a gendered manner.

In contrast, pregnant bodies that become too large can also create challenges. Some paramedics described having to personally make amendments to their uniforms to accommodate their growing pregnant bodies, for lack of sufficiently adequate maternity-wear. In policing, the uniform is also used as a measure for when a pregnant person is no longer suitable to employ their use of force, and signals when they should be redeployed to a civilian position conducted in plain clothes. While this practice was likely set in place for the safety of both the pregnancy and other team members, the uniform can be seen as a symbolic measure of sameness, which indicates capacity for professional performance; a viewpoint that can be extended to understanding challenges related to uniforms for women at large in hypermasculine work environments.

Organizational standards for the ways workers must use their bodies to perform physical tasks varied considerably from one organization to another, with some services described as very open to multiple approaches while others as very rigid in their methods and techniques. While this rigidity may too have origins in occupational health and safety concerns, for the sake of injury prevention, it may also be used to make larger generalizations about whether someone is capable of doing the work or not, standards which are generally established on very tall and very strong bodies. What would have previously been regarded as disobedient to health and safety standards is now becoming more acceptable and even encouraged, such as when women might leverage the strength in their legs rather than their arms to utilize and control a large piece of equipment. While having some strong members on the team is important, organizations must now also hire for endurance, strategy, and skill in handling equipment, along with the ability to employ leverage and technique to accomplish physical tasks. Furthermore, the increased demand, availability, and use of technologies that support the physical aspects of first response work are acting to soften the need for size and strength of body. In this way, some of our participants argued that the field of first response is developing towards a post-

gender era, in which weight, body, and gender no longer act as finite limits to one's capacity to perform job tasks; developments which may further support the inclusion of women in this work.

Impacts of Paramilitarism

Unique to first response professions, when compared to other professional structures, are the paramilitary ranks and chain of command structures within their organizations. Research on gender in military occupational sectors has been highlighted in a growing body of literature, which use the structures to examine models of hegemonic masculinity (Lomsky-Feder & Rapoport, 2003; Gouliquer, 2011) and the ways in which women interact with such dynamics (van Douwen, van den Brink, & Benschop, 2021). Paramilitary institutions, such as the fire, police and paramedic services, have been associated with Goffman's (1960) concept of "total institutions" (Gouliquer, Poulin & McWilliams, 2020), whereby a closed social system is governed by strict norms, rules, and schedules, producing a united atmosphere that differentiates and segregates its members from larger society. Common in paramilitary institutions are masculinized language and culture which serve to differentiate and marginalize non-masculine individuals (Batty & Burchielli, 2011). As such, workers in men-dominated fields who do not conform to masculine characteristics tend to be excluded, or made invisible (Bendl, 2008; Gouliquer, Poulin & McWilliams, 2020).

The power dynamics typical of an organization, in which the distribution of power is concentrated at the top, can be amplified by the sociohistorical paramilitary structures found within the field of first response. In interviews, participants described how strict paramilitary organizational structures worked interconnectedly to reinforce and amplify social structures. While paramilitary structures have very practical implications for organizing high intensity situations that involve many qualified experts, they also double down on women in subordinated roles, such as female new recruits, removing their personal power and autonomy from multiple directions.

The chain of command structure may also insulate, or hedge against culture change. For instance, a chief's personal opinion on a matter is most often going to be echoed amongst his or her staff, given that the chief's ranking position is not routinely challenged by those ranking below them. Through the enforcement of social cohesion, paramilitary orientations may act as structural resistance to development and change. In this way, paramilitarism may impede an organization's ability to respond to generational and/or cultural shifts, when the distribution of power and influence is so heavily concentrated at the top, while the role of everyone else is to follow orders. However, some experts have described "a slow erosion" of paramilitary forms of management in the field (Murray, 2020) which may be exemplified by the gaining popularity of changes to policing promotion processes.

Promotion Pathways and Public Opinions

Finally, the relatively low number of women holding leadership and senior management positions merits further exploration. The term "glass ceiling" has been described as a barrier so subtle as to be invisible, yet so strong that it prevents women and minority groups from attaining career advancement into leadership roles (Townsend, 1997). Barriers that have been identified by pre-existing literature have been related to organizational practices such as recruitment, retention, and promotion; behavioural and cultural factors such as stereotyping and leadership style preference; and organizational structures which define and channel gender differences through socialization patterns (Weyer, 2007).

Most paramedic participants identified a lack of on-the-job training as a barrier to career advancement, a factor which sometimes drove women to take on training during maternity leaves, or return from maternity leaves prematurely. By comparison, police officers and firefighters were often provided opportunities to learn new skills within their daily work, as a result of dynamic staffing needs and amid a wide variety of ranks and roles within these professions. As such, approaches to

training in conjunction with paramilitary organizational structures may be shaping vertical gender segregation through fewer ranking gradations and upskilling opportunities, contributing to, and upholding a glass ceiling within paramedicine.

Literature on gender inequalities and leadership have also observed that women appear to be appointed to leadership more often than men when an organization is in a situation of crisis, a phenomenon known as the “glass cliff” (Ryan & Haslam, 2007). This is rationalized by gendered scripts that perceive women as more skilled at working under pressure, that they are more interested in helping “the underdog”, and more willing to “take one for the team”. Ryan et al., (2011) suggest these potentially career damaging situations, with significant professional risk, place women at an increased chance of becoming a scapegoat for an underperforming group.

Within the context of first response professions and the intersection of shifting public opinion, leadership teams have been facing external pressure to balance the gender ratios within their teams. As previously described, equity promotions have been accompanied by a number of consequences, such as the contamination of women’s promotions and reputations, both among women’s colleagues and within their own sense of self confidence. This doubt further amplifies the impacts of tokenism for women, such as having to work harder to earn a strong reputation compared with their male colleagues. Making matters worse is the public nature of policing, in which public inquiries and media investigations are becoming more commonplace. Policing participants described observing promotions of women who lacked the experience required of the role, under the auspices of increasing women in leadership. In the absence of organizational supports, women whose professional reputations become compromised, also risk further reinforcing the discourse of women as being incapable of conducting this work. In these situations, participants perceived women as being “fed to the wolves”, which when considered in the context of diminishing public support for policing, increased personal accountability and media attention, may be exemplifying Ryan et al.’s (2011) unfortunate scapegoat scenarios.

Recruitment and Retention Recommendations

One of the key research goals was to explore factors which may support the recruitment and retention of women first responders. Many of the interview questions asked of our participants were relevant to this query. The following summary represents an analysis of the data with this specific lens. This information is also summarized in Appendix I, in the format of a policy document that will be distributed among members of the first response field and beyond.

In response to hearing from women about persisting challenges related to uniforms and equipment, it is recommended that organizations ensure their women first responders have ready access to gear that fits well and ensures safety and ease of use. Furthermore, it is recommended that all organizations prioritize the provision of multiple sets of uniforms, to ensure women do not have to shoulder the work of extra cleaning, and remove potential barriers for women to fully participate in their work.

Participants also recognized the importance of increasing the number of women first responders in leadership roles. Providing on-the-job paid training to facilitate advancement for women paramedics may help to dismantle the glass ceiling described by participants in this study.

There were also calls for increased support from management for the periods during and after which promotions take place. It was repeatedly communicated that women only want to be promoted when they have genuinely earned it. As such, organizations must work to combat the negative association women are gaining from equity-driven promotions through the provision of ongoing training and mentorship, and exemplify clear support for women's professional success.

In light of this study's findings, women first responders would significantly benefit from supports which ease tensions between work and home life. This could take the form of formal childcare supports with flexible options, such as professional daycare and personal childcare services. Creating scheduling approaches that provides workers more opportunity to shape their regular schedules would also support women who care for others. This could be enacted through adjustments

to the specific hours worked in day, or which days are taken off, as well as offering more options around the number of hours worked across a week.

Lastly, participants called for continued efforts to improving workplace cultures, to create spaces that are positive and supportive for women to conduct first response work. Women identified the importance of delivering equity, diversity, and inclusion training for leaders and workers; a program which could be mandated by provincial legislation for all professional levels and geographic regions.

CONTRIBUTIONS AND LIMITATIONS

In several instances, our findings align with the literature presented in the background section, much of which identifies challenges related to workplace cultures and policies, or practices which fail to support women's specific needs (Contursi, 2018; Boyle, Inger, Waters, & Miller, 2020). The various forms of harassment and discrimination, as well as tokenism discussed in the literature continue to persist for many women first responders (Batty & Burchielli, 2011; Perrott, 2016; Janke et al., 2019; Gouliquer, Poulin & McWilliams, 2020). Likewise, problems accessing uniforms and equipment designed specifically for women, as discussed by Griffith et al. (2016), continue to remain a challenge for some of the participants of this study.

Alternatively, the existence of hypermasculine work environments, addressed by many experts in the field (Herbert, 2001; Prokos & Padavic, 2002; Ainsworth, Batty & Burchielli, 2014; Woodfield, 2016; Perrott, 2016; Brown, et al., 2020), appears to be shifting in some circumstances. Changes to work environments were explicitly noted by women who were working under the supervision and management of other women and exceptional men. Additionally, as organizations adapt and respond to public opinion or patient needs, they are increasingly shifting towards typically-feminine values which will shape workplace cultures to further appreciate the skills women often excel at.

Given the dearth of literature on women first responders, and that no formal academic literature exists to date that takes a qualitative and comparative approach to women first responders in a Canadian context, this research provides a key contribution to the literature, improving understanding of the complexities and larger trends in the field. Through its comparative framework, this investigation has highlighted differences between the professions, such as training and advancement practices, which in the case of paramedicine, may be contributing to barriers for women aspiring to leadership roles. It has also revealed unique factors that are shaping workplace cultures in each profession, such as the influence of public opinion in policing and firefighting, or improving access to equipment and technologies in paramedicine. Through employing the lens of GBA+, this work has also examined the gendered nature of each occupation, such as the feminine-coded care work of paramedicine, or the masculinized heroic perceptions of firefighting, contributing further insight into persistent gender distributions across first response professions.

This study has also made unique contributions to the exploration of generational differences and how they intersect with gender, rank and power, and uniquely presents positive participant stories, which describe women feeling embraced by their teams and genuinely belonging to their fraternities. Finally, this study has contributed a unique perspective on this topic through its comparison of the three professions examined. What can be considered a uniquely Southern Ontario perspective is a collection of experiences from the experts who respond to the millions of individuals who dial 9-1-1 for emergency support. This comparison includes standpoints in healthcare, environmental protection, and public safety, as they work individually and coordinate to serve the larger public in their times of need.

Limitations of this study design include the constrained capacity for data analysis, given that the work was conducted predominantly by the student investigator for the completion of a Master's research project. Within this constraint, the breadth of comparative analysis across three professional

domains also acts as a limiting factor which competes for time and resources, and acts as a trade off against more in-depth investigations into each of the individual sectors.

Limitations also exist surrounding the choice to focus on women's experiences to the exclusion of a range of gender categories which may be impacted by hegemonic masculinity. Gay men, men who sleep with men, or non-binary and transgender individuals are likely to be impacted by gender norms and expectations in these occupational settings (Perrott, 2016; Gouliquer, Poulin & McWilliams, 2020; Angehrn, Fletcher & Carleton, 2021). While this population merits further research, their inclusion is beyond the scope of this study of individuals who identify as women.

According to the disclosure of our participants, the recruitment strategies employed in this study failed to engage individuals who identified as anything other than white, English-speaking, cis-gendered women. This has certainly influenced the type of responses and experiences shared with this study. Given the level of gender discrimination experienced by our white participants, who garner some degree of privilege compared with other visible minorities, it is likely that racial and other forms of discrimination are also an ongoing challenge among this workforce, representing an opportunity for future research to investigate more specifically. However, given the low number of racialized individuals in the field of first response, as described by participants, it is likely that this group would be subject to even greater levels of visibility and tokenism, and would therefore be even less likely to participate in research such as this. With this consideration in mind, employing ethnographic approaches may be a more suitable and respectful avenue for future research involving this specific population.

Finally, while the recruitment approaches were designed to strive for thematic saturation, it is also possible that women who have experienced extensive harassment or discrimination may have left the profession entirely, shaping the range of experiences represented in our investigation. Despite explicitly including women who had recently left the profession as part of our inclusion criteria, it is

likely that these recruitment avenues would not have reached individuals who have disconnected themselves from the communication channels of the professional industry.

An investigation such as this would benefit from including other key stakeholders such as those representing unions, or professional associations connected to the field of first response. Further research with larger resource capacity might also take an Institutional Ethnography approach in considering organizational and policy documents which may shape structural factors impacting women first responders' experiences. In future, this study could be conducted in a longitudinal format, which could evaluate experiences across the professional life course of first responders. Finally, this qualitative and comparative approach could also be extended to other professional groups experiencing gender inequalities.

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APPENDICES

Appendix A: Recruitment Letter

Hello,

My name is Kelly Gregory and I am a student working under the supervision of Dr. Elena Neiterman and Dr. John Mielke, in the School of Public Health Sciences at the University of Waterloo. I am contacting you because we are currently seeking volunteers to take part in a study that we are conducting on women first responders.

What is this study about?

The purpose of this study is to improve understanding of the occupational experiences of women first responders through a comparison of paramedics, police officers, and firefighters in Southern Ontario. The data collected for this project will contribute to more effective recruitment and retention, as well as support for women working in this field.

What is involved in participating?

Participation in this study is voluntary. It will involve an interview with the lead researcher that will take approximately 60-120 minutes to complete and will take place either over phone, or Zoom. During the interview you will be asked about your experiences being a first responder, and if you feel comfortable, we will ask you about your age, race, and other demographics such as length of service, education and ethnicity.

Attached is a Letter of Information and Consent Form where you can learn more about the study's purpose and procedures. I would like to assure you that the study has been reviewed and received ethics clearance through the University of Waterloo's Human Research Ethics Committee, and we take your confidentiality very seriously.

If you are interested in participating in this study please contact me at [REDACTED]. Once I receive your confirmation email, I will provide you with more information about the study and, if you are still willing to participate, will set up an interview time.

For more information regarding this study feel free to contact me at [REDACTED] or either of my supervisors, Dr. Elena Neiterman at [REDACTED], or Dr. John Mielke at [REDACTED].

Sincerely,

Kelly Gregory, BPH
Master's Student Researcher
School of Public Health Sciences
University of Waterloo

Appendix B: Recruitment Image



**If you are a woman* working as a
firefighter, police officer or paramedic**



in Southern Ontario,
or have recently worked as one,
researchers at the University of Waterloo would like to
invite you to participate in a study on women first responders.

Participation involves a **1-2 hour phone or Zoom interview** to discuss your experiences being a first responder, and if you feel comfortable, we will ask you about your age, race, and other demographics.

**We are looking to hear from cis, trans, non-binary, queer and any other individuals who identify as women*

Our study, titled ***Exploring occupational experiences of women first responders in Southern Ontario, Canada***, is interested in understanding what it is like for women in these roles and how recruitment and retention of women first responders might be improved.

Participant names and responses will be kept private and anonymous.

To volunteer for this study, or for more info, please contact:



Kelly Gregory, BPH

*From the School of Public Health Sciences,
University of Waterloo*

by email:

or phone:



This study has been reviewed by and received ethics clearance through a University of Waterloo Human Research Ethics Committee.

Appendix C: LOI and Consent Form

Project Title: Occupational experiences of women first responders in Southern Ontario, Canada.

You are invited to participate in a study that will try to improve understanding of the unique experiences of women first responders through a comparison of paramedics, police officers, and firefighters in Southern Ontario. This project hopes to contribute to more effective recruitment and retention, as well as support for women working in these fields.

This study will be undertaken by Kelly Gregory, a graduate student of the School of Public Health Sciences at the University of Waterloo, under the supervision of Dr. Elena Neiterman and Dr. John Mielke.

What You Will Be Asked to Do:

Participation in this study is voluntary. It will involve filling out a short questionnaire on age, length of service, education and ethnicity, and taking part in an open-ended interview that will require approximately 30-60 minutes to complete. The interview will take place either over the phone or Zoom, at a mutually agreed upon time. When information is transmitted over the internet, privacy cannot be guaranteed. There is always a risk your responses may be intercepted by a third party. University of Waterloo researchers will not collect internet protocol (IP) addresses, or other information which could link your participation to your computer, or electronic device without first informing you.

With your permission, the interview will be audio-recorded to facilitate the collection of information, and later transcribed for analysis. During the interview, you may decline to answer any of the interview questions and/or share your personal information with the researchers. Furthermore, you may withdraw from this study at any time by advising the researcher. If you decide to withdraw, we will erase the interview transcript and all the research notes that were taken during the interview process.

Confidentiality:

Your identity will remain confidential. Your name, or any other personal identifying information will not appear in any research papers or publications resulting from this study. To protect your confidentiality, we will erase the audio recording of the interview right after we transcribe it, and only the transcription with an assigned code will remain. Your signed consent form and anonymized interview transcript will be stored as separate encrypted files on a password-protected computers of the researchers.

Any quotations from transcripts used in publications or presentations from this research will remain anonymous and may be presented with only the information of the participant that is important to the topic being discussed (e.g., rank or ethnicity). Additionally, other unrelated demographic characteristics of the participant may be intentionally altered to preserve the person's confidentiality (e.g., number of children).

Benefits and Risks of Participating in the Study:

Participation in this study may not provide any personal benefit to you. We hope the data collected will advance our understanding of the experiences of women first responders. There are no known or anticipated risks to you as a participant in this study.

Research Ethics Clearance and Further Questions:

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee (ORE# 43443). If you have questions for the Committee, contact the Office of Research Ethics at 1-519-888-4567 ext. 46005 or ore-ceo@uwaterloo.ca.

For all other questions regarding this study, or if you would like additional information to assist you in reaching a decision about participation, please contact Kelly Gregory at [REDACTED], or either of the study supervisors, Dr. Elena Neiterman at [REDACTED] or Dr. John Mielke at [REDACTED].

I very much look forward to speaking with you and thank you in advance for your assistance in this project.

Sincerely,
Kelly Gregory
Student Researcher

CONSENT FORM

By signing this consent form, you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

I have read the information presented in the information letter about the study being conducted by Kelly Gregory, Dr. Elena Neiterman and Dr. John Mielke, with the School of Public Health Sciences, University of Waterloo. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be audio recorded to ensure an accurate recording of my responses.

I am also aware that excerpts from the interview may be included in the project paper and/or publications to come from this research, with the understanding that the quotations will be anonymous.

I was informed that I may withdraw my consent at any time by advising the student researcher.

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee (ORE# 43443). If you have questions for the Committee, contact the Office of Research Ethics at 1-519-888-4567 ext. 46005 or ore-ceo@uwaterloo.ca.

For all other questions contact John Mielke [REDACTED] or Elena Neiterman at [REDACTED]

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

YES NO

I agree to have my interview audio recorded.

YES NO

I agree to the use of anonymous quotations in the project papers and any other publications base on this research.

YES NO

I agree to the use of my interview transcript in the future research projects conducted by Dr. Neiterman or Dr. Mielke or their students.

YES NO

I agree to the use of anonymous quotations in the future research projects conducted by Dr. Neiterman or Dr. Mielke or their students.

YES NO

Participant Name: _____ (Please print)

Participant Signature: _____ Date: _____

Researcher's/Witness' signature _____ Date: _____

Appendix D: Oral Consent Script

Hello. My name is Kelly Gregory and I am conducting research about women first responders. This interview is part of my Master's studies with the School of Public Health Sciences at the University of Waterloo. I'm working under the supervision of Dr. Elena Neiterman and Dr. John Mielke who are also part of the School of Public Health Sciences.

Thank you for your interest in participating in my research.

[If the LOI was provided in advance]

Have you had time to read the Letter of Information I sent you?

[If the LOI was provided in advance and the participant responds that they have read the LOI]

Great, then I would like to take a moment to review some main points from the Letter of Information before we continue. *[Proceed to review the highlights of the LOI, be sure to include risks and what will happen with their data, and confirm the important points about voluntary participation and withdrawal listed below.]*

[If it is not possible to give an LOI to the participant, or if the LOI was not sent in advance, or the participant responds that they did not read the LOI in advance, then proceed to go through the full LOI in detail with the participant and confirm the important points about voluntary participation and withdrawal listed below.]

Confirm the following to the participant:

- Your participation in this study is voluntary.
- If you do not want to answer some of the questions you do not have to, but you can still be in the study.
- You can decide to stop at any time, even part-way through the interview for whatever reason.
- If you decide to stop during the interview, we will ask you how you would like us to handle the data collected up to that point, whether returning it to you, destroying it or using the data collected up to that point.
- You can ask to remove your data from the study up until approximately January 1, 2022
- This study has been reviewed and cleared by a University of Waterloo Human Research Ethics committee.

Do you have any questions or want me to go over any study details again?

Consent questions:

1. Do you agree of your own free will, to participate in this study?
2. Do you agree to have my interview audio recorded?
3. Do you agree to the use of anonymous quotations in the course project papers and any other publications base on this research?
4. Do you agree to the use of my interview transcript in the future research projects conducted by Dr. Neiterman or Dr. Mielke or their students?
5. Do you agree to the use of anonymous quotations in the future research projects conducted by Dr. Neiterman or Dr. Mielke or their students?

If no, "Thank you for your time."

Appendix E: Interview Guide

Demographics:

1. Can you please tell me what year you were born?
2. What is your gender identity?
 - a. Probe: Woman, cis or trans, non-binary, other, or prefer not to say
3. What is your sexual orientation?
 - a. Probe: Straight/heterosexual, lesbian, bisexual, other, or prefer not to say
4. How long have you worked for the service, in years and months?
5. What is your rank, currently?
6. Would you describe your work location as urban, rural, or a mix?
7. What is your relationship status?
 - a. Probe: Married, common law, long-term relationship, divorced, widowed, single, or other
8. What level of education do you have?
 - a. High school diploma, college diploma/degree, university degree, post-graduate degree
9. How would you categorize your ethnic background?
 - a. European, African, Chinese, Indian, etc.
10. And lastly, what is your primary language?
11. How did you hear about the study?

Individual Life course:

1. Can you tell me what initially drew you to work that you do in police/firefighting/paramedicine?
 - a. Probe: Did someone inspire you? When did you first consider working in this role?
2. Can you tell a little bit about your process of becoming a police officer/firefighter/paramedic?
 - a. Probe: Such as any training or education?
3. Would you be able to tell me how you arrived at/advanced to the position you are in today?
4. Do you think the components of who you are, as discussed in the demographic questions at the beginning, have shaped your experiences as a first responder?
 - a. If yes, how?
 - a. Probe: your gender, sexual orientation, ethnic background, etc.
5. [If relevant] Can you speak about the circumstances of you leaving the job/taking a leave of absence?

6. [For policer officers:] Can you please tell me about your base training experience at OPC?
 - a. How did you feel, as a woman, in this environment? (Supported? Outnumbered?)
 - b. How did you feel about the paramilitary structure of the training?

Resiliency and Stress:

7. What factors and personal characteristics do you think are necessary for succeeding in your position?
 - a. Probe: Factors like family, social networks, relationship with coworkers, organizational supports.
 - a. Probe: Certain personal qualities or attributes like resiliency, self-determination, drive
8. What is your favourite part of your job? What do you like the least?
 - a. Are there particular things that provide you happiness or cause you stress?
9. What supports have helped you in this role? What more do you think people could do to support women in your field?
 - a. Sources of support such as family and personal networks, colleagues, organizational

Workplace Culture, Diversity and Inclusion:

10. How would you describe your work culture?
 - a. Probe: supportive, competitive, team oriented, individualistic, healthy, toxic, etc.
11. Do you feel as though you come to a safe work environment each day?
 - a. Please explain
12. Do you think that management is fair in your organization?
 - a. Please explain
13. Do you think the women in your organization have the same access to resources as the men do?
 - a. Probe: mentorship, opportunities for growth, work space, equipment, etc.

Gender and Professional Roles:

14. Do you think women bring unique skills or perspectives to the work that you do?
 - a. If yes, some examples?

15. Do you think women in your profession face unique challenges? If yes, what are they?

- a. Work-life balance
- b. Family
- c. Health (e.g., reproductive health issues)
- d. Institutional challenges (e.g., shift-work, properly fitting equipment, harassment, or discrimination)

16. So, I'm also studying (other two profession), so I'm wondering: How are your professional experiences similar or different to these other two first responder roles we are investigating?

17. Is there anything else you would like to add that we haven't mentioned yet?

- a. Probe: or anything important you would like to reiterate?

Post-Interview Questions/Comments:

- I will be sending you a follow up email with my contact information, if you would like to reach out to me for any reason.
- Would you be interested in receiving a copy of the final thesis once it's completed?
- Would you be willing to share a recruitment poster with some of your colleagues to help spread the word?
- Feel free to stay in touch and reach out anytime!

Appendix F: Letter of Appreciation

Dear Participant,

I would like to thank you for your participation in this study entitled *Occupational experiences of women first responders in Southern Ontario, Canada*.

As a reminder, the purpose of this study is to improve understanding of the unique experiences of women first responders through a comparison of the professional experiences of women working as paramedics, police officers, and firefighters in Canada. The data collected for this project hopes to contribute to more effective recruitment and retention, as well as support for women working in this field.

This study has been reviewed and received ethics clearance through a University of Waterloo Research Ethics Committee (ORE# 43443). If you have questions for the Committee, please contact the Office of Research Ethics, at 1-519-888-4567 ext. 46005 or ore-ceo@uwaterloo.ca.

For all other questions, please contact either of my supervisors, Dr. Elena Neiterman at [REDACTED] or Dr. John Mielke at [REDACTED].

Please remember that your identity will be kept confidential. Any paper records of data collected during this study will be retained for 7 years in a locked filing cabinet, to which only researchers associated with this study will have access. Electronic data will be kept for 7 years on a secure computer, to which only researchers associated with this study have access. All identifying information will be removed from the records prior to storage.

Once all the data are collected and analyzed for this project, I will present the findings as a thesis research project. I may also share this information with the research community through seminars, conferences, presentations, and journal articles. If you would like to read my research project report, I will be happy to send it to you. If you wish to receive the results of the study please provide your email address and, when the study is completed, I will send you the information.

In the meantime, if you have any questions about the study, please do not hesitate to contact me by email or telephone as noted below or contact Dr. Neiterman, or Dr. Mielke.

Sincerely,

Kelly Gregory, BPH

Master's Student Researcher
School of Public Health Systems
University of Waterloo
LHN 3721, 200 University Ave West
Waterloo, ON N2L 3G1
Telephone: [REDACTED]
Email: [REDACTED]
<http://www.uwaterloo.ca>

Appendix G: Analytic Approach

PHASE 1: Grounded line-by-line gerund codes, grouped by interview-guide categories				
Transcripts Coded	Code Category	Code Example		
PM-01 and PM-02	Individual Life Course	<i>"needing a mental health break after working as a temp"</i>		
	Resilience and Stress	<i>"navigating gossip culture"</i>		
	Gender and Professional Roles	<i>"women calling for backup when men wouldn't have to"</i>		
	Workplace Culture, Diversity and Inclusion	<i>"being pregnant while working"</i>		
PHASE 2: Grounded codes organized by topic, grouped into focused codes within analytic buckets				
Transcripts Coded	Analytic Bucket	Focused Code Group Example	Code Example	
PM-03 to PM-07	Embodiment; Bodily Experience; Voice	Struggling to uniform my body	<i>"wearing men's uniforms feels unprofessional"</i>	
	Intra- and Interprofessional Dynamics, and Workplace Culture	Describing and thinking about workplace cultures	<i>"navigating gossip culture"</i>	
	Stress, Sustainability, Support, and Strategies	Temp or perm work scheduling strategies	<i>"needing a mental health break after working as a temp"</i>	
	Factors related to recruitment and retention	Important factors for success in this career	<i>"being someone who keeps learning and doesn't get stagnant"</i>	
PHASE 3: Theory generating and testing by grouping analytic buckets into theoretical components				
Transcripts Coded	Theoretical Component	Analytic Bucket	Focused Code Group Example	Code Example
FF-01 to FF-05 and PO-01 to PO-08	Developments in the field	Embodiment; Bodily Experience; Voice	Struggling to uniform my body	<i>"wearing men's uniforms feels unprofessional"</i>
	Sexism and glass ceilings	Intra- and Interprofessional Dynamics, and Workplace Culture	Experiencing sexism, harrassment, disrespect, unfairness	<i>"treating others with respect is not a huge ask"</i>
	Women love this work	Factors related to recruitment and retention	Important factors for success in this career	<i>"being someone who keeps learning and doesn't get stagnant"</i>

Note. Figure represents the developmental phases of the analytical process. Selected examples were chosen to represent larger collections of groups or codes.

Appendix H: Participant Demographics

Aggregated Demographics n,(%)

Interviews (% , n)			
Total	Paramedics	Police Officers	Firefighters
100, 20	35, 7	40, 8	25, 5

Age	
Average	Range
39	27 - 58

Sexual Identity (% , n)	
Heterosexual	Bisexual, lesbian, gay, other
70, 14	30, 6

Family Status (% , n)			
Married/ Partnered w/ kids	Separated/ Single w/ kids	Married/ Partnered	Divorced/ Single
45, 9	20, 4	15, 3	20, 4

Gender (% , n)	Language (% , n)	Race/Ethnicity (% , n)
Female	English	White
100, 20	100, 20	100, 20

Education (% , n)		
College	University	Graduate Degree
35, 7	50, 10	15, 3

Length of Service	
Average	Range
13.25 years	0.38 - 37 years

Location (% , n)		
Urban	Rural	Mixed
70, 14	10, 2	25, 5

Improving the Recruitment and Retention of Women First Responders in Southern Ontario

Based on results from the study *Improving Spaces for Women First Responders: Investigating women's occupational experiences using a comparative grounded theory* conducted by Kelly Gregory, BPH, Phil Bigelow, PhD, Meg Gibson, PhD, John Mielke, PhD, and Elena Neiterman, PhD, at the University of Waterloo

KEY FINDINGS

- There have been significant improvements to women's inclusion in first response work, however many women still face sexism and barriers to promotion and leadership
- Despite such challenges, women are deeply passionate about the work they perform, and encourage other women to become first responders

"I don't have any more patience for it (harassment). Like, this isn't okay. It's 2021. Not that it was ever okay a hundred years ago, but it's definitely not okay now."

— a Primary Care Paramedic

"...we have to prove ourselves EVERY SINGLE DAY... There's definitely a double standard there."

— a Constable-level Police Officer

KEY RECOMMENDATIONS

1. Ensure women have access to uniforms and equipment that fit properly, including multiple sets of uniforms
2. Offer on-the-job paid training that provides the skills required for advancements and promotions
3. Support women during and after promotions by providing ongoing training and mentorship
4. Create scheduling approaches that offer workers more opportunities to shape their regular schedules, such as time of day or days off
5. Establish formal childcare supports with flexible options that address first responders' specific needs, including non-traditional and overnight hours and extended care options
6. Create legislation which mandates the delivery of equity, diversity, and inclusion (EDI) training to leaders and workers at all professional levels and geographic regions

While these recommendations were derived from the participants of this study and meant to address the specific challenges women face, their implementation would benefit all first responders, and contribute to improving the recruitment and retention of this important workforce.

For more information, please contact Kelly Gregory, [\[redacted\]](#)

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