

**The Impact of Organizational Culture on the Mental Well-being of Public Safety  
Communications Officials**

**by**

Nadine Leduc  
B.A. in Criminal Justice, Athabasca University, 2019

February 07, 2022

M.A. THESIS PROPOSAL SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

In the  
Department of Sociology

© Nadine Leduc 2022

MEMORIAL UNIVERSITY OF NEWFOUNDLAND

All rights reserved. This work may not be  
reproduced in whole or in part, by photocopy  
or other means, without permission of the author.

submitted to

Dr. Rosemary Ricciardelli, Thesis Co-Supervisor  
Dr. Stephen Czarnuch, Thesis Co-Supervisor

## **Abstract**

Public safety communicators (e.g., 911, police, fire, and ambulance call-takers), like many other public safety personnel (e.g., police, fire) suffer operational stress injuries (OSIs) that are too often hidden, and at a prevalence higher than the general population. Unfortunately, there are very little data for OSI prevalence among Canadian public safety communicators, and no known pan-Canadian studies focusing on organizational culture and its potential influence on OSIs, within the communicator context. In the current qualitative study, I focus on participant responses (n=329) to open ended items included in a larger national online survey that revealed communicator OSIs are impacted by organizational and operational factors (work environment; e.g., feeling undervalued by one's organization, exposure to potentially traumatic psychological events, insufficient mental health supports), and interactions with others (inter-personal work relationships; e.g., management, colleagues, the community). A semi-grounded thematic approach was used to analyze what communicators reported when asked in an online survey to describe the organizational culture in their communications centre. Six dominant themes emerged; organizational affect (positive or negative characteristics), management and supervision, morale and staffing, division and exclusion, colleagues, and gender. The findings suggest that, while organizational culture is a key factor in employee well-being; it varies considerably across agencies, impacting treatment-seeking behaviours related to potential OSIs. Our new understandings of organizational culture's role in OSIs may help reduce the frequency and severity of communicator OSIs, helping ensure that emergency services are delivered to Canadians.

*Key words:* operational stress injuries, organizational culture, public safety communicators, well-being.

## **Acknowledgements**

The completion of this thesis could not have been possible without the expertise and support of my academic supervisors, Dr. Rosemary Ricciardelli and Dr. Stephen Czarnuch. Their passion and commitment to improving the well-being of public safety personnel is inspiring.

I would like to thank the Association of Public-Safety Communications Officials (APCO) Canada and MITACS for their financial support, and Robert Stewart in particular for his commitment to our project both personally and through his role with APCO Canada.

I owe a debt of gratitude to Tara and Sue. I appreciate the countless hours you have devoted to reading and editing my work over the years. Finally, I would like to thank my family and friends, especially Erick and Lou, who have supported and encouraged me throughout this incredible journey.

We respectfully acknowledge the territory in which we gather as the ancestral homelands of the Beothuk, and the island of Newfoundland as the ancestral homelands of the Mi'kmaq and Beothuk. We would also like to recognize the Inuit of Nunatsiavut and NunatuKavut and the Innu of Nitassinan, and their ancestors, as the original people of Labrador. We strive for respectful relationships with all the peoples of this province as we search for collective healing and true reconciliation and honour this beautiful land together.

## Table of Contents

<b>1</b>	<b>INTRODUCTION</b> .....	<b>1</b>
<b>2</b>	<b>LITERATURE REVIEW</b> .....	<b>4</b>
2.1	MENTAL HEALTH IN THE WORKPLACE.....	4
2.2	PSP MENTAL HEALTH .....	5
2.3	COMMUNICATOR MENTAL HEALTH .....	7
<b>3</b>	<b>THEORETICAL FRAMEWORK</b> .....	<b>11</b>
<b>4</b>	<b>METHODOLOGY</b> .....	<b>17</b>
4.1	SURVEY .....	18
4.1.1	<i>Demographic items</i> .....	19
4.1.2	<i>Mental health measures</i> .....	19
4.1.3	<i>Organizational culture items</i> .....	20
4.2	RECRUITMENT.....	20
4.3	PROCEDURE.....	21
4.4	ANALYSIS.....	22
<b>5</b>	<b>RESULTS</b> .....	<b>24</b>
5.1	THEMES.....	25
5.1.1	<i>Management and Supervision</i> .....	25
5.1.2	<i>Organizational Affect</i> .....	36
5.1.2.1	Positive affect.....	37
5.1.2.2	Negative affect .....	39
5.1.3	<i>Morale and staffing</i> .....	42
5.1.4	<i>Division and Exclusion</i> .....	49
5.1.5	<i>Colleagues</i> .....	52
5.1.6	<i>Gender</i> .....	56
<b>6</b>	<b>DISCUSSION</b> .....	<b>58</b>
6.1	LIMITATIONS .....	60
6.2	RECOMMENDATIONS .....	61
<b>7</b>	<b>CONCLUSION</b> .....	<b>61</b>
<b>8</b>	<b>REFERENCES</b> .....	<b>63</b>
<b>9</b>	<b>APPENDIX: DEMOGRAPHIC TABLES</b> .....	<b>72</b>

## List of Tables

<b>Table 1: Demographic Questions .....</b>	<b>72</b>
<b>Table 2: Organizational Culture Questionnaire Questions .....</b>	<b>20</b>
<b>Table 3: Survey Completion Rates .....</b>	<b>73</b>
<b>Table 4: Participation by Province .....</b>	<b>73</b>
<b>Table 5: Primary Role in Communications Centre.....</b>	<b>73</b>
<b>Table 6: Years of Service.....</b>	<b>74</b>
<b>Table 7: Secondary Role in Communication Centre.....</b>	<b>74</b>
<b>Table 8: Annual Salary .....</b>	<b>74</b>
<b>Table 9: Employer .....</b>	<b>75</b>
<b>Table 10: Employment Status .....</b>	<b>75</b>
<b>Table 11: Age They Began Working in Public Safety Communications.....</b>	<b>75</b>
<b>Table 12: Biological Sex .....</b>	<b>75</b>
<b>Table 13: Gender .....</b>	<b>76</b>
<b>Table 14: Sexual Orientation.....</b>	<b>76</b>
<b>Table 15: Highest Level of Education Completed .....</b>	<b>76</b>
<b>Table 16: First Language Learned at Home .....</b>	<b>77</b>
<b>Table 17: Marital Status .....</b>	<b>77</b>

## **List of Abbreviations**

APCO	Association of Public-Safety Communications Officials
CIPSRT	Canadian Institute for Public Safety Research and Treatment
OSI	Operational Stress Injury
PPTE	Potentially Psychologically Traumatic Event
PSAP	Public Safety Answering Point
PSP	Public Safety Personnel
PTSD	Posttraumatic Stress Disorder

## **1 Introduction**

In 2016, the Canadian Minister of Public Safety and Emergency Preparedness was mandated by the Prime Minister of Canada to work with the federal Minister of Health to develop a National Action Plan to address posttraumatic stress disorder (PTSD) among public safety personnel (PSP; e.g., police, firefighters, paramedics, correctional officers, and emergency communicators; Oliphant, 2016). A roundtable was held in 2016 to discuss mental health disorders among PSP (Picard, 2016). The Standing Committee on Public Safety and National Security reported that current estimates of mental health disorders among PSP were lacking, suggesting stigma might be a barrier to seeking help (Oliphant, 2016), but previous studies on PSP mental health have been limited either by small sample sizes, limited geographic areas, or methodologies (Carleton et al., 2018).

The term “first responder” typically invokes images of firefighters, paramedics, and police officers, but not necessarily those of public safety communicators who field the calls for help from the public and other agencies. As PSP, public safety communicators (e.g., 9-1-1 call-takers, and dispatchers) are the first point of contact for people needing immediate assistance from police, fire, or ambulance. They quickly and accurately gather vital information to assess the situation and determine the level of response required. They regularly provide life-saving instructions to panicked callers, often with poor outcomes that are beyond their control. Communicators are also a critical link for uniformed responders who rely on them as a lifeline in dangerous situations. As such, communicators are required to control their emotions and remain calm in distressing situations. Yet despite regular exposure to significant duty-related psychological trauma and potentially psychologically traumatic events (PPTE) (e.g., death of a caller while on the line, inability to geographically locate a caller, no knowledge of call outcomes), this group is one of the most understudied of all (Adams et al., 2015; Baseman et al., 2018; Carleton et al., 2018; Carleton et al., 2019; Golding et al., 2017; Koopmans et al., 2017; Lilly & Allen, 2015; Oliphant, 2016; Pierce &

Lilly, 2012; Ramey et al., 2017; Steinkopf et al., 2018). Limited research on the public safety communicator population has revealed that the prevalence of posttraumatic stress disorder can be higher among communicators than among other PSP (Lilly & Allen, 2015; Pierce & Lilly, 2012; Ramey et al., 2017; Steinkopf et al., 2018). In addition, Carleton et al. (2018) found that Canadian communicators reported similar or higher prevalence of mental disorders when compared to other PSP, including major depressive disorder, generalized anxiety disorder, social anxiety disorder, panic disorder, alcohol use disorder, and mood disorders.

Many factors have been linked to mental health and well-being in PSP. Despite limited research on communicators, two themes have been identified; organizational/operational factors (e.g., work environment), and interactions with others (e.g., management, members of the community, and peers) (Golding et al., 2017). While operational factors, such as continuous exposure to PPTE, cannot be prevented, organizational factors can positively or negatively influence communicators' well-being. Moreover, organizational factors shape interactions with others by sanctioning which behaviours are acceptable or intolerable. Thus, how organizations deal with operational and organizational factors establishes a climate, effectively a work culture.

Carleton et al. (2018), in the largest study of Canadian PSP inclusive of communicators to date, specifically identified the need for further research into the impacts of organizational factors on PSP mental well-being. I limit the scope of my study to include only communicators, not the broader PSP group, to complement the work of Carleton et al. (2018), which did not include substantial data specific to communicators and did not differentiate among communicator roles. I also explore the possibility that organizational culture is one factor influencing the limited consideration given to communicators. Organizational culture is “a collective belief system about social arrangements that are deeply embedded values” (Quinn & McGrath, 1985, p. 325) which shape patterns of assumptions



and guide behaviours (Schein, 2014). My study focuses on the organizational culture of emergency communications centres, also called public safety answering points (PSAPs). The data were collected from communicators working in primary and secondary PSAPs. Primary PSAPs receive 9-1-1 calls and either dispatch emergency responders or transfer the call to another agency at a secondary PSAP for dispatch (CRTC, 2022). For instance, a municipal police service may take 9-1-1 calls but will transfer calls requiring a response from fire services to their local emergency fire communications centre. I explore how organizational culture impacts the mental well-being of communicators by assessing communicators' perceptions of the culture in their respective organizations, how the culture impacts a communicator's ability to perform their duties, and what communicators like and dislike about their organization's ideology and mental health support practices.

The dearth of research investigating the importance of organizational culture within this arena renders my study salient, particularly as the federal government, in partnership with the Canadian Institute of Public Safety Research and Treatment (CIPSRT), seeks to create policies to support PSP mental health and well-being (Carleton et al., 2018). In addition to supporting quality and accessible mental health care for PSP, CIPSRT also promotes the development of new researchers with the objective of expanding on the current research on PSP mental health (CIPSRT, 2020). My study is unique in that I include communicators from primary and secondary municipal, provincial, federal, and privately operated PSAPs; French and English-speaking communicators; and private sector communicators (e.g., OnStar). My goal is to identify aspects of organizational culture that positively or negatively impact a communicator's ability to perform their duties. The data from this study can help inform better organizational practices aimed at reducing mental health struggles before they develop into chronic health issues, potentially impairing communicators' abilities to perform their duties. Additionally, the development and implementation of positive measures and

treatments designed to alleviate the negative impacts on psychological health can potentially mitigate the impacts of duty-related trauma. Furthermore, workplace interventions could conceptually result in cost savings for communications organizations and the community alike by, for example, reducing sick leave and turn over intention, decreasing costs to the health care system, increasing retention, and making a positive impact on communicators' quality of life. Moreover, these data could feed into a national mental health strategy that is specific to communicators, as suggested in the Carleton et al. (2018) study.

## **2 Literature Review**

### **2.1 Mental health in the workplace**

The Canadian Standards Association, also known as the CSA Group, maintain that psychologically healthy environments foster employee engagement, increase productivity, are more innovative, and better positioned to recruit and retain talent (CSA Group, 2013). The CSA Group (2013), which develop standards designed to enhance public safety and health, contends that psychologically unhealthy workplaces enhance the risks of conflict, high turnover, disability, absenteeism, and poor morale. Globally, the Lancet Commission on global mental health and sustainable development estimate that mental disorders will cost the global economy \$16 trillion by 2030 in lost productivity, estimating 12 billion lost working days annually (Patel et al., 2018). The Mental Health Commission of Canada (MHCC, 2016) projects the cost of providing treatment, care, and support services to Canadians will exceed \$2.5 trillion (in current dollars) by 2041. In Canada, approximately 20 percent live with a mental disorder and slightly more than 20 percent of workers struggle with a mental disorder which can impact their productivity (MHCC, 2013). Furthermore, 70 percent of Canadians are troubled about the psychological health and safety of their workplace, while 14 percent asserting their workplaces are not healthy or safe (MHCC, 2022). Weekly, an estimated

500,000 Canadians miss work for mental health reasons and approximately 30 percent of all short- and long-term disability claims in Canada are attributed to mental health challenges (MHCC, 2022).

While a focus on mental well-being in the workplace, specifically on prevention and early identification of needs, could benefit employees (MHCC, 2016), the Centre for Addiction and Mental Health (2022) claims prevailing stigma in the workplace may inhibit workers from sharing their mental health challenges, thus creating a barrier to receiving support. Corroborating the findings of Oliphant (2016), workers fear the negative consequences of disclosing mental health challenges, that is to be perceived as “unreliable, unproductive, and untrustworthy” (MHCC, 2013, p. 9). Employees who do disclose may be discriminated against, potentially resulting in unemployment, underemployment, or alienation in the workplace (Szeto et al., 2019). The economic impact of lost or lowered productivity due to poor mental health cannot be overstated. The inability to disclose is profoundly impactful, as expressed by workers who maintain that dealing with the stigma is oftentimes worse than the disorder itself (MHCC, 2013). While our understandings of mental health challenges have come a long way, the stigma of disclosing remains powerful and creates immeasurable consequences at the micro and macro levels.

## **2.2 PSP mental health**

Carleton et al. (2018) arguably conducted the most comprehensive study of the mental well-being of Canadian PSP, including communicators. In their study, participants (n=5813) were grouped into six categories: municipal/provincial police, firefighters, paramedics, call centre operators/dispatchers, correctional workers, and Royal Canadian Mounted Police. The study revealed that the prevalence of self-reported mental disorders among Canadian PSP were higher than diagnostic rates among the general population<sup>1</sup> (Carleton et al., 2018). Of significant concern was the

---

<sup>1</sup> Stigma surrounding disclosure of mental health issues in this population may result in under-reporting (Halpern et al.,

increase in risk for posttraumatic stress disorder, major depressive disorder, panic disorder, generalized anxiety disorder, and social anxiety disorder, with a susceptibility for alcohol use disorder across all PSP organizations (Carleton et al., 2018). The prevalence of each mental health disorder varied across the six occupations examined, which prompted the authors to call for national mental strategies that are occupation specific, as well as for specific research into each occupation. The limitations of the study of Carleton and colleagues include the reliance on participant self reports, and the limited number of communicators who took part, most of whom worked for police organizations.

In addition, researchers have discovered that duty-related stress and psychological trauma leave PSP highly susceptible to mental health challenges and physical health issues (Carleton et al., 2018; Golding et al., 2017; Lilly & Allen, 2015; Pierce & Lilly, 2012; Ramey et al., 2017; Smith et al., 2019; Steinkopf et al., 2018). Similar to direct exposure to psychological trauma experienced by first responders, indirect trauma, also referred to as secondary trauma, experienced by communicators can also lead to PTSD (Adams et al., 2015; Carleton et al., 2018; Golding et al., 2017; Koopmans et al., 2017; Lilly & Allen, 2015; Pierce & Lilly, 2012; Ramey et al., 2017; Soria, 2020; Steinkopf et al., 2018).

In a report produced by the Parliamentary Standing Committee on Public Safety and National Security, a theme emerged suggesting that PSP are expected to remain composed and detach themselves from the emotions of a psychologically traumatic experience (Oliphant, 2016). The committee noted that consequently, many PSP choose not to inform their superiors (or others) of mental health challenges. Rather, PSP keep their struggles private for fear that negative consequences from supervisors and/or colleagues will further traumatize them (Oliphant, 2016). The committee recommended that PSP organizations must shift from a “suck it up” culture to one that is supportive

of PSP and is “psychologically safe and stigma free” (Oliphant, 2016, p. 11). In addition to providing meaningful mental health supports, organizations must create safe environments intended to permit members to disclose and discuss operational stressors in a healthy manner. Moreover, the identification of positive factors, which may contribute to resilience and good psychological health, should also be explored.

### **2.3 Communicator mental health**

In the most comprehensive review of communicator mental health to date, Golding et al. (2017) examined the psychological health of emergency communicators working in police, fire, and ambulance communications centres. The Critical Appraisal Skills Program guide to performing systematic reviews (CASP, 2018) was used to ensure methodological quality. A narrative synthesis revealed two dominant themes influencing psychological well-being: organizational/operational factors, and interactions with others. According to Golding et al. (2017), for communicators, organizational and operational factors are related to the work environment (e.g., feeling undervalued by one’s organization, increased exposure to traumatic and abusive calls, minimal control over individual workload, high-pressure decision-making with limited resources, and no knowledge of call outcomes). Communicators express regularly feeling invisible and not recognized within their organization and tended to feel unappreciated and treated dismissively or with disrespect (Basemen et al., 2017; Coxon et al., 2016; Golding et al., 2017; Smith et al., 2019; Soria, 2020; Steinkopf et al., 2018). Coxon et al. (2016) investigated the lived experiences of full-time communicators (n=9) working in an ambulance Emergency Response Centre in the United Kingdom, and discovered that all participants felt “overlooked, misunderstood and marginalised” (p. 646). Other studies highlight that communicators feel excluded from awards ceremonies (e.g., bravery awards) or critical incident debriefs, despite similar or worse negative outcomes to those of “traditional” first responders (Adams

et al., 2015; Lilly & Allen, 2015; Pierce & Lilly, 2012; Ramey et al., 2017; Steinkopf et al., 2018). Further studies have identified additional organizational stressors experienced by communicators including a lack of effective training, rigid policies, outdated mental health culture, poor relationships with colleagues and responders, and poor leadership (Coxon et al., 2016; Ramey et al., 2016; Smith et al., 2019; Steinkopf et al., 2018).

To promote consistency and standardize data collection from a civilian calling a PSAP in an emergency, a communicator's job often involves following best practices protocols that prompt questions for callers. For instance, like most provinces and territories, the Alberta government sets performance targets requiring that 911 calls be answered within 15 seconds and transferred to the appropriate emergency service within 60 seconds of answering, 95 per cent of the time (Government of Alberta, 2021). Likewise, ambulance services typically rely on scripts designed to assist call takers in determining the correct chief complaint, thereby more accurately assessing the priority of the call. However, communicators often struggle to follow rigid protocols in dynamic situations (Smith et al., 2019) and recount how they tend to receive feedback only when mistakes in following protocols are made (Adams et al., 2015; Deselms, 2016). Communicators describe being constantly scrutinized for adherence to protocols (Koopmans et al., 2017), despite reporting receiving inadequate training, or no training at all (Adams et al., 2015; Coxon et al., 2016; Golding et al., 2017; Smith et al., 2019; Steinkopf et al., 2018). Inadequate training increases a communicator's anxiety and stress levels, resulting in feelings of insecurity (Bang et al., 2001; Coxon et al., 2016), conceivably impairing their ability to quickly and effectively coordinate resources. Adams et al. (2015) hypothesize that the absence of training, or insufficient training, could stem from the organization's lack of understanding of communicators' unique needs, or it could be an example of the hierarchical divisions within agencies.

Golding et al. (2017) found that interactions with others influenced communicator psychological well-being, such as management (e.g., through a lack of support, empathy or understanding), members of the community they serve (e.g., feeling a communicator's role is invisible, emotionally demanding) and peers, friends, and family (e.g., seeking informal support for job-related issues). Communicators claim that inappropriate behaviours from responders, allied agencies, and PSAP colleagues, which commonly result in conflicts and bullying, are frequently unaddressed (Golding et al., 2017). Poor supervision, coupled with the perceived lack of support by superiors, contribute to job-related stress, which is amplified by the dearth of positive feedback (Adams et al., 2015; Golding et al., 2017; McCarty & Skogan, 2012; Ramey et al., 2017; Soria, 2020). Golding et al. (2017) posit that the scarcity of organizational support from the upper echelons can in part be attributed to managers being too removed from the role, the lack of recognition of communicators' needs, or a lack of appreciation of their hard work, excessive workloads, paucity of breaks, frequent overtime, downstaffing, and generally poor treatment from responders.

While Golding et al. (2017) provided invaluable insight and identified key stressors existing within emergency communication centers, their study was limited in scope. Most notably, and a clear reflection of the limited literature available on communicators in both a Canadian context and globally, is that in their review they note an insufficient number of high-quality studies available to draw stronger results from the extant data. Furthermore, while Golding et al. (2017) note heterogeneity in the study designs included in their review, which increases the generalizability of their findings, there were no longitudinal studies included, preventing the analysis of causal factors and limiting study interpretations to risk factors. Finally, in addition to the authors noting inconsistent recruitment strategies, all included studies were limited to English publications.

Unquestionably, achieving a supportive culture is essential, particularly as several PSP, including communicators, characterize their workplace culture as toxic, and rife with bullying, harassment, and conflict between colleagues, responders and supervisors (Adams et al., 2015; Baseman et al., 2018; Ramey et al., 2017; Smith et al., 2019). Perhaps most poignant for communicators is the discourse surrounding inadequate briefings after calls, inappropriate training for mental health calls, the demands of high-pressure environments without meaningful downtime, and little recognition of routine exposure to duty-related secondary trauma (Golding et al., 2017; Ramey et al., 2016; Smith et al., 2019). The Diagnostic and Statistical Manual of Mental Disorders, 4th edition text revised (DSM-IV-TR) defines indirect exposure as “events experienced by others that are learned about” (American Psychiatric Association [APA], 2000, p. 464). The latest revision, DSM-5, expands on the construct of trauma by adding “experiencing repeated or extreme exposure to aversive details of the traumatic event (APA, 2013, p. 271). Communicators, who are exposed to secondary trauma as a function of their work, are shown to have higher rates of PTSD than police officers (Pierce & Lilly, 2012; Ramey et al., 2017; Steinkopf et al., 2018), firefighters (Lilly & Allen, 2015), and the general population (Lilly & Allen, 2015). Given that PTSD can impair judgment, in an environment where seconds count, poor decisions can cause risks to public health and safety (Lilly & Allen, 2015; Pierce & Lilly, 2012).

Despite the negative aspects of emergency communications, an overwhelming number of communicators report enjoying performing an altruistic role (Golding et al., 2017) and take pride in their work (Coxon et al., 2016). In spite of the stressors and demands of the job, communicators thrive on the challenges (Golding et al., 2017) and retain a positive outlook of the world (Lilly & Pierce, 2013).



In sum, operational and organizational factors can positively or negatively affect communicators' work environments, their mental well-being, relationships with colleagues, morale, and commitment to their organization. The implications of working in stressful conditions with regular exposure to PPTE are copious and may impact public safety through sub-par service delivery. Using Schein's theoretical framework, I examine elements of organizational culture, and identify how they interact to illustrate why this integral group is too often forgotten. Schein's framework permits me to portray organizational practices and work environments, both positive and negative, as systemic, and not limited by service type or geographic location. The disparity of attention afforded this group has resulted in a scarcity of investigations into their lived experiences. Ideally, my findings will advance our understandings of the impacts of organizational culture on the operational and organizational factors that influence the mental well-being of communicators. Moreover, I will identify characteristics of supportive organizations that can serve as a benchmark for organizations seeking change.

### **3 Theoretical Framework**

My research explores the impacts of organizational culture on the well-being of communicators. Organizational culture and its impacts on the productivity, commitment, and well-being of its members is well-documented (Schein, 2004), yet not well-understood in the context of PSP in general or communicators specifically. Two predominant theorists within the field of organizational culture, Eisenberger (1986) and Schein (2004) have committed decades to researching and understanding organizational behaviours and their impacts on employee productivity and success. Eisenberger et al. (1986) developed organizational support theory to identify a causal link between an employee's work effort and the degree they feel valued, fundamentally impacting their perception of the organization's commitment to them. Organizational support theory posits that increased levels

of support from an organization positively correlate to an employee's performance and their commitment to the organization, strengthening their perception that increased effort will result in increased rewards (Eisenberger et al., 1986). Framed within organizational support theory is social exchange theory, which suggests that if the cost of employment (e.g., physical health, mental well-being) is greater than the rewards (e.g., financial benefit, esteem, approval), then an employee's attachment to an organization diminishes, potentially culminating in decreased productivity or the termination of the relationship. Put differently, an employee's work effort and commitment depends on how they perceive they are treated by an organization, and that treatment influences their mental well-being. When the exchange is positive, employees feel valued, morale is positively affected, and absenteeism is reduced. While Eisenberger et al. (1986) focus primarily on elements of organizational support and social exchange theory, Schein (2004) examines factors that contribute to tacit cultures and underlying assumptions, both of which were extensively referred to by respondents.

Schein (2004) defines organizational culture, as "a set of structures, routines, rules, and norms that guide and constrain behavior", and is formed through member interactions, shared experiences, and is shaped by the behaviours of its leaders (p. 1). Schein divides organizational culture into three levels, or degrees, to which outsiders observe cultural phenomenon: 1) artifacts, referring to tangible, identifiable elements seen by the public (e.g., uniforms); 2) espoused beliefs and values, describing the behavioural norms, the rules of behaviour, or how a member represents the organization (what ought to be versus what is); and 3) basic underlying assumptions, which are unseen by the public, but are salient, unconscious behaviours or tacit assumptions that are taken for granted by members and are difficult to articulate.

My research is guided by the concept that organizational culture has a direct impact on its members, both explicitly and implicitly, or tacitly. Explicit culture is expressed in customs and

traditions (e.g., swearing-in ceremonies), rituals (e.g., annual fundraiser), celebrations (e.g., promotions), values (e.g., mission statement), structures and processes (Schein, 2004). Implicit or tacit culture, according to Schein (2004) is expressed in group norms and guides behaviour (e.g., they evolve in groups working together); they are the “phenomena that are below the surface” (p. 8), unwritten “rules of the game” (p. 13) and “the way we do things around here” (p. 13). The implicit, or tacit culture, encapsulates the underlying, implied assumptions and beliefs held within the organization, which are impactful, despite being invisible and primarily unconscious (Schein, 2004). Schein (2004) contends that culture exists throughout every aspect of an organization, invariably creating sub-cultures with different shared experiences, languages, skill sets, and interpretations of events and policies. Schein (2004) further asserts that conflicting cultural assumptions can occur between subgroups, frequently leading to conflicts, as evidenced in numerous organizations in this study.

Schein (2004) identifies five reasons why sub-cultures, or differentiation, manifest within an organization. First is functional/occupational differentiation. Organizations hire members to fulfill functions, and units are formed based on those functions. Unit members share cultural assumptions based on their education, duties, and responsibilities. Therefore, assumptions differ between subcultures, or units, based on their primary functions. Fundamental difference in roles culminate in contrasting occupational identities, despite working for the same organization. (e.g., vastly different training is required for uniformed responders than for communicators, thus, one could expect their occupational identities and assumptions to differ as well). Second is geographical differentiation. Schein asserts that assumptions are based on working conditions and customer requirements unique to each geographic unit. Geographic separation can threaten the useful exchange of information between subcultures if managers adopt assumptions held by their subunit. Although assumptions

about other subgroups are typically incorrect, they become embedded into the unit culture as the group evolves, potentially fracturing their connection to other units and even the organization. Given that communications centres are commonly separate from responder locations, particularly in larger, urban organizations, there can be an increase in subcultural differences and/or assumption of these differences (e.g., rural responders may feel that communicators in urban settings do not understand their unique needs). The third is the result of differentiation by product. Diverse personality types, each with unique educational backgrounds, mindsets, and experiences, are attracted to different business units. These fundamental differences can lead to conflicting priorities and result in cultural integration issues. For instance, communicators must prioritize patient care *and* the safety of the community as well. They accomplish their safety focus by ensuring ambulances are strategically distributed throughout the area, and appropriate resources are sent to calls. Thus, communicators are aware of the status of each hospital as well as each paramedic unit. Paramedics regularly request to transport a patient to a hospital they consider to be in the patient's best interest; a request that may be denied if a hospital is on bypass (not accepting non-urgent patients), or if there are already several ambulances waiting to be triaged. Consequently, paramedics may feel slighted, or presume that communicators do not understand the needs of their patient. Communicators, on the other hand, may sense the paramedics are challenging them or questioning their ability to do their job. Paramedics are medically trained and have a specific focus on their patients whereas communicators are more strategic and must consider all moving parts in the 'big picture'. While both sub-groups work for the same organization, and are equally focused on public safety, paramedics work more at a micro level while communicators work with at both the micro and macro picture. Tensions between the occupational needs of both groups can create division. The fourth difference results from divisionalization. As organizations grow, the need to decentralize functions is vital to optimize the

efficiencies of each unit. Self-contained units are formed based on responsibilities, operational requirements, products and services delivered, as well as geographic areas served. Each division has their own management group to lead them, and these managers facilitate communications and integration across the subcultural boundaries of an organization. Thus, a group's cultural identity begins to form around these units. The final sub-cultural divide results from differentiation by hierarchical level. Organizational growth requires additional levels of responsibility to manage the span of control and evolving business units. Consequently, in addition to unit subcultures, additional subcultures are formed at these hierarchal levels, typically based on rank or status. Commonly, higher-ranking members operate in isolation and have limited interactions with lower ranking members. Such isolation can result in assumptions being made about what the lower levels need (e.g., executive members commonly make decisions that do not make sense to the front line). Schein (2004) argues that within well functioning organizations, subcultural differences can be appropriate and functional, with each group respecting the boundaries and diversity of the other.

Like Eisenberger et al. (1986), Schein (2004) posits that one's commitment and loyalty to an organization diminishes when they feel devalued or unsupported. However, their theories differ in that Schein (2004) points to subcultural differentiations and tacit behaviours as elements of culture, whereas Eisenberger and colleagues (1986) rely primarily on social exchange and feelings of support to substantiate culture. Specifically, Schein (2004) highlights hierarchical differences as a source of contention in unhealthy organizations and maintains that conflict is characteristic in command-and-control organizations. My qualitative analysis of the participant narratives revealed alignment with Schein's model, perhaps in part because communicators generally work in paramilitary, command-and-control organizations. Moreover, Schein (2004) asserts that assumptions, or interpretations,

shape values, and values shape practices and behaviours, ultimately creating a culture formed by subcultures.

Once sub-cultural interpretations, practices and narratives are established, they are passed along to new employees, ensuring the culture's survival through new shared experiences of the group. Schein (2004) argues that within this context, culture is a mechanism of social control by which members are manipulated into "perceiving, thinking and feeling in certain ways" (p. 20). The command-and-control model typically adopted by emergency service organizations specifically contributes to division amongst subgroups by assuming that conflict is inherent and expected (Schein, 2004). As illustrated in the extant literature and the research findings, the clash in sub-cultures can result in conflict and further divide already fractured working relationships, resulting in countercultures. For example, management and communicators are regularly segregated from each other. Although both might be situated within the same PSAP, their interactions are limited. Furthermore, the services they dispatch (e.g., sworn patrol officers) typically work in the community or in their respective stations. The physical separation, differing tasks and responsibilities, as well as varying products delivered by each unit – despite being members of the same organization – intensifies the division between the subcultures.

Schein (2004) describes three types of sub-cultures within command-and-control organizations: operator, engineering, and executive cultures. The operators are those whose knowledge, skill and commitment ensure continuity of operations, even when significantly or critically, understaffed. In communications, the operator sub-culture manifests through roles including dispatchers, call-takers, and supervisors.

The engineering sub-culture, according to Schein (2004) is responsible for designing products and processes intended to facilitate workflow and improve current, often outdated, practices. In

communications, this sub-culture includes roles distant from the front line, such as provincial regulators, agency directors, and municipalities. Although numerous innovative solutions brought forward by individuals within the engineering sub-culture may be effective, front-facing users within the operator sub-culture frequently feel left out of solution designs meant to improve their job.

The third type of sub-culture within Schein's model is the executive sub-culture. Executives are tasked with ensuring the organization is effective and remains economically sustainable. Oftentimes, executives are perceived as being far removed from the realities faced by those belonging in the other sub-cultures. For example, operators and engineers may feel that those in the executive role make financial and policy decisions without fully understanding the ramifications.

In addition to the subcultural differentiations, how issues are discussed in the workplace communicates meaning, thus it is an integral component of the culture. Schein (2004) refers to this phenomenon as a linguistic paradigm, or the common language used which is conveyed to new members. The difficulty by which emergency response organizations struggle to discuss mental health issues in a healthy way are also congruent with the findings of Oliphant (2016), in that historically held beliefs in first responder organizations espouse values of a suck-it-up culture. Such rigid, inflexible thinking patterns may establish a climate that risks fossilizing organizations and preventing growth necessary to ensure the well-being of its members. Furthermore, Schein (2004) asserts that some organizations are not open to inquiries or assessments of their organizations because they feel vulnerable that their organizational practices may be revealed to outsiders, which may also help explain why many PSP fail to seek help when faced with possible mental health issues.

#### **4 Methodology**

Methodologically, my research builds on a current study replicating the work of Carleton et al. (2018) aimed at broadly characterizing Canadian public safety communicator mental health and

wellness. The larger project involves several stakeholders, including CIPSRT and the Association of Public-Safety Communications Officials (APCO) Canada. Together, we aim to: 1) improve our understanding of Canadian communicator mental health through self-reported, validated psychometric assessments; 2) examine the impact of organizational culture on communicator wellbeing; and 3) characterize workplace stressors in communications centers.

#### **4.1 Survey**

The survey is intended to capture a cross-sectional snapshot of the mental health screenings and organizational culture on a statistically representative sample of Canadian communicators. By replicating the work of Carleton et al. (2018), the overall survey results can be used to directly compare communicator mental health to other Canadian PSP who were more clearly defined in the original survey. In addition, our survey results provide a snapshot of COVID-19 best practices, and more relevant to my thesis, organizational practices.

The survey was implemented through a self-administered questionnaire initiated through an anonymous link provided to the participants when they agreed to participate, hosted online on the Qualtrics platform provided through Memorial University. The questionnaire was available in both French and English and included 19 sections and 179 questions, and depending on specific responses to screening questions, participants could skip entire sections. Most sections were comprised of validated scales designed to measure mental health disorders, such as major depressive disorder, generalized anxiety disorder, and alcohol use disorder, among others. While most scales included both closed and opened ended questions, several were measured using Likert scales or offered multi-option responses. The section related to organizational culture was the only one to solicit only open-ended responses.



#### **4.1.1 Demographic items**

Similar to the work of Carleton et al. (2018), demographic information was collected (see Appendix: Demographic Tables) including: workplace details (e.g., place of work, workplace staffing questions, employer questions), sex, gender, education, ethnicity, religion, language, marital status, income, and children (see Table 1 for a list of demographic questions). We did not collect personally identifiable information (e.g., name, phone number) to protect the anonymity and privacy of our participants, particularly given the potentially sensitive nature of the data we were collecting.

#### **4.1.2 Mental health measures**

We conducted mental-health self-report screenings using validated mental health scales including: the PTSD Check List 5 (PCL-5) (Weathers et al., 2013; MacIntosh et al., nd; Ashbaugh et al, nd; Blevins et al., 2015; Bovin et al., 2016); the 9-item Patient Health Questionnaire (PHQ-9) (Kroenke et al., 2001; Lowe et al., 2004; Beard et al., nd; Kroenke et al., 2010) ; the PD Symptoms Severity scale, Self-Report (PDSS-SR) (Shear et al., 1997; Furukawa et al., 2009; Spitzer et al., 2006); the 7-item GAD scale (GAD-7) (Kroenke et al., 2001; Spitzer et al., 2006; Beard & Bjorgvinsson, 2014); and the Alcohol Use Disorders Identification Test (AUDIT) (Saunders et al., nd; Gache et al., 2005). Participants reported symptoms per the instructions for each scale: PCL-5, past month; PHQ9, past 14 days; PDSS-SR, past 7 days; GAD-7, past 14 days; SIPS, currently no specific time window; and AUDIT, past year. Following guidelines presented in the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5; American Psychiatric Association, 2013), participants reported on their lifetime exposure to potentially psychologically traumatic events provided by the Life Events Checklist for the DSM-5 (LEC-5) (Weathers et al., 2013; MacIntosh et al., nd; Ashbaugh et al, nd; Blevins et al., 2015; Bovin et al., 2016).

### 4.1.3 Organizational culture items

To apply organizational culture theory in a practical way, I developed four research questions which are based on the foundation that organizational culture has a direct impact on the well-being of its members. Initially, I piloted my questions to members of our research group working on the national communications survey. After incorporating the group's feedback, I again piloted the revised questions to the entire research team (n=16) who are part of Memorial University's Atlantic Canada Public Safety Research and Innovation Lab, as well as the APCO Canada executive board members (n=5). After incorporating the larger group's feedback on the questions, members of the APCO Canada mental-health sub committee (n=7) were asked to further validate the process by completing the survey, resulting in the final set of four questions (Table 2).

<i>Table 1: Organizational Culture Questionnaire Questions</i>	
<b>Item</b>	<b>Item phrasing</b>
1	Please describe the organizational culture in your communications centre
2	How does the organizational culture impact your ability to do your job?
3	What are three things you like about the organizational culture in your communications centre?
4	What are three things you dislike about the organizational culture in your communications centre?

## 4.2 Recruitment

Participation was initially solicited through recruitment emails sent by APCO Canada to their membership, directing interested persons to the online questionnaire, and encouraging participants to share the questionnaire link with colleagues within their agency or allied agencies. To be included in the study, participants were required to be employed as fire, police, or ambulance service emergency communicators, or be employed as emergency call takers for OnStar or VoIP. Unfortunately, no participants identified as being employed by VoIP completed the survey. Participants were excluded from the study if they were not a Canadian communicator (e.g., if the link was shared by a Canadian

communicator to a colleague in another country) . We encouraged snowball sampling as it facilitated access to previously inaccessible or unknown communicators. We additionally recruited participants through direct emails found through internet searches for PSAPs and communications oversight organizations (e.g., NL911; Government of Nova Scotia’s Emergency Management Office; E-Comm 911), social media, and communications newsletters. Snowball sampling also led to several unions contacting the research team, and these unions also sent the invitation to their email distribution lists. Social media was used to access ambulance dispatchers in Ontario, the Municipal Agency for the Funding and Development of Québec’s Emergency 9-1-1 Call Centres published our recruitment message in both their December 2020 and January 2021 Info 9-1-1 Québec newsletters, and the Canadian Paramedicine’s magazine included our recruitment message in the March 2021 edition of their newsletter.

### **4.3 Procedure**

Data were collected using a web-based self-report survey in both English and French. Our research followed established guidelines for web surveys (e.g., informed consent, confidentiality) (Ashbaugh et al., 2010). Our study was approved the Newfoundland and Labrador Human Research Ethics Board (File #20210168; Approval date October 13, 2020). The online survey was available for voluntary participation from 4 November 2020 to 30 April 2021.

Upon entry to the questionnaire, participants were directed to an informed consent page, where we explained the purpose of our study, presented the potential risks and benefits of participation, provided resources that may be relevant (e.g., an online resource to find a Canadian therapist<sup>2</sup> as well as a Canadian crisis resources for suicide<sup>3</sup> ). Additionally, we provided an overview of the procedures, an estimated timeline to complete the survey, a detailed confidentiality agreement,

---

<sup>2</sup> <http://www.cpa.ca/public/findingapsychologist/>

<sup>3</sup> <http://suicideprevention.ca/thinking-about-suicide/find-a-crisis-centre/>

instructions on how to withdraw from the study, contact information, and directions on where to find the study results. Once electronic consent was provided, participants were issued a unique computer-generated random identifier. Participants were responsible for recording their own identifier, which allowed for repeated entry into the questionnaire to accommodate the challenging schedules of communicators, facilitate participation, and allow completion of the questionnaire over multiple sessions.

All participants were presented with demographic questions at entry to the questionnaire. Following the demographic questions, participants were given mental health screening questions which determined the validated scales that they would be presented (e.g., PHQ-9, used to assess major depressive disorder). Participants were only presented with mental health scales that were relevant to their responses to reduce the amount of time required to complete the questionnaire. After completing the mental health scales, participants were presented with four open ended questions relating to the organizational culture in their communications centres.

#### **4.4 Analysis**

My research aims to examine the impacts of organizational culture on the mental well-being of public safety communicators. I endeavour to contribute to the identification of positive and negative cultural practices, and understandings of the implications of culture. Despite these practical and academic objectives, I also had some personal aims when I embarked on this project. As a former communicator, I am passionate about sharing the experiences of a group of people who are unseen and commonly overlooked. I wanted to understand if my experiences were common to communicators, or if my perceptions of events were based on assumptions and beliefs I held about the organization for which I worked. Throughout the analyses of the participants' accounts, I saw myself in the data, and the narratives of the participants mirrored my experiences on many levels.

Thus, my academic and personal aims relate and underpin my research.

While I am emotionally connected to the research, and I identify with aspects of the respondents' experiences, I have taken measures to ensure my ontological position does not bias the data. Giddens (1993) suggests that although personal commitment and passion may influence one's areas of research, they do not destroy objectivity, particularly when appropriate methodological measures are implemented. To remain objective, I have discussed and evaluated my analyses with my thesis supervisors, ensuring I am appropriately summarizing the narrative content. The data were also auto coded using NVivo software, limiting my interpretations of commentaries. Methodologically, I have used a constructivist emergent theme approach that was semi-grounded in that themes emerged from the data but not necessary theory. Theory instead was applied to the data.

I used constructivist semi-grounded theory, a constant comparative method of analysis, to analyze the themes as they emerged organically from the data (see Ricciardelli et al., 2010; Ricciardelli, 2011). Constructivist grounded theory provides a structured analytic framework that allows for flexibility and the emergence of unexpected themes (Charmaz, 2014). Charmaz (2014) points out that preconceived notions can introduce bias into the data; therefore the theory must emerge from the data—not the other way around. However, my work was semi-grounded in that although themes were generated from the data, I could not distance myself from prior theoretical knowledge – recognizing research does not occur in a vacuum – which is why my approach is only semi-grounded. NVivo qualitative analytic software (version 1.5.1) aided me in identifying and tracking emergent themes, as well as coding. Once the themes were identified (e.g., management and supervision, division and exclusion, and gender), I used those data to inform the theoretical approach.

## 5 Results

In total, 696 survey responses were received (27 French and 669 English), distributed between police, fire, and paramedic services across Canada, within varied and previously unsurveyed communicator roles (e.g., 9-1-1, police, fire and ambulance call-takers, dispatchers, auditors, leadership and administration). Fewer participants (n=329 or 47.2%) responded to the first of four questions related to organizational culture (please describe the organizational culture in your communications centre). Of those responses, 25 (3.6%) indicated they either did not understand the meaning of organizational culture or responded with “N/A”. An additional 83 (11.9%) provided details of the organizational structure in their communications centre (e.g., paramilitary, ranks, etc) rather than the culture. I attribute the participants’ misunderstandings to a lack of clarity and a failure to provide a definition for organizational culture. Furthermore, organizational culture is a relatively nuanced academic concept and is not always understood by the front line.

Based on previous studies, homogeneous themes emerged, yet unique experiences specific to communications centres or responder services were also revealed. Referencing the research from Golding et al. (2017), expected findings included mention of organizational/operational factors (e.g., lack of control over workload, feeling undervalued and demoralized by the organization, no knowledge of call outcomes, exposure to traumatic and abusive calls, and making decisions in pressured environments) and interactions with others (e.g., lack of support, empathy, or understanding from management, the invisible nature of the role, providing an emotionally demanding public service, and seeking support from peers, family, and friends). Furthermore, several participants described their workplace culture as toxic (Adams et al., 2015; Baseman et al., 2018; Ramey et al., 2017; Smith et al., 2019), with inadequate support from both supervisors and organizations (Golding et al., 2017; McCarty & Skogan, 2012; Soria, 2020). Additionally, dialogue

surrounding discomfort disclosing mental health struggles to superiors is consistent with previous assessments of PSP experiences (see Oliphant, 2016).

Conversely, positive feedback related to supportive colleagues, management and organizations emerged. References to satisfactory mental health supports, and positive feelings about being part of a team and helping the public were common.

## **5.1 Themes**

A thematic analysis revealed six overarching themes; management and supervision, organizational affect, morale and staffing, division and exclusion, colleagues, and gender. Participant responses frequently fit into one or more categories; therefore, the same comment was counted each time it appeared in a theme. Similarly, a handful of participants were cited more than once, as they expressed several points that could be classified or grouped across numerous themes.

### **5.1.1 Management and Supervision.**

Overall, the category of management and supervision yielded the most responses (n=189) and the most corresponding subthemes (n=9). Of the nine subthemes, only one uncovered exclusively positive remarks concerning the leadership in their organization, while others offered limited positive feedback. Leadership positions within emergency services organizations are generally occupied by uniformed members, predominantly men<sup>4</sup>, who have been promoted through their rank structures. Conversely, communicators are largely civilian, or non-uniformed members, exposing them to different experiences. As described by Schein (2004), the diversity created by subcultural memberships gives rise to contrasting occupational identities based on education, duties, and responsibilities. Therefore, the shared experiences, or occupational identities, of one subunit creates

---

<sup>4</sup> I was unable to locate official data sources identifying the number of women occupying executive leadership positions in Canadian police, fire, or paramedic services. I reached out to national association leaders and was provided with estimates identifying only a handful of women. Thus, I will use the term “predominantly” to identify male leadership.

assumptions about other subunits, based on its own understandings and practices.

Differing occupational identities were not barriers for organizations with supportive leaders, as they genuinely appreciate the hard work and dedication of the communications staff, and endeavour to recognize their contributions. Participant 36, a dispatcher with an ambulance service in eastern Ontario, stated “management always want Staff support and recognition to be at the forefront.” Respondents working in respectful environments who felt supported personally as well as professionally, shared positive sentiments regarding senior leaders. While respondents (n=24) shared positive comments about the senior leadership in their organizations, most spoke specifically about their supervisors. Participant 114, a fire and police services dispatcher in northern Ontario, relayed their “supervisor does a good job of trying to boost morale”, and participant 278, a call taker with the RCMP in Nova Scotia, shared that their “supervisors are very active and aware and supportive [but] management does not care about employee's well-being.” Similarly, participant 133, a dispatcher for an ambulance service in Eastern Ontario, states that “the supervisor does everything in her power to mitigate and make the director understand.” Schein (2004) posits that front line supervisors, or the operator subculture, are more attuned to human nature, whereas the executive subculture has a greater focus on economic sustainability. Participant 307, a supervisor for an ambulance and fire service in Eastern Ontario, supports Schein’s assertion that executives have different, claiming the workers in their centre must “follow the rules even if they do not make sense, look good in Stats for the Province.”

Accounts of disconnect between the executive and operator subgroups support the findings of Golding et al. (2017) who claim that management are too distant to understand or appreciate the demands of the communicator role. As expected, participants strongly felt the leaders in their organizations failed to adequately understand the communicators’ roles (n=32), and made managerial



decisions based on incorrect assumptions. Participants contended that managers have “no clue what we do” (participant 13, a call taker with a major ambulance service in Ontario), therefore they make unreasonable and illogical decisions, constrained by their limited perception of alternatives. Not surprisingly, decisions are commonly “shortsighted [sic] and misguided because they don’t understand” (participant 94, a dispatcher with a major police service in Ontario). Moreover, participant 82, a call taker for a police service on Vancouver Island, shared that operational pressures commonly compel managers to “sign off people who are not ready, and/or not the right job for them”, increasing the workload of other members. Communicators who endeavoured to address central issues with management felt disregarded, describing their experiences as futile, or "screaming into the wind" (participant 368, a dispatcher with a metropolitan police service in Ontario). While leaders may earnestly endeavour to comprehend the challenges, needs, and experiences of communicators, their interpretations may be biased, as they are perceived through the lens of a uniformed responder.

To reiterate, Schein (2004) contends that fundamental differences in both occupation and hierarchy, or rank, commonly manifest in faulty assumptions about another group’s needs, tasks, and practices. Therefore, it is no surprise that respondents (n=33) suggested that because the leaders in their organizations had only a tangential understanding of their daily lives, management was rendered ineffective. Negative judgements of organizations developed as respondents described managers as unable, or unwilling, to resolve chronic issues. Long-standing staffing issues, in addition to insufficient allocation of resources required to support communicators, were constant sources of irritation, and suggestive of disorganized organizations. The absence of solution-based actions needed to address systemic issues was attributed to “weak supervision and little leadership” (participant 318, a senior dispatcher from an urban ambulance communications centre in Ontario). Ineffective leaders, or those who operate with blinders on and routinely avoid dealing with problems, were depicted as

having a “don’t rock the boat” attitude (participant 196, a dispatcher with the RCMP in western Canada). Schein (2004) posits that this type of leader avoids change, and the conflicts created by it, by encouraging the harmony attributed to the status quo. Unfortunately, this type of leader fails to recognize, or acknowledge, that the status quo is not optimal, or even adequate, for communicators.

Notions of inequality intensified as leaders failed to produce meaningful changes to ameliorate conditions for communicators, leaving them with the perception that communicators are less valued than uniformed PSP (n=7). Notwithstanding the modest number of comments, participants expressed frustration that their contributions were deemed less significant than that of PSP. Communicators felt unappreciated and devalued, and perceived their organizations regarded them as less deserving of recognition or consideration than uniformed responders, supporting the findings of Coxon et al. (2016), Golding et al. (2017), and Steinkopf et al. (2018). The findings suggest that when communicators "feel less than and subservient" to uniformed responders (participant 268, a call taker with a metropolitan police service in Ontario), their psychological well-being and sense of belonging are negatively impacted, corroborating the findings of Golding et al. (2017). Likewise, commitment and loyalty to an organization diminishes when members discern that they are not important enough or are “considered last by organization” (participant 151, a manager in an emergency communications centre in Nova Scotia). Inconsistent treatment of subcultures is reflective of the tacit beliefs held by members of the leadership, and within this context, the leadership subculture is shaped by the fact uniformed personnel comprise the subculture, which have noted subcultures, even cultures, of their own. Schein identifies artifacts, such as uniforms or badges, as the top tier of the culture pyramid. Artifacts are traditional symbols which contribute to the identity of an organization; they are the elements recognized by the public. Communicators, who are commonly non-uniformed members, tend to work in isolated centres, amplifying the contrast in identity-based appearance since the public

does not see them, and they do not share the same symbolic attire as the dominant culture. Furthermore, the communication subculture may have a different employment agreement, or their association may be at odds with that of the dominant culture, which may affect their sense of belonging (Kiedrowski & Petrunik, 2019).

Contrasting subcultural identities contribute to disparate treatment from leaders based on function, geography, products delivered, and hierarchy (Schein, 2004). When unequal treatments are espoused by the dominant subculture, be it overtly or implicitly, they become part of an organization's culture, creating countercultures (Schein, 2004). To reiterate, Schein (2004) asserts that geographic separation resulting from decentralization evolves in the formation of unit-specific identities and the adoption of norms that often differ from those of the leadership and other subgroups. Countercultures are created when subgroups compete for resources or recognition, or when assumptions about other units contribute to conflict (Schein, 2004). For instance, task-specific police units (ie., guns and gangs) commonly develop their own identities and informal codes of conduct (Johnson, 2019). Consequently, countercultures arise when their differing identities, coupled with their competition for resources and recognition, place them at odds. Notwithstanding differing unit identities, police subunits remain connected through artifacts and visibly shared identities. Unfortunately, communicators typically do not benefit from shared artifacts, thus, visible differences, in addition to their geographic separation and isolation from of the organization, exacerbate the division from the dominant unit and subunits.

Communicators' conjectures that their mores and values differ from, or are counter to, those of the dominant group, reinforce collective perceptions of unsupportive organizations (n=17). Management's inadequate support was in part attributed to their indifference toward communicators' daily struggles or career goals. The dearth of support provided by supervisors and the organization

alike corroborates the findings of Golding et al. (2017), McCarty & Skogan (2012), Smith et al. (2019), and Soria (2020), which identified insufficient support as a key stressor. Communicators shared commentaries such as, “managers don’t have your back” (participant 182, a dispatcher with Ecomm911), it “does not feel like management is on our side” (participant 14, a call taker with a large ambulance service in Ontario), and, when given the opportunity, management will “throw us under the bus” (participant 318, a senior dispatcher from an urban ambulance communications centre in Ontario). Respondents, as evidenced in the participants’ words, characterized their managers and supervisors as quick to discipline, culminating in a paucity of positive feedback. Communicators also inferred that their organizations are equally deficient, as they do not allocate sufficient resources necessary for an arduous job. Participant 33, a fire and paramedic dispatcher in Manitoba, supports this claim and states “there is not a lot of talk about peer support within our centre - CISM [Critical Incident Stress Management] is often thought of for medics and fire immediately but not often offered to comms.”

In addition to feeling unsupported, communicators acknowledged feeling confused about unclear chains of command but also with inconsistent management decisions resulting from the poorly delineated authority structures (n=20). An example of a statement came from a call taker with an ambulance service in Eastern Ontario, who wrote: “Way too many people have roles in higher positions, confusing who is in charge of what and who to go to with which issue” (participant 13). Organizations with top-heavy bureaucracies, when coupled with high turnover rates amongst leaders, converge to create the perfect storm of incongruous messaging. The repercussions of incongruous messages are felt by communicators, who are closely scrutinized for adherence to protocols and commonly receive feedback only when mistakes are made (Adams et al., 2015; Deselms, 2016). Exacerbating matters, supervisors commonly interpret, and subsequently implement, policies

differently on their platoons (or officer shifts), creating further confusion: “Nothing is the same across platoons. They try to stay organized but they don’t do a good job of communicating with staff and being consistent” (participant 203, a dispatcher with an ambulance service in Alberta). Participants reasoned that poor communication, inadequate supervision, and weak management are to blame for the diverging interpretations of policies. Thus, deficient communication practices emerged as a subtheme (n=9).

Participant 273, a dispatcher with the RCMP in Atlantic Canada, characterized the management in their centre as “terrible”, with a “lack of communication and people skills.” Managers who operate with a “do as I say not as I do mentality” (participant 267, a supervisor in a police service in Manitoba) were regarded as unsympathetic and disengaged. Due to their physical separation from operations, in addition to most not having worked as communicators, leaders are commonly unacquainted with the intricacies of communications centres, rendering them “out of touch with the needs of the membership” (participant 267, a supervisor in a police service in Manitoba). Rather, leaders may reason, based on incorrect assumptions, that their centres operate optimally, as communicators reliably stay on task, despite excessive workloads, a scarcity of breaks, frequent overtime, and perpetual downstaffing (Golding et al., 2017). Inaccurate suppositions made by the leadership subculture about the communications subculture suggest they are either unaware of, or indifferent to, the dynamic and complex minutia of communicators’ daily tasks. Fortunately, the impacts of specious beliefs can be curtailed by insightful leaders who recognize culture as an ecosystem of interdependent groups and strive to mend the inherent division amongst the subunits.

Schein (2004) posits that exploiting the natural synergy between subunits promotes horizontal communication, which is essential to the health, well-being, and success of an organization. Yet, diverse organizations commonly struggle with internal integration, unintentionally creating

boundaries which proliferate maladaptive reliance on assumptions - further compromising internal relationships. Thus, without continuous unfettered and respectful communication across subcultural boundaries, suppositions of other units remain opaque. Conversely, respect amongst subgroups facilitates open communication while identifying the competing needs of subunits, and effectively coordinating efforts to achieve common goals.

Schein (2004) further asserts that although subcultural differences by hierarchy can be appropriate and utilitarian, they can also be used as mechanisms of social control, deterring subordinates from communicating candidly. In addition to posing a risk to the health of an organization, destructive leaders negatively impact the mental well-being of its members by exhibiting harmful behaviours and creating stressful environments tolerant of aggressive behaviours (Montano et al., 2017). To restate, culture is shaped by the behaviours of its leaders, thus creating a foundation for acceptable behaviours. Remarks or actions that hurt, humiliate, or isolate colleagues are damaging, and have a lasting impact on the overall morale of the unit. Communicators chronicled working in emotionally abusive environments tolerant of bullying, thereby “contributing to the fear based submissive culture” (participant 366, a call taker for a metropolitan police service in central Ontario). Thus, abusive and toxic leaders emerged as subtheme number seven (n=12).

Social control permeated as participants expressed fears of reporting issues or asking questions, instead choosing to “just bottle up, stay upset and wont deal with the issue” (participant 198, a call taker for a fire service in eastern Ontario). Participants working in centres with predominantly male leaders experienced gender bias, as described by participant 305, a police and fire service dispatcher in Alberta, who states “people have gotten away with rampant sexual harassment because they are higher up.” This suggests a gap still exists between professed organizational values and actual behaviour norms.

Healthy working conditions cannot withstand fear-based cultures, where people believe at any given moment they can be criticized, verbally abused, or bullied. Therefore, if the structure of the culture is such that toxic behaviour is not constrained, and the mistreatment of subordinates and colleagues is normative, then conditions have been created for a harmful climate. When leaders do not lead by example, or enforce a code of conduct, the health of the organization is compromised, as the “phenomena that are below the surface” are not aligned with the espoused values (Schein, 2004, p. 8). The negative impact on the mental health of communicators who are constantly exposed to such environments is inevitable.

To this end, the final, and arguably most significant subtheme in the Management and Supervision section, pertains to the insufficient recognition of communicator mental health issues (n=19). “I do find there to still be a stigma (which I have witnessed) against colleagues that suffer from chronic/semi-chronic mental health, specifically relating to time off work” (participant 44, a trainer in a police and fire communications centre in northern Ontario). A narrative analysis revealed that leaders were commonly portrayed as uncaring and unsupportive of communicators with operational stress injuries. Communicators felt that supports were systematically offered to uniformed responders, reinforcing the contention that minimal recognition is given to communicators, or the secondary duty-related trauma they are consistently exposed to (Golding et al., 2017; Ramey et al., 2016; Smith et al., 2019). Communicators disclosed that stigma surrounding mental health issues, be it structural or perceived, is still deeply rooted in the emergency services culture and that more robust PTSD training is needed. For instance, a call taker for emergency services in Nova Scotia wrote: “I feel there has been some progress made in regards to seeking help for mental health issues however there is room for improvement so that people feel more comfortable talking about it” (participant 408). A recent Canadian study found 85% of police officers would not disclose to a

supervisor/manager or colleague if they experienced a mental illness as over half feel they would be discriminated against, or that seeking treatment is a sign of personal failure (Knaak et al., 2019). These data corroborate the conclusions of Ricciardelli et al. (2021) that police cultures shape behaviours around mental health treatment-seeking, often creating barriers for officers and communicators alike. Not surprisingly, participants conveyed fears regarding possible harmful consequences of disclosing mental health struggles, including concerns about appearing weak, having to fight to have OSIs recognized, feeling judged, and losing respect from peers. All these factors amalgamate and create barriers to help seeking behaviours.

Conversely, a handful of respondents felt their organization had excellent peer support teams, with one participant reporting their organization had implemented policies to remove the stigma of calling in sick. Although organizations publicly maintain that they support mental health strategies, nominal solutions have been implemented, leading communicators to believe the executives are simply paying “lip service” to mental health needs (participant 223, an ambulance dispatcher in Alberta). Claims that organizations are supportive of mental health initiatives appear interpreted as disingenuous by participants who describe toxic environments that perpetuate malicious discourse about colleagues with mental health needs. To exemplify, a dispatcher with a metropolitan police service in central Ontario wrote: “Running down people who need to take time off” (participant 386), emblematic of an organization’s linguistic paradigm, which permits harmful rhetoric (Schein, 2004). Such language is not only tolerated, but is relayed to new members, setting a climate that is not conducive to mental health safety.

Inadequate mental health discussions and supports, coupled with an outdated mental health culture, support Oliphant et al. (2016) findings that a suck-it-up culture remains engrained within emergency services organizations. Until a paradigm shift in mindset occurs, communicators will



continue to work in harmful work environments, enhancing their risk of developing operational stress injuries, of which they are already at a heightened risk of developing due to routine exposure to trauma (Lilly & Allen, 2015; Pierce & Lilly, 2012; Ramey et al., 2017; Steinkopf et al., 2018). Communicators who struggle with mental health needs, and who do not feel supported in the workplace, are more apt to burnout or require time off work, increasing turnover rates and adding stress to already over-worked colleagues (Baseman et al., 2018; McCarty & Skogan, 2012; Ramey et al., 2017; Steinkopf et al., 2018). Furthermore, management's perceived apathy with respect to organizational and operational stressors directly impacts employee satisfaction and engagement, culminating in decreased productivity and diminished commitment to an organization (Schein, 2004).

One could infer that the risk of making critical errors increases in conditions where communicators are subject to conflicting and unclear interpretations of policies while required to make snap decisions in high pressure situations. Yet despite chronic understaffing, communicators regularly exceed their capacity to perform effectively, contributing to the incorrect assumption that "all is well in comms." Disconnected, uncaring, and ill-informed leaders - who base their decisions on unsubstantiated suppositions of the communicator subgroup - amplify perceptions that communicators are invisible, undervalued, and subservient to uniformed responders. When leaders fail to encourage and facilitate respectful communications between subcultures, countercultures emerge, inevitably creating boundaries that bolster disharmony. Conflicts amongst colleagues, subcultures, countercultures, and hierarchies ensue, invariably contributing to toxic work environments and decreased morale. Furthermore, if toxic behaviours are not addressed, they become part of the implicit culture, entrenching the values, and normalizing maladaptive behaviours. A perpetual learning cycle is developed as new members soon recognize that how things are, differ from how they ought to be, therefore, they too adopt the tacit values of the dominant and subgroups.

Unfortunately, perpetual cycles recycle unhealthy and outdated ideologies, values, and norms. Unless an organization's behaviour is aligned with their espoused values, it is unlikely that communicators will be afforded a safe, supportive, and healthy space in which to work. This can lead to a significantly decreased quality of life, as communicators may feel undervalued often enough that it seeps into their personal life; affecting friendships, family, and other professional relationships. This devaluing of personal beliefs and worthiness can potentially lead to an increased risk to the public if communicators begin to have difficulty with work.

### **5.1.2 Organizational Affect.**

When asked about their organizational culture, communicators provided equally favourable perceptions (n=66) and negative descriptors in their responses (n=66). The former, which we refer to as positive responses, pointed to a supportive environment, thus a positive organizational culture. For instance, participants used words such as “accepting” (participant 12, a quality assurance official from a police, fire, and ambulance communications centre in Alberta), “relaxed” (participant 85, a dispatcher from a large urban police service in Ontario), and “calm” (participant 149, a call taker from an ambulance communications centre in Ontario). Others described the organizational culture as “kind” (participant 195, a dispatcher from a fire and ambulance communications centre in the Northwest Territories), “polite” (participant 90, a supervisor from a major metropolitan police communications centre in Ontario), “respectful” (participant 310, a dispatcher from a major metropolitan police service in Alberta), and “encouraging” (participant 193, a manager in a police, fire, and ambulance communications centre in Ontario). Beyond these favourable descriptors, three central sub-themes emerged from positive responses, the first pertained to ways forward (e.g., organizational direction), the second to supportive spaces, and third, a culture which aligned with the organization's espoused values.

### 5.1.2.1 Positive affect

Ways forward, or the organizational direction, refers to organizations that have deliberately made changes to promote the training and skills development of its members, and have allocated resources to realize the priorities outlined in strategic planning. While strategic priorities differ by group, successful organizations prioritize efforts to ensure their objectives, such as increased employee retention, are linked to their vision and mission statements. In this regard, participant 19, an employee of a police service in Alberta, wrote “In the last 6 or 7 years the culture has changed to focus on development, training, hiring practices for additional staff.” Participant 44, from a police and fire service communications centre in Ontario, wrote “Luckily we have a strong Manager who engages in forward-thinking, staff support, and transparency.” These organizations have taken measures to align their actions with their value statements, and have built trust by providing transparency to “the way we do things around here” (Schein, 2004, p.13). Furthermore, an analysis of the participants’ responses validates Schein’s contention that a cultural paradigm shift appears possible when organizations implement policies serving to develop the strengths (e.g., leadership skills) and proficiencies (e.g., enhance autonomy in problem solving) of its members. Here, adequate resources are made available, and managers are encouraged to be innovative and find novel approaches to customary practises. Unless communicators’ needs are considered in strategic planning, and adequate resources are made available to ameliorate their working environment, their productivity, commitment, and well-being will be put at risk (e.g., compromised possibly).

Regarding supportive spaces, identified as principles of organizations geared toward creating work conditions that promote positive relationships between its members, participants were keenly aware of the support they received from colleagues and management. Participant 36, from a metropolitan police service in Ontario, noted that their organization “values inclusivity and

supporting each-other.” Inclusivity and support are fundamental to ensure public safety communicators are able to navigate both responding to often times distressing calls, while administering self-care. Similarly, participant 88, from an ambulance dispatch centre in Ontario, stated, “Our communications centre is very team orientated and positive. Everyone is willing to help each other out - especially open to helping new hires like me feel comfortable and confident in my new role.” The magnitude of providing misinformation to callers can be dire. Thus, to develop their skills, new hires must be encouraged to ask questions and be granted the leeway to make mistakes. Furthermore, participant 113, from a police and fire service in Ontario, stated, “Our Communications Supervisor/Manager does a good job of telling us, every chance she gets, about how dedicated, valued, talented and ‘fabulous’ we are. She constantly reiterates how we are a team and must always try to work together.” Team cohesion is necessary to maintain stable daily operations in a fluid environment.

Respondents highlighted that knowing they can depend on their colleagues and leaders in challenging times strengthens team cohesion and boosts morale. A climate of commitment to an organization is created when employees feel valued and supported, and that their contributions are appreciated by their employer (MacQueen, 2020). As described by Schein (2004), commitment to an organization culminates in the adoption of espoused core values and beliefs, and the desire to help the organization succeed. Employees who feel supported also support others, creating safe environments in which to learn and make mistakes.

Lastly, organizations whose culture aligns with their espoused values put their objectives into action by supporting management practices and processes that reflect the principles commonly rooted in their corporate value statements. For instance, participant 324, from a large police service in Ontario, described their communications centre as “... one of teamwork and professionalism,

accountability”, and participant 36, from a metropolitan ambulance communications centre, said their “organization values inclusivity and supporting each other (servant leadership).” Research suggests that leaders who establish behaviour norms by aligning their management styles with the organization’s core beliefs and mission statements, result in their members adopting these norms and using them as benchmarks to guide their own behaviours (Schein, 2004). In the pursuit of common goals, employee productivity, commitment, and well-being are profoundly impacted (Schein, 2004).

### **5.1.2.2 Negative affect**

Respondents who characterized the culture in their workplaces as negative described what we consider unhealthy work environments (e.g., low morale, constant stressors, negativity, high turnover, bullying). Participant 260, a call taker from a police and fire communications centre in Saskatchewan, defined their communications centre as “chaotic and unorganized, especially during this pandemic.” Communications centres were similarly depicted as “hectic and loud” (participant 149, call taker for an ambulance service in southern Ontario), and “dysfunctional and ineffective” (participant 138, supervisor in a metropolitan ambulance service in Ontario). Participant 145, a supervisor for an ambulance service in northern Ontario, recalled feeling “belittled” by management, and participant 198, a call taker for a fire service in eastern Ontario, said their colleagues “are afraid to follow chain of command.” Fear-based work surroundings are not psychologically safe and can negatively impact communicator well-being by contributing to stress, burnout, and anxiety (Golding et al., 2017).

Communicators working in deleterious settings imparted they did not feel safe expressing their concerns or asking questions, thus felt unsupported and that their well-being was jeopardized. These less favourable work environments were described as offering “no support and quick to punish” (participant 214, a dispatcher in an ambulance communications centre in Ontario). Others explained that in their work place they were to “do as your [sic] told and do not ask questions, no voice”

(participant 172, a dispatcher for a metropolitan police service in Ontario. Others explained that, at their work, “people are treated more as means to an end, instead of considering [them as] individuals” (participant 254, a dispatcher for a police service in New Brunswick), and “unappreciated” (participant 234, a supervisor for an ambulance service in southern Ontario). Achieving a supportive culture is essential given that the impacts of working in negative environments can permeate throughout all areas of life and can impact a communicator well after the end of their workday (Golding et al., 2017). Working in an environment that feels toxic is impactful, affecting one’s social, physical, psychological health – they are without supports and feel minimized, unheard, and susceptible to harm. Toxicity in any workplace results in exclusiveness and feelings of isolation and alienation from both work and peers.

Though communicators are subjected to negative treatment from a variety of sources, such as the public, uniformed responders, and supervisors (Golding et al., 2017), newer employees described enduring more hardships in comparison to those with occupational tenure or who feel accepted within their workspace. Participant 266, a supervisor for an ambulance communications centre in central Ontario, remarked that the personnel in their centre are “bullies to younger staff.” “We eat our young and piss on our sick” (participant 255, a call taker for a large police service in Ontario). Along with Schein’s (2004) contention that formal training is necessary to achieve psychological safety when new knowledge and skills are being introduced, researchers have identified that receiving inadequate training increases anxiety and stress levels, culminating in feelings of insecurity (Bang et al., 2001; Coxon et al., 2016). The hierarchical nature of emergency services, when combined with an organization’s failure to understand the unique needs of communicators, converge and result in an absence of, or insufficient training (Adams et al., 2015). When newer members feel unsupported and are not afforded safe spaces to learn, the probabilities they will remain with the organization

diminish—indeed, why stay in a place that fails to value your contributions or respect your person?

Predictably, even seasoned communicators expressed finding it difficult to concentrate in damaging environments and felt their work performance was negatively impacted by increased stress levels. Communicators working in unfavourable conditions also expressed difficulty in even going to work at all, conceivably increasing their likelihood of calling in sick. The cyclical effect of a negative atmosphere is that it contributes to increased levels of stress, which may lead to burnout, resulting in an increased workload when employees are absent, thereby sustaining the harmful effects of a detrimental work environment. An organization's inability to maintain adequate staffing levels necessitates current employees absorb additional responsibilities, despite struggling to manage their own duties. When multiple communicators are absent, workloads become unmanageable, again increasing stress levels. Heightened degrees of stress contribute to burnout, resulting in missed steps and poor decisions, putting the health and safety of the public at risk (Lilly & Allen, 2015; Pierce & Lilly, 2012).

The central emergent theme across the 60 negative responses was that of a toxic work atmosphere. Respondents who reported working in toxic atmospheres (n=26) defined them as “backstabbing, poisonous, harsh” (participant 144, a supervisor for an ambulance service in Ontario), and “cliquey and juvenile” (participant 130, a dispatcher with an ambulance service in southern Ontario). A tacit culture is shaped by the behaviours of its leaders and is expressed in group norms, subsequently guiding the members behaviours (Schein, 2004). Thus, according to Schein (2004), behaviours exhibited in toxic centres are indicative of an implicit culture that is not aligned with the espoused beliefs and core values of an organization, but is part of its culture, nonetheless. Until leaders address “phenomena that are below the surface” (Schein, 2004, p.8), organizations will fail in creating safe spaces and sustaining healthy levels of support for its members. In consequence,

commitment and loyalty to an organization are less likely to develop because employees feel undervalued. In contrast, employees who feel respected and appreciated are more apt to do well and support others. Organizations are ethically bound to support employees and treat them fairly. To behave differently is counterproductive and irresponsible.

### **5.1.3 Morale and staffing.**

Communicators shared personal sentiments regarding morale and inadequate staffing resources in their centres. I identified five themes: favouritism; understaffing; increased levels of responsibilities; morale; and ways forward, the latter being the only positive theme. Favouritism, the most prevalent (n=21), identified three distinct beneficiaries of preferential treatment: uniformed responders; full time employees; and chosen communicators. As illustrated in the Management and Supervision section, organizations are commonly faulted for their myopic focus on uniformed responders, causing communicators to feel like they “play second fiddle” to responders (participant 177, a senior call taker with a fire service in eastern Ontario). Schein (2004) contends that command-and-control models of operation inherently divide subcultures, creating animosity and conflict between groups, particularly if one appears less supported or valued. Accordingly, communicators expressed resentment that their roles were minimized, and their contributions deemed too insignificant to warrant the same recognition and appreciation bestowed upon responders. Small, effective shifts in culture can rapidly be achieved when rewards, or in this case, recognition, and resources, are equitably distributed amongst subgroups (Schein, 2004). The structure of an organization’s rewards system reveals its underlying assumptions (Schein, 2004); therefore, principled organizations should regularly recognize the contributions of communicators, and strive to make substantive reforms, thus ensuring communicators remain engaged and motivated.

The second subtheme, favouritism related to employment status, was expressed by participant



106, a call taker with a metropolitan police service in Central Ontario, as “You're in or out. Being part time, you're out.” It would not be unexpected to see a decrease in motivation and performance from communicators coping with the stressors of precarious employment, while managing the possibility of termination. While only seven percent of respondents identified as part-time employees, fiscally constrained centres may be more apt to rely on their part-time cadre, to fill operational gaps. Furthermore, not all centres employ part-time members, reducing the ratio of organizations contributing to this inequality in tenure. Not surprisingly, as Schein’s theory suggests, respondents impacted by these circumstances, in addition to routine operational pressures, may be less engaged, and therefore less committed to the organization.

Preferential treatment from management arose as the third, and final, subtheme. Statements show that team cohesion eroded when communicators challenged the integrity of decisions or questioned purported equal access to opportunities. Tensions increased when communicators believed that rewards and promotions were based on favouritism, not performance. Participant 305, a police and fire dispatcher in Alberta, shared their impression of discrimination in the workplace, stating “nothing is fair because you are targeted based on how much you are liked.” Similarly, participant 145, a supervisor for an ambulance service in northern Ontario, expressed working in a “poisoned work environment brought on by management giving jobs to friends”, naturally “putting staff against each other.” The narratives conveyed by participants highlight impressions that an absence of procedural justice occurs when members are treated inequitably or disrespectfully, habitually contributing to conflicts and an erosion of trust (Cohen-Charash & Spector, 2001). Discord amongst colleagues disrupts the harmony needed for the coordination and management of resources, potentially affecting operations, and placing the health and safety of the responders, as well as the public, at risk.

In fact, in fast-paced work environments, constant communication, coordination, and re-evaluation are imperative because of the ever-evolving nature of emergency operations. Trust and teamwork contribute to the synchronicity needed to successfully execute plans. Creating a climate of trust requires organizations to be transparent in their practices (e.g., selection processes) and implement measures designed to ensure transparency (e.g., audits, information sharing). Schein (2004) contends that open lines of communication throughout all levels of an organization are necessary to achieve openness. Regrettably, such outcomes are improbable in organizations that tend to limit communications to the next level in the chain of command.

The second dominant theme identified was understaffing (n=16), or compelling communicators to function with fewer resources than required to do the job safely. Staffing issues were overwhelmingly characterized as chronic, with little confidence that satisfactory solutions will be realized. Communicators shared that habitually inadequate staffing levels directly impacted their stress levels and impeded their ability to decompress. They recounted routinely being unable to leave their stations, despite the incessant demands of a high-pressure environment and consistent exposure to PPTE. For instance, participant 273, an RCMP dispatcher in Nova Scotia, stated they were expected to “make up for staffing with less people despite a heavier workload with more expectations.” Participants were powerless to take measures, even nominal ones, to attend to their mental health, as they were regularly unable “to organize breaks and time to debrief after calls as almost always short-staffed” (participant 46, a fire and paramedic dispatcher in Manitoba). Unequal access to basic resources supports the perception that communicators are less important to the organization than uniformed responders, who are commonly offered mental health support. Communicators’ routine struggles to access mental health supports (Koopmans et al., 2017), may stem from an organization’s insufficient understanding of vicarious trauma and its correlation to

PTSD (Ramey et al., 2016; Smith et al., 2019).

Untenable expectations are placed on communicators who are obligated to take on additional tasks, often without the benefit of breaks, while struggling to manage the demands of high-pressure environments. Participant 349, a call taker with a metropolitan police service in central Ontario, writes that although their centre is “understaffed, everyone [is] expected to do extra to make it work anyway.” Though meaningful time away from work may well relieve stress and exhaustion, communicators were continually denied vacation requests due to downstaffing. Participant 13, a call taker with a major ambulance service in Ontario, summarized the culture in their centre as “no vacation, extreme short staffing.” Similarly, participant 273, a dispatcher with the RCMP in Atlantic Canada, described routinely working “short staffed, [with an] expectation to make up for staffing with less people.” Organizations that are reluctant, or unable, to maintain adequate staffing levels, and do not provide sufficient mental health supports, inevitably create circumstances which contribute to the burnout of their members. Even members who are loyal to the organization are incapable of sustaining the never-ending pressure, as described by participant 109, a supervisor with a metropolitan police service in Ontario, who asserts they are trying to “feel positive, but [it is] hard to when we are extremely short staffed and running consistently without lunches.”

Despite living with the detrimental effects of working with less-than-optimal staffing levels, communicators, or operators, as described by Schein (2004), continue to conduct the tasks and functions necessary to maintain operations. Their burdens are not always evident to administrators because, despite difficulties sustaining grueling conditions, they regularly come through in a crisis. Schein (2004) contends that differences in hierarchy creates subcultures, effectively isolating leaders from lower ranking members. Limited interactions between the two groups, as well as the functional differences in their responsibilities, can produce mistaken assumptions of communicators’

experiences and needs, frequently appearing as a lack of concern. However, functional differences do not appear to be an issue in supportive organizations that listen to communicators' concerns and take measures to address them. Unless supervisors convey the hardships experienced by communicators, it is doubtful that the leadership will adjust their management tactics. However, for supervisors to feel comfortable raising concerns about their staff, they must be given the opportunity to do so, and their comments must be validated with action.

An equally taxing issue, struggling with increasing responsibilities, also surfaced as a third dominant theme (n=14). Communicators relayed feeling overburdened by operational pressures and steadily increasing workloads. Two origins of stress emerged: "incompetent" or "lazy" staff creating additional work for colleagues; and management assigning too much work, at times without considering the impact on communicators' daily tasks. While communicators expressed exasperation with colleagues who appeared not to pull their weight, most relayed that they pulled together to get the job done when needed, however, inequitable distribution of work occurred when communicators routinely did "the bare minimum... leaving others to put in the 'extra' effort to make up for it" (participant 398, a call taker in an emergency service communications centre in Atlantic Canada). Any imbalance may be attributed to ineffective supervision, but as underscored earlier, favouritism may also play a role in tolerating substandard performance by some. Respondent narratives also expressed frustration that questionable managerial decisions directly impacted their abilities to perform their duties.

Considering how far-removed leaders are from the daily operations of communications centres, particularly in larger centres, their dearth of recognition concerning the impacts of their decisions can be understood, but the effects of their decisions cannot be dismissed. Frequent changes in operational practices might be unavoidable, but are frustrating, nonetheless. A supervisor in an

ambulance communications centre in eastern Ontario explains that: “There is an imbalance between what gets pushed downline, and what the downline can actually handle. It is death by 1000 cuts, and the cuts keep coming” (participant 78). Compounding the effects of endless volume of work unloaded on communicators are the constant revisions in rules. Participant 336, a supervisor with the RCMP in Alberta, expressed frustration about frequent changes in policies and procedures culminating in an “increase to the amount of work associated [with] creating a file for each incident.” Although not always feasible, it is conceivable that fewer changes could be required if front-line personnel were consulted, as they are uniquely positioned to recommend efficient solutions. Organizations with rigid structures and inflexible leaders usurp efforts by members to enact change, inevitably perpetuating the implicit and destructive idiom that this is “the way we do things around here” (Schein, 2004, p.13).

In addition to impeding healthy organizational growth, ineffective leaders also have a negative impact on employee morale, either directly (e.g., by implementing unnecessary changes), or indirectly (e.g., devaluing the input from direct supervisors). For reasons elucidated thus far, survey respondents who referenced morale (n=16) largely expressed struggling with low morale, with only two expressing positive feelings. Members shared feeling dread about going to work, and cynical that resolutions to key issues will be found. They expressed disappointment at feeling unheard, impacting their perception of, and commitment to, their organization. Unrelenting stress levels contributed to a proliferation of consequences, including low morale and mental health struggles. A scarcity of recognition and appreciation has impacted their relationships with co-workers as well as with management. Respondent organizations that outwardly did not place significance on the psychological health of communicators, also appeared not to allocate resources intended to support mental health initiatives. Everyday pressures and routine exposure to trauma cannot be avoided

(Adams et al., 2015), but can be mitigated by implementing measures designed to reduce the impacts of potentially psychologically traumatic events.

Similar to the preceding themes, respondents shared predominantly negative sentiments regarding morale in their respective centres. There were, however, a couple of positive statements (n=2) that indicate positive ways forward. Participant 310, a dispatcher with a police service in Alberta, characterized the morale in their centre as “decent”, suggesting a balance between the negative elements of the job, and the beneficial support provided by colleagues or the organization, or both. With respect to support, the salience of efforts taken to eliminate the stigma or mark of sick leave cannot be understated (see section 5.1.2 for a discussion of stigma). Limited research has revealed that Canadian PSP have higher rates of self-reported mental disorders than the general population (Carleton et al., 2018), and communicators often have higher rates of PTSD than some other PSP, however, both groups resist disclosing mental health struggles for fear it may provoke reprisals or negative consequences from superiors and colleagues alike, thus choosing to struggle in secrecy (Oliphant, 2016). Therefore, it is imperative for organizations to create cultures that are “psychologically safe and stigma free” (Oliphant, 2016, p.11) by consciously and strategically shifting away from a maladaptive belief that ignoring operational stress injuries is the most effective way to manage them. A notable example of positive ways forward came from a participant whose organization forbids “discussing someone’s [sic] mental health or off duty sick time while in the workplace”, accordingly, they have not “heard anyone speak badly about another co-worker in a long time” (participant 272, a dispatcher for the RCMP in British Columbia). Meaningful cultural shifts happen in organizations which understand that stigma has been identified as a key barrier to seeking help (Oliphant, 2016), and are taking measurable steps to ensure their members feel safe disclosing their mental health struggles.

In sum, communicators have a stressful job, complicated by ever-evolving demands and a lack of meaningful down-time. Yet despite regular exposure to secondary trauma, and insufficient mental health supports, they consistently succeed in managing crises. Their daily operational struggles, when compounded with the cumulative effects of favouritism, down-staffing, increased workloads, and poor morale, have deleterious impacts on their well-being. Moreover, detrimental working conditions are unsustainable, inevitably leading to exhaustion, burnout, and sickness. As illustrated by participants who shared characteristics of positive cultures, strategies to achieve objectives should be aligned with the organization's mission and vision statements. A compelling argument can be made that moving forward, organizations should take a conscious approach to identify the needs of communicators and set goals to rectify gaps between what is and what ought to be.

#### **5.1.4 Division and Exclusion.**

Physical division (n=14) and perceptions of exclusion (n=21) are inextricably linked and equally impact communicators' impressions about the value of their role in their organizations. Though customary for communications centres to be physically separated from the administration, uniformed responders, and other organizational branches, even when in the same building, the impacts of isolation cannot be dismissed. Geographic separation of subcultures commonly produces communication issues, contributing to often-incorrect assumptions about other groups (Schein, 2004). Over time, organizational subunits develop occupational identities, complicating inter-group relations when opposing identities clash, further fracturing tenuous relationships. Participant 25, a quality assurance official in Manitoba, exemplifies the impact of opposing identities, sharing that "general patrol members and communication centre staff are separated and often resent each other and blame the other for service wide issues." In command-and-control organizations, where vertical

communication is expected, lateral communication is limited. Though subunits may be interdependent, as illustrated by participant 25, they may be unfamiliar with each other's policies, practices, and tasks. To repair dissension between conflicting subcultures, it is incumbent upon leaders to bring units together at regular intervals to become familiar with each other, thus minimizing assumptions while increasing cohesion (Schein, 2004). Put differently, effective leaders recognize that the success of their organization and smooth delivery of their products hinges on unfettered communication between its units. Therefore, by promoting constant exchange of information and ideas between subgroups, they establish a framework for how things are done in their organization.

Proximity to subunits facilitates interactions, but for security and operational reasons, communications centres are typically isolated and inaccessible. Their remoteness breeds unfamiliarity, as expressed by participant 147, a (director/chief) with the RCMP service in western Canada, who says "the greater organization doesn't really understand what impacts occur to the staff, let alone what they really do." Other business units within their organizations might be unfamiliar with them. Participant 356, a dispatcher with a metropolitan police service in central Ontario, indicated that "outside our building people tend to forget we exist." To reiterate a core concept of culture, when employees feel valued, their productivity and well-being are positively impacted, and their commitment to their organization is strengthened (Schein, 2004). While the physical isolation of communications centres cannot be changed, deliberate measures can be taken to demonstrate the importance of communicators' roles, and to include them in organization-wide programs and events.

Physical isolation was not the sole factor contributing to perceptions of exclusion. Feelings of exclusion were also linked to policy and procedural decisions made by management, directly impacting communicators' routine tasks, time on tasks, and workload. Specific to policy and programming, participant 318, a senior dispatcher from an urban ambulance communications centre



in Ontario, maintains that no one from their unit is represented in planning discussions, therefore, “communications is not considered at all in any program or policy planning, but always gets stuck with all the administrative burden and responsibility.” Respondents affirmed that senior officials in their centres, typically uniformed members, likewise make decisions without the input, or presence of communications leadership. Consequently, communications supervisors are routinely not offered rationale regarding new policies or procedures and feel frustrated that they are not granted an opportunity to participate in impactful decisions. Participant 218, a supervisor from a police, fire, and ambulance communications centre in Manitoba, who similarly expressed dissatisfaction with the lack of inclusion and communication, states “We are given policy changes or direction without being asked for our input or at least being given the reason behind the change so that we can better explain it to the members on our shift.”

As explained by Schein (2004), an element of functional differentiation arises when one unit makes decisions for another unit based on their own education, functions, and responsibilities. Consequently, decisions are often based on assumptions about the impacted unit, without fully understanding the implications of such decisions. Time and again, decisions made by leaders regularly culminate in increased workloads for communicators, as explained by participant 257, a dispatcher at an urban ambulance communications centre in Ontario, “every time a Commander, Deputy Chief or Chief wants to make their job or the paramedics job easier, they pass along more responsibilities to the dispatchers. Dispatchers are already over worked and must complete an ever growing list of tasks in order to make things easier for paramedics, QA/QI, commanders and statistics gathering groups.”

Recognizing workload can have an emotional impact, communicators cannot be expected to sustain fast-paced performance levels and remain committed to their organization if they feel

unappreciated, overlooked, or forgotten. “It feel[s] like we are an after thought[t]” (participant 390, a call taker for a police service in Atlantic Canada). Similarly, despite feeling devalued by their organization, participant 66, a dispatcher with a police service in Manitoba, imparted feelings of optimism regarding pending changes in their centre; unfortunately, their organization failed in “following through with [their] promises.” Overwhelmingly, communicators revealed feeling repeatedly let down by their leadership, despite explicitly expressing the need for meaningful changes aimed at creating supportive and inclusive cultures. Participant 66, a dispatcher with a police service in Manitoba, summarized it succinctly, stating “they forget what it's like to feel what we feel, resulting in tension.” Demonstrably, an organization’s culture “is shaped by the behaviours of its leaders” (Schein, 2004, p.1). Managers who are inaccessible, be it physically or communicatively, risk straining relationships with their subordinates by implementing changes which significantly impact communicators’ workload. Their deficient communication patterns, coupled with their disinclination to promote inter-group connections inherently contribute to conflicts between subgroups. Moreover, their lack of inclusive approaches suggests a poverty of insight concerning the nature of organizational commitment and its impact on retention.

### **5.1.5 Colleagues.**

Participant accounts of relationships with colleagues support the conclusions of Golding et al. (2017) that interactions with peers have a direct influence on communicators’ psychological well-being. As such, relationships with colleagues (n=34) emerged as a prevailing theme, portraying colleagues as either positive (n=9) or negative (n=25). Additionally, three sub-groupings were identified; (a) a supportive communicator subculture within a supportive organization, (b) a supportive communicator subculture within an unsupportive organization, and (c) an unsupportive communicator subculture within an unsupportive organization. Notwithstanding the sub-group, when

confronted with poor treatment from external or internal players, or both, communicators could consistently rely on each other to get the job done. Schein (2004) refers to this group as operators, crediting their capacity for success to their knowledge, skills, and commitment, even when significantly downstaffed.

To reiterate, supportive cultures thrive in organizations whose implicit behaviours closely align with their espoused values, where member interactions are courteous, and differences are valued (Schein, 2004). Leaders in sub-group (a) foster productive interactions and positively impact morale by creating team cohesion, required for the continued successful execution of operational plans (Schein, 2004). Participant 124, a call taker in an ambulance and fire communications centre in northern Ontario, wrote, “we all get along, [we] get together outside of work.” Similarly, participant 24, a trainer in an RCMP centre in metropolitan Vancouver, indicated they work with “tons of supportive folks who became fast friends outside of work.” References to implicit, familial feelings reveals that cohesion regularly appears to emerge naturally from the bonds created between colleagues.

Communicators in sub-group (b), a supportive communicator subculture within an unsupportive organization, also have supportive leaders, but they exist primarily at the micro, subcultural level rather than the organizational level. Narratives from this group highlight that team cohesion is achievable despite sub-optimal organizational conditions. The “pressure to perform” appeared to be blunted by “help from colleagues” (participant 35, a trainer with a paramedic service in eastern Ontario), suggesting that strong bonds of mutual support create a climate where support is offered to those within their subculture, ensuring continuity of operations. Similarly, participant 386, a dispatcher with a metropolitan police service in Ontario, recalls receiving “lots of support from my coworkers but nothing real from supervisors up.” Although this group is not devoid of interpersonal

conflict, as relayed by participant 135, a call taker with a large urban police service in central Ontario, who states, “we're constantly short staffed and there are some people who have negative attitudes, however we all can come together...”, their teamwork creates conditions favourable to ensuring continuity of operations. Thus, teamwork is a central value, and commitment to the group and its objectives facilitates collaborative efforts.

While group stability and harmony appeared to be maintained for communicators in categories (a) and (b), communicators working in sub-group (c) an unsupportive communicator subculture within an unsupportive organization, shared experiences of being overlooked, undervalued, disrespected, overworked, and belittled in their workplaces. Operational pressures, commonly experienced by emergency services personnel, appeared to routinely add strain to already tenuous relationships, resulting in the mistreatment of subordinates and colleagues alike. Thus, as revealed in the extant literature, participants in this study also depicted their workplaces as toxic, and rife with bullying, harassment, and conflict between colleagues (Adams et al., 2015; Baseman et al., 2018; Ramey et al., 2017; Smith et al., 2019). Schein’s depiction of division by hierarchy exists not only at the macro level but also within the communicator subculture, creating in/out groups based on seniority or age. Several participants shared sentiments of inferiority; “more senior people get away with breaking rules, unfairly getting their way, telling people what to do” (participant 380, a call taker for a police service in Saskatchewan), or “the people with more seniority tend to be more "dominant" and voice their opinions causing tension with both supervisors and other shift members” (participant 143, a dispatcher with a police service in Manitoba), and notably, participant 383, a police communicator in northern Alberta, described the culture in their communications centre as “nasty - they eat their young. You are not qualified until you've been there for a couple years and proven yourself to the older staff.” Conversely, participant 408, an emergency call taker in Nova Scotia,

related struggling to work alongside younger staff, implying that “many of them are younger, lack life experience and have an invincible attitude. It is very difficult to work alongside them as I don't have the same attitude.” Conceivably, junior members’ perception that the more tenured members dislike them, could simply be because senior communicators struggle to find common ground with them. Likewise, participant 318, a senior dispatcher for an urban ambulance communications centre in Ontario, stated that “young adults [are] more interested in socializing loudly than doing their jobs”, demonstrating that some members with tenure feel the younger staff are not taking on their share of duties. To sum, communicators not only grapple with relationships and communications amongst other subunits, but they commonly have divisive inter-team relationships, providing no respite from tension and leaving them at greater risk for operational stress injuries.

As summarized in the Management and Supervision section, communicators commonly struggle with increasing responsibilities, and point to poor management practices for not managing equal distributions of work. Participant 198, a call taker for a fire service in eastern Ontario, said “there are many people who don't or will not ‘step up to the plate’ when we get busy. Always issues with the same people”, suggesting a lack of accountability is a major vexation. When communicators work with “cancerous employees that create more problems than they are worth” (participant 9, a manager with the RCMP in Alberta), morale is negatively impacted. Poor morale can spawn apathy, making it challenging for members to move forward positively, lowering retention (Schein, 2004).

Damaged relationships with team members in part contribute to hostile environments, by “allowing toxic people to drag down a team” (participant 197, a trainer with the RCMP in Manitoba). An unhealthy workplace subculture would be unable to thrive in a supportive organization, as the implicit culture expressed through toxic group norms would have been corrected and redirected to align with the espoused values (Schein, 2004). Again, when unchecked, practices and narratives are

passed along to new employees, and in this instance, creating what participant 165, a trainer with a police service in Alberta, calls a “supportive pool of sharks.” Schein (2004) suggests that disciplining aggressive behaviour can be a step towards the positive evolution of a group, but change can only occur if the dominant group is willing to change and if the organizational structure makes it possible to work as a team. Within this context, the dominant group - management – appears resistant to accepting cultural diversity, holding communicators at arm’s length, and hindering their prosperity by preserving the current culture.

#### **5.1.6 Gender.**

Despite women’s advances in the workplace, antiquated ideologies and perceptions of their ability to lead persist, particularly in patriarchal institutions. Understandably, gender was not a major theme (n=7), as the question posed pertained to organizational culture, not diversity. While most references were negative, one respondent believed the mix of genders offered a broader perspective, contributing positively to the dynamics of the workplace. Yet, participant 157, a call taker with the RCMP in southern Alberta, affirms that although gender issues are abating, biases still exist as “many women are mistaken on the phone as 'just secretaries' and the men who answer those same phones are thought to be 'well trained policemen.” Communicators characterized their organizations as “male dominated” (participant 412, a dispatcher for a metropolitan ambulance service in central Ontario), and participant 161, a call taker for a police service in southern Alberta, describes it as “sexist”, contending that there is “far more career growth for male employees.”

Participants emphasized there are more men in upper management positions despite employing more women, suggesting that paternalistic hierarchies remain beneficial for men. Schein (2004) maintains that dominant members will seek to preserve, or even enhance, the prevailing culture as it benefits them. As outlined in the Management and Supervision section, such leaders are

ineffective as they are either incapable, or unwilling, to recognize that the current framework is damaging not only to its members but also to the overall health of the organization. Furthermore, substandard leaders poison a potentially healthy workplace by eroding trust, negatively impacting employee satisfaction and engagement, and rendering organizations vulnerable to failures due to decreased productivity, diminished commitment to an organization, and high turnover (Schein, 2004).

When leaders are allowed to maintain their harmful patterns of behaviour, and are supported by those with shared assumptions, those who are not in favour with these behaviours or in agreement with the ideology suffer the consequences (Schein, 2004). As cultures evolve incrementally, leaders incorporate historically beneficial practices into their current practices, even if the rewards only benefited their own subgroup, at the cost of increased animus with other divisions (Schein, 2004). Given that culture is shaped by the behaviours of its leaders, which in this context is male dominated, shared perceptions and assumptions of the dominant group cannot be changed unless the composition of the group is changed (Schein, 2004). One could extrapolate and further hypothesize that the impacts of hegemonic masculinity on decision making compromises the ability to create equitable and safe working environments for women, racialized people, and LGBTQ, by excluding them from decision-making roles. Androcentric ideologies, which contribute to gender inequality, also influence the health and safety of its members, and within this context, their mental health. “These are all men who have their own complex histories and are often "old school" and jaded and tend to be more of a "brush it off" type than a supportive type of manager. It means that many people have to fight to have their workplace mental injuries after traumatic events treated appropriately” (participant 72, a dispatcher with a police service in Manitoba). Thus, leaders who rely on outdated mental health belief patterns undermine the health and safety of the organization and contribute to toxic workplaces, corroborating Oliphant’s (2016) findings that emergency services remain rife with a suck-it-up

culture.

Without increased personal accountability of leaders and transparency in selection processes, organizations may struggle, and likely fail, to achieve cultural diversity. Ideally, leadership teams should reflect the demographics of the membership and should be occupied by people with varied life experiences. Unbalanced gendered representation in leadership positions produces culture conflicts with subgroups and creates de facto barriers, as explained by participant 141, a call taker with a metropolitan police service in Ontario, “there is a "Boys Group" that has recently developed and the females (70% of staff are female) don't have a means to be heard anymore.” Tacit norms and accepted patterns of behaviour influence culture and reflect deeper assumptions and values of the organization, often preventing members of subgroups from speaking up. Why would members of subgroups trust their organization when there appears to be no consequences for leaders’ implicit, or explicit, discriminatory actions or behaviours? Thus, confidence in an organization is further undermined, and relationships with leaders remains problematic when inadequate attention is paid to gender issues.

## **6 Discussion**

The current study results build on the existing evidence of the Carleton et al. (2018) study. The research offers a clearer understanding of the experiences of communicators and provides new insight into the relationship between organizational culture and communicator well-being. Routine exposure to potentially psychologically traumatic events, in addition to the pressures of performing in high stress situations, can compromise a communicator’s capacity to make rapid decisions and function at the high pace required in chronically understaffed centres. Still, participants report that although organizations formally endorse mental health initiatives, supports are commonly absent. Similarly, respondents maintain that stigma surrounding disclosing mental health struggles prevails,



shaping cultures that limit and exclude rather than encourage and include. These conclusions reinforce Schein's position that when the espoused beliefs and values of an organization conflict with the basic underlying assumptions of its members, tacit group norms guide behaviour. Schein further contends that the implicit understanding of "the way we do things around here" is more impactful to its members than the organization's publicly endorsed value statements (Schein, 2004, p. 13). Thus, stigma surrounding the disclosure of mental health struggles prevails in part because negative discourse remains rooted in the tacit culture, most notably in unsupportive organizations.

Six predominant themes delineated domains which positively or negatively impacted communicators' well-being. To reiterate, Schein (2004) contends that retention issues develop when employees struggle to remain engaged and loyal to an organization where they do not feel respected or appreciated. In each theme presented, the difficulties experienced by communicators in centres across Canada were identified and recounted by them. Communicators conveyed feeling devalued when hardships remained unaddressed, potentially impacting their commitment to the organization. The data revealed that retention issues are widespread across all services, adding pressure and taxing the coping skills of communicators remaining in the role. Notably, participants conveyed sentiments of hopelessness that conditions will improve in their workplaces, even within supportive organizations. They impart strong desires to be recognized as valued members of their organizations, to be included in mental health solutions, to be provided sufficient human resources to adequately perform tasks, to be granted meaningful time away from task while on shift, to be treated with dignity and respect, to have their stress and trauma validated, and to access career opportunities based on skill and not gender. Unfortunately, despite proclamations to address long-standing issues, organizations regularly fall short of gaining traction as they commonly fail to allocate sufficient resources, or are unfamiliar with the unique needs of communicators, or both. These findings

corroborate the contentions of Carleton et al. (2018) who assert that the needs of each PSP group should be identified, and that evidence-based treatment options should be developed to support occupation specific needs.

## **6.1 Limitations**

Our reliance on respondents to provide us with contact information for partnering PSAPs was only moderately helpful, therefore contacting communicators nationwide proved challenging. Given that the public cannot access the national PSAP directory, a substantial amount of time was dedicated identifying PSAPs across Canada and attempting to obtain contact information for each. Efforts were made to reach communications chiefs, managers, and supervisors by phone and email, with limited success. In a bid to solicit voluntary participation, I began sending emails from a newly created APCO research email address, rather than my Memorial University email. Unfortunately, this tactic was largely unsuccessful, as it only attracted a handful of participants. Most advised they were not in a position of authority to approve the dissemination of the survey, stating they required approval from the “chain of command” prior to dissemination. When I succeeded in reaching people in positions of authority, the uptick from their services was not typically fruitful. Notably, I found it challenging to reach people at any level of the chain of command within fire services nationally. When I was successful, I was met with similar messaging: that they would need to have it approved by someone higher up in the chain of command – often the chief. Overall, attempts were made to reach fire services via phone and emails to communicators, communications managers and chiefs, service chiefs, provincial fire marshals, fire service unions, fire service women’s social media groups, and by individual Facebook, Instagram, and Twitter accounts, all with limited success.

The reliability of these data may be impacted by the positioning of the organizational culture questions near the end of the survey, between 165-168 of 179. One could expect completion rates to

diminish in lengthy surveys, particularly with open ended questions. A further limitation remains that the data was a result of responses to open-ended survey items, not interviews, therefore, I lacked the opportunity to ask follow up questions or probe for additional information.

## **6.2 Recommendations**

Future research should investigate barriers to accessing communicators and identify measures to facilitate access, markedly within fire services. Emergency services, principally fire services, should be encouraged to share mental health research opportunities with their members, permitting the members to determine if they want to participate. Organizations should (a) offer training for management, including leadership, equality and diversity, and mental health training, (b) conduct regular screening for mental health needs, like annual evidence-based psychological assessments, (c) offer interpersonal relationship training to assist with collegiality and professionalism in interactions. Implementing measures designed to improve working conditions of communicators can produce incremental changes, potentially manifesting in substantial cultural shifts.

## **7 Conclusion**

My research aimed to examine the impacts of organizational culture on the well-being of communicators. Though stress, exposure to potentially psychological trauma, and high-pressure decision-making are concomitants of the occupation, supportive cultures can mitigate the proliferation of impacts. Based on the qualitative analysis of the survey questions, it can be determined that a dearth of debriefs after stressful or traumatic calls, an inability to take breaks or have meaningful time away from the centre, in addition to insufficient mental health supports can exacerbate negative sentiments towards one's organization and add to existing mental health struggles. Furthermore, the stigma associated with disclosing mental health challenges remains

entrenched within emergency services, contributing to behaviour norms which create barriers to care seeking.

The data clearly illustrate that when organizational behaviours are aligned with their value statements, supportive and inclusive cultures are created. Conversely, organizations that operate with the knowledge and acceptance that members' tacit behaviours differ from their implicit values, create unhealthy work environments, to the detriment of communicator morale. Thus, to contribute positively to the well-being of its members, organizations should foster strong networks of trust between subunits to create collaborative and supportive cultures in which everyone feels valued. Empathetic and effective leaders, strong mental health supports, and adequate resourcing are crucial elements to establishing a supportive culture. Employees who are treated with dignity and are appreciated by their organization are engaged and motivated to succeed.

The nexus between supportive cultures and communicator wellbeing cannot be overstated. While cultural changes are attainable, they cannot occur within a short temporal horizon. Culture is a complex, multidimensional phenomenon and cannot easily be reduced to simple components. As such, transforming deeply embedded assumptions requires insight, open communication, transparency, prioritization, and commitment. Only then can an organization's explicit and implicit assumptions align to create positive cultures.

## 8 References

- Adams, K., Shakespeare-Finch, J., & Armstrong, D. (2015). An Interpretative Phenomenological Analysis of Stress and Well-Being in Emergency Medical Dispatchers. *Journal of Loss and Trauma*, 20(5), 430–448. <https://doi.org/10.1080/15325024.2014.949141>
- American Psychiatric Association (APA) (2000). Diagnostic and Statistical Manual of Mental Disorders (4th ed., text rev.). Washington, DC: American Psychiatric Pub.
- American Psychiatric Association (APA). (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: American Psychiatric Pub.
- Ashbaugh AR, Herbert CF, Butler LD, et al. (2010). A new frontier: trauma research on the internet. In: Brunet, Ashbaugh, A. R., & Herbert, C. F. (2010). *Internet use in the aftermath of trauma*. IOS Press. Amsterdam (the Netherlands). p 324
- Bång, Ortgren, P.-O., Herlitz, J., & Währborg, P. (2002). Dispatcher-assisted telephone CPR: a qualitative study exploring how dispatchers perceive their experiences. *Resuscitation*, 53(2), 135–151. [https://doi.org/10.1016/S0300-9572\(01\)00508-1](https://doi.org/10.1016/S0300-9572(01)00508-1)
- Baseman, J., Revere, D., Painter, I., Stangenes, S., Lilly, M., Beaton, R., Calhoun, R., & Meischke, H. (2018). Impact of new technologies on stress, attrition and well-being in emergency call centers: The NextGeneration 9–1-1 study protocol. *BMC Public Health*, 18(1), 597. <https://doi.org/10.1186/s12889-018-5510-x>
- Beard, & Björgvinsson, T. (2014). Beyond generalized anxiety disorder: Psychometric properties of the GAD-7 in a heterogeneous psychiatric sample. *Journal of Anxiety Disorders*, 28(6), 547–552. <https://doi.org/10.1016/j.janxdis.2014.06.002>

- Beard, Hsu, K. ., Rifkin, L. ., Busch, A. ., & Björgvinsson, T. (2015). Validation of the PHQ-9 in a psychiatric sample. *Journal of Affective Disorders*, *193*, 267–273. <https://doi.org/10.1016/j.jad.2015.12.075>
- Blevins, Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5): Development and Initial Psychometric Evaluation. *Journal of Traumatic Stress*, *28*(6), 489–498. <https://doi.org/10.1002/jts.22059>
- Bovin, Marx, B. P., Weathers, F. W., Gallagher, M. W., Rodriguez, P., Schnurr, P. P., & Keane, T. M. (2016). Psychometric Properties of the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (PCL-5) in Veterans. *Psychological Assessment*, *28*(11), 1379–1391. <https://doi.org/10.1037/pas0000254>
- Canadian Radio-television and Telecommunications Commission. (C. R. T. C.). (2022). *Canadian Radio-television and Telecommunications Commission*. Retrieved from <https://crtc.gc.ca/eng/home-accueil.htm>
- Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., Duranceau, S., LeBouthillier, D. M., Sareen, J., Ricciardelli, R., MacPhee, R. S., Groll, D., Hozempa, K., Brunet, A., Weekes, J. R., Griffiths, C. T., Abrams, K. J., Jones, N. A., Beshai, S., Cramm, H. A., Dobson, K. S., ... Asmundson, G. J. G. (2018). Mental Disorder Symptoms among Public Safety Personnel in Canada. *Canadian Journal of Psychiatry*, *63*(1), 54–64. <https://doi.org/10.1177/0706743717723825>
- Carleton, R. N., Afifi, T. O., Taillieu, T., Turner, S., Krakauer, R., Anderson, G. S., MacPhee, R. S., Ricciardelli, R., Cramm, H. A., Groll, D., & McCreary, D. R. (2019). Exposures to Potentially Traumatic Events Among Public Safety Personnel in Canada. *Canadian Journal of Behavioural Science*, *51*(1), 37–52. <https://doi.org/10.1037/cbs0000115>

- CASP. (2018). CASP-Critical Appraisal Skills Programme. CASP-Critical Appraisal Skills Programme website. Retrieved from <https://casp-uk.net/>
- Centre for Addiction and Mental Health. (2022). *Mental health, stigma and the Workplace*. Retrieved from <https://www.camh.ca/en/camh-news-and-stories/mental-health-stigma-and-the-workplace>
- Charmaz. (2014). *Constructing grounded theory* (Second edition.). Sage.
- CIPSRT (2020). Cipsrt-Icrtsp.Ca/. <https://www.cipsrt-icrtsp.ca/>
- Cohen-Charash, & Spector, P. E. (2001). The Role of Justice in Organizations: A Meta-Analysis. *Organizational Behavior and Human Decision Processes*, 86(2), 278–321. <https://doi.org/10.1006/obhd.2001.2958>
- Coxon, Cropley, M., Schofield, P., Start, K., Horsfield, C., & Quinn, T. (2016). “You’re never making just one decision’: exploring the lived experiences of ambulance Emergency Operations Centre personnel. *Emergency Medicine Journal : EMJ*, 33(9), 645–651. <https://doi.org/10.1136/emermed-2015-204841>
- CSA Group. (2021, April). *CSA standards -- standards development*. Retrieved from <https://www.csagroup.org/standards/>
- CSA Group/BNQ (2013) *Psychological Health and Safety in the Workplace - Prevention, Promotion, and Guidance to Staged Implementation*. CAN/CSA-Z1003-13/BNQ 9700-803/2013. CSA Group. Toronto.
- Deselms. (2016). *911, What’s My Emergency? Emotional Labor, Work-Related Rumination, and Strain Outcomes in Emergency Medical Dispatchers*. ProQuest Dissertations Publishing.

- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500–507. <https://doi.org/10.1037/0021-9010.71.3.500>
- Furukawa, Katherine Shear, M., Barlow, D. H., Gorman, J. M., Woods, S. W., Money, R., Etschel, E., Engel, R. R., & Leucht, S. (2009). Evidence-based guidelines for interpretation of the Panic Disorder Severity Scale. *Depression and Anxiety*, 26(2), 922–929. <https://doi.org/10.1002/da.20532>
- Gache, Michaud, P., Landry, U., Accietto, C., Arfaoui, S., Wenger, O., & Daeppen, J.-B. (2005). The Alcohol Use Disorders Identification Test (AUDIT) as a Screening Tool for Excessive Drinking in Primary Care: Reliability and Validity of a French Version. *Alcoholism, Clinical and Experimental Research*, 29(11), 2001–2007. <https://doi.org/10.1097/01.alc.0000187034.58955.64>
- Giddens, Anthony. (1993). *New Rules of Sociological Method. A Positive Critique of Interpretative Sociologies*. 2nd ed. Cambridge and Malden: Polity Press.
- Golding, Horsfield, C., Davies, A., Egan, B., Jones, M., Raleigh, M., Schofield, P., Squires, A., Start, K., Quinn, T., & Cropley, M. (2017). Exploring the psychological health of emergency dispatch centre operatives: a systematic review and narrative synthesis. *PeerJ* (San Francisco, CA), 5, e3735–e3735. <https://doi.org/10.7717/peerj.3735>
- Government of Alberta. (2021). *Alberta 911 Program*. Alberta.ca. Retrieved from <https://www.alberta.ca/alberta-911-program.aspx>.
- Halpern, J., Gurevich, M., Schwartz, B., & Brazeau, P. (2009). What makes an incident critical for ambulance workers? Emotional outcomes and implications for intervention. *Work and Stress*, 23(2), 173–189. <https://doi.org/10.1080/02678370903057317>



- Henderson, S. N., Van Hasselt, V. B., LeDuc, T. J., & Couwels, J. (2016). Firefighter Suicide: Understanding Cultural Challenges for Mental Health Professionals. *Professional Psychology, Research and Practice*, 47(3), 224–230. <https://doi.org/10.1037/pro0000072>
- Johnson, A. (2019). Police Subcultural Traits and Police Organizational Failure. *International Journal of Criminal Justice Sciences*, 14(2), 120–131. <https://doi.org/10.5281/zenodo.3712069>
- Karaffa, K. M., & Koch, J. M. (2016). Stigma, Pluralistic Ignorance, and Attitudes Toward Seeking Mental Health Services Among Police Officers. *Criminal Justice and Behavior*, 43(6), 759–777. <https://doi.org/10.1177/0093854815613103>
- Kiedrowski, Ruddell, R., & Petrunik, M. (2019). Police civilianisation in Canada: a mixed methods investigation. *Policing & Society*, 29(2), 204–222. <https://doi.org/10.1080/10439463.2017.1281925>
- Knaak, Luong, D., McLean, R., Szeto, A., & Dobson, K. S. (2019). Implementation, Uptake, and Culture Change: Results of a Key Informant Study of a Workplace Mental Health Training Program in Police Organizations in Canada. *Canadian Journal of Psychiatry*, 64(1\_suppl), 30S–38S. <https://doi.org/10.1177/070674371984256>
- Koopmans, E., Wagner, S. L., Schmidt, G., & Harder, H. (2017). Emergency Response Services Suicide: A Crisis in Canada? *Journal of Loss and Trauma*, 22(7), 527–539. <https://doi.org/10.1080/15325024.2017.1360589>
- Kroenke, Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine: JGIM*, 16(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Lilly, M. M., Allen, C. E. (2015). Psychological Inflexibility and Psychopathology in 9-1-1

- Telecommunicators: Psychopathology in Telecommunicators. *Journal of Traumatic Stress*, 28(3), 262–266. <https://doi.org/10.1002/jts.22004>
- Löwe, Gräfe, K., Zipfel, S., Witte, S., Loecherer, B., & Herzog, W. (2004). Diagnosing ICD-10 Depressive Episodes: Superior Criterion Validity of the Patient Health Questionnaire. *Psychotherapy and Psychosomatics*, 73(6), 386–390. <https://doi.org/10.1159/000080393>
- MacIntosh HB, Séguin G, Abdul-Ramen I, et al. (2015). Première traduction française PCL-5-LEC, civilian checklist for PTSD, DSM5. Montreal (Canada): McGill.
- MacQueen, J. (2020). *The Flow of Organizational Culture: New Thinking and Theory for Better Understanding and Process*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-25685-2>
- McCarty, & Skogan, W. G. (2013). Job-Related Burnout Among Civilian and Sworn Police Personnel. *Police Quarterly*, 16(1), 66–84. <https://doi.org/10.1177/1098611112457357>.
- Mental Health Commission of Canada (2013). *Making the case for investing in mental health in Canada*. Ottawa, ON.
- Mental Health Commission of Canada. (2013, November). Opening Minds – Interim Report. Retrieved from <https://mentalhealthcommission.ca/resource/opening-minds-interim-report/>
- Mental Health Commission of Canada (2022, March). *Workplace Mental Health*. Retrieved from <https://mentalhealthcommission.ca/what-we-do/workplace/>
- Montano, Reeske, A., Franke, F., & Hüffmeier, J. (2017). Leadership, followers' mental health and job performance in organizations: A comprehensive meta-analysis from an occupational health perspective. *Journal of Organizational Behavior*, 38(3), 327–350. <https://doi.org/10.1002/job.2124>

- Oliphant, R. (Chair. (2016). *Healthy Minds, Safe Communities: Supporting Our Public Safety Officers Through a National Strategy for Operational Stress Injuries*. Parliament of Canada. Standing Committee on Public Safety and National Security. Retrieved from [http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId\\_8457704&Language\\_E](http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId_8457704&Language_E)
- Patel, Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., Chisholm, D., Collins, P. Y., Cooper, J. L., Eaton, J., Herrman, H., Herzallah, M. M., Huang, Y., Jordans, M. J. D., Kleinman, A., Medina-Mora, M. E., Morgan, E., Niaz, U., Omigbodun, O., ... Unützer, Jü. (2018). The Lancet Commission on global mental health and sustainable development. *The Lancet (British Edition)*, 392(10157), 1553–1598. [https://doi.org/10.1016/S0140-6736\(18\)31612-X](https://doi.org/10.1016/S0140-6736(18)31612-X)
- Picard MC. (2016). National roundtable presentations on post-traumatic stress disorder. Convened by Public Safety Canada (PSC) at the University of Regina; Regina, SK.
- Pierce, H., & Lilly, M. M. (2012). Duty-related trauma exposure in 911 telecommunicators: Considering the risk for posttraumatic stress. *Journal of Traumatic Stress*, 25(2), 211–215. <https://doi.org/10.1002/jts.21687>
- Quinn, R. E., & McGrath, M. R. (1985). Transformation of organizational cultures: A competing values perspective. In P. J. Frost, L. F. Moore, M. R. Louis, C. C. Lundberg, & J. Martin (Eds.), *Organizational culture* (pp. 315– 334). Beverly Hills: Sage.
- Ramey, S. L., Perkhounkova, Y., Hein, M., Chung, S. J., & Anderson, A. A. (2017). Evaluation of Stress Experienced by Emergency Telecommunications Personnel Employed in a Large Metropolitan Police Department. *Workplace Health & Safety*, 65(7), 287–294. <https://doi.org/10.1177/2165079916667736>
- Ricciardelli, R., Clow, K. A., & White, P. (2010). Investigating Hegemonic Masculinity: Portrayals

- of Masculinity in Men's Lifestyle Magazines. *Sex Roles*, 63(1-2), 64–78.  
<https://doi.org/10.1007/s11199-010-9764-8>
- Ricciardelli, R. (2011). Masculinity, Consumerism, and Appearance: A Look at Men's Hair. *The Canadian Review of Sociology*, 48(2), 181–201. <https://doi.org/10.1111/j.1755-618X.2011.01261.x>
- Ricciardelli, R., Czarnuch, S. M., Kuzmochka, N., & Martin, K. (2021). "I'm not sick!...Are you?" Groupthink in police services as a barrier to collecting mental health data. *International Journal of Police Science & Management*, 23(4), 331–344.  
<https://doi.org/10.1177/14613557211008473>
- Saunders, Aasland, O. G., Babor, T. F., De La Fuente, J. R., & Grant, M. (1993). Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption-II. *Addiction (Abingdon, England)*, 88(6), 791–804. <https://doi.org/10.1111/j.1360-0443.1993.tb02093.x>
- Schein, E. H. (2004). *Organizational Culture and Leadership*. San Francisco, CA: Wiley.
- Sellar, C. (2018). *The Role of Canadian Standards*. CSA Group. Toronto.
- Shear, Brown, T. A., Barlow, D. H., Money, R., Sholomskas, D. E., Woods, S. W., Gorman, J. M., & Papp, L. A. (1997). Multicenter Collaborative Panic Disorder Severity Scale. *The American Journal of Psychiatry*, 154(11), 1571–1575. <https://doi.org/10.1176/ajp.154.11.1571>
- Soria, J.R. (2020). Emergency Dispatcher Vulnerabilities. *Office of Suicide and Violence Prevention, Nova Southeastern University. Winter Issue*, 14-15. Retrieved from <https://www.nova.edu/suicideprevention/newsletter.html>
- Spitzer, Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A Brief Measure for Assessing Generalized Anxiety Disorder: The GAD-7. *Archives of Internal Medicine (1960)*, 166(10),

1092–1097. <https://doi.org/10.1001/archinte.166.10.1092>

Steinkopf, B., Reddin, R. A., Black, R. A., Van Hasselt, V. B., & Couwels, J. (2018). Assessment of Stress and Resiliency in Emergency Dispatchers. *Journal of Police and Criminal Psychology*, 33(4), 398–411. <https://doi.org/10.1007/s11896-018-9255-3>

Szeto, Dobson, K. S., Luong, D., Krupa, T., & Kirsh, B. (2019). Workplace Antistigma Programs at the Mental Health Commission of Canada: Part 1. Processes and Projects. *Canadian Journal of Psychiatry*, 64(1\_suppl), 5S–12S. <https://doi.org/10.1177/0706743719842557>

Weathers FW, Litz BT, Keane TM, et al. (2013). The PTSD Checklist for DSM-5 (PCL-5). Scale available from the National Center for PTSD. Boston (MA): National Center for PTSD. [https://www.ptsd.va.gov/understand/isitptsd/have\\_ptsd.asp](https://www.ptsd.va.gov/understand/isitptsd/have_ptsd.asp)

Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). The PTSD Checklist for DSM-5 (PCL-5). Scale available from the National Center for PTSD at [https://www.ptsd.va.gov/understand/isitptsd/have\\_ptsd.asp](https://www.ptsd.va.gov/understand/isitptsd/have_ptsd.asp)

## 9 Appendix: Demographic Tables

<i>Table 2: Demographic Questions</i>	
<b>Item</b>	<b>Item phrasing</b>
1	What province do you work in?
2	What communications centre do you work for?
3	What geographic area does your public safety communications centre cover?
4	What services do you call take and/or dispatch for (check all that apply)?
5	How many communicators work in your centre (total)?
6	Please select the primary role that best describes your current position.
7	How long have you been in your primary role?
8	Please select any additional role(s) that best describes your current position:
9	What is your salary?
10	Who is your employer?
11	Why did you choose a job in public safety communications?
12	If you have ever qualified as another category of First Responder, Public Safety Personnel, or Military, please indicate the organization (check all that apply).
13	Please indicate your current employment status.
14	What year were you born?
15	At what age did you begin working in public safety communications?
16	Please indicate your biological sex.
17	Please indicate your gender
18	Please indicate your sexual orientation
19	Please indicate the highest level of education you have completed.
20	By your own definition, what is your ethnicity?
21	What language did you first learn at home in your childhood?
22	Please indicate your current marital status.
23	Please indicate your total household income.
24	Do you have any children (biological, adopted, step)?
25	Please indicate how many children you have.
26	Please describe your children. - Sex
27	Please describe your children. - Lives at home
28	Please describe your children. - Age

Completed	Participants
1%	18
2-20%	104
21-40%	85
41-60%	14
61-80%	19
81-99%	27
100%	429

AB	93 (13.3%)
BC	48 (6.9%)
MB	50 (7.1%)
NB	20 (2.9%)
NL	15 (2.2%)
NWT	6 (0.9%)
NS	21 (3.0%)
NV	1 (0.1%)
ON	337 (48.4%)
PEI	14 (2.0%)
QC	21 (3.0%)
SK	46 (6.6%)
YK	(0.1%)
No response	21 (3.0%)

Call taker	147 (21.1%)
Director	6 (0.9%)
Dispatcher	244 (35.0%)
IT/Radio tech	1 (0.1%)
Manager	12 (1.7%)
Other	140 (20.1)
QA/QI	9 (1.3%)
Supervisor	90 (12.9%)
Trainer	23 (3.3%)
No response	24 (3.4%)

10 years+	237 (34.1%)
5 to 10 years	147 (21.1%)
2 to 5 years	146 (20.9%)
1 to 2 years	82 (11.8%)
Less than one year	56 (8.0%)
No response	28 (4.0%)

Call Taker	485 (69.7%)
Director/Chief	1 (0.1%)
Dispatcher	76 (10.9%)
IT/Radio Tech	1 (0.1%)
Manager/Commander	7 (1.0%)
None	37 (5.3%)
Other	13 (1.9%)
QA/QI	7 (1.0%)
Supervisor	11 (15.9%)
Trainer	12 (1.7%)
More than one secondary role	16 (2.3%)
No response	30 (4.3%)

Less than \$20,000	2 (0.3%)
\$20,000 to \$39,999	19 (2.7%)
\$40,000 to \$59,999	102 (14.7%)
\$60,000 to \$79,999	273 (39.2%)
\$80,000 to \$99,999	193 (27.7%)
\$100,000 to \$119,999	49 (7.0%)
\$120,000 to \$139,999	11 (1.6%)
\$140,000 to \$159,999	2 (0.3%)
\$160,000 to \$179,999	1 (0.1%)
\$180,000 to \$199,999	2 (0.3%)
Rather not say	13 (1.9%)
No Response	29 (4.2%)



Municipality	318 (45.7%)
Province	115 (16.5%)
Federal Government	97 (13.9)
Private/Commercial	58 (8.3%)
Health Authority/Region	38 (5.5%)
Other	41 (5.9%)
No Response	29 (4.2%)

Full time	545 (78.3%)
Part time	50 (7.2%)
Casual	17 (2.4%)
Disability	16 (2.3%)
On leave	3 (0.4%)
Parental Leave	3 (0.4%)
Full time student	3 (0.4%)
Part time student	3 (0.4%)
Volunteering	1 (0.1%)
Other	24 (3.4%)
No reply	31 (4.5%)

17 to 20 years old	52 (7.5%)
21 to 30 years old	425 (61.0%)
31 to 40 years old	156 (22.4%)
41 to 49 years old	24 (3.4%)
Over 50 years old	5 (0.7%)
No response	34 (4.9%)

Female	519 (74.6%)
Male	140 (20.1%)
Rather not say	3 (0.4%)
Other	1 (0.1%)
No Reply	33 (4.7%)

Woman	516 (74.1%)
Man	140 (20.1%)
Transgender	3 (0.4%)
Rather not say	4 (0.6%)
Other	1 (0.1%)
No Reply	32 (4.6%)

Heterosexual	554 (79.6%)
Homosexual	40 (5.7%)
Bisexual	31 (4.5%)
Rather not say	30 (4.3%)
other	7 (1.0%)
No response	34 (4.9%)

Graduated 2/3-yr college program (e.g., SIAST, CEGEP, professional technical training)	222 (31.9%)
Partial college education	153 (21.9%)
Graduated 4-yr college/university program	149 (21.4%)
Graduated high school or high school equivalent	81 (11.6%)
Some graduate school (e.g., Master's or PhD in progress)	15 (2.2%)
Completed graduate school (e.g., you have a Master's or PhD)	14 (2.0%)
Grade 9-12 without graduating high school	5 (0.7%)
Other	22 (3.2%)
No Response	35 (5.0%)

English	527 (75.7%)
French	96 (13.8%)
Other	38 (5.5%)
No response	35 (5.0%)

Married	405 (58.1%)
Single	153 (21.9%)
Remarried	17 (2.4%)
Separated or Divorced	60 (8.6%)
Widowed	7 (1.0%)
Other	17 (2.4%)
No response	15 (2.2%)