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Other Minds: The Octopus, the Sea, and the Deep Origins of Consciousness

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“ONE PERSON CAN’T DO IT ALL!”

THE COMMUNICATIVE ENACTMENT OF ORGANIZATIONAL CULTURE,
COLLECTIVE IDENTITY AND MULTILAYERED LEADERSHIP

By

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MS Management Communication

A THESIS

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This thesis is completed as a partial requirement for the degree MS Management Communication at the University of Portland in Portland, Oregon.

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Abstract

This qualitative case study featured an interpretive approach to understanding the culture of a fire station utilizing participant observation and semi-structured interviews. The goal of this study is to investigate the layer(s) of Complexity Leadership that are enacted and valued by organizational members to create an adaptive and collaborative work environment. It also aims to understand the role of organizational culture (Pacanowsky & O'Donnell-Trujillo, 1982) in creating the collective identity of the fire station. In addition, the study navigates the tension between this collective identity, individual specialization and fixed place in the hierarchy when dealing with unpredictability. The results suggest that firefighters construct their culture through the negotiation of three main elements, which are organizational structure, social structure and episodic unpredictability. The interactive sense making of these elements lays the ground for the collective identity through constructing a shared cognitive understanding of organizational reality, active relationships and emotional investment (Melucci, 1995). This helps firefighters navigate uncertainty and unpredictability at a micro level by self-organization and formulation around specialization. In addition, the findings indicate that firefighters create an adaptive outcome at a macro level through the utilization of Administrative leadership (Uhl-Bien, Marion, & McKelvey, 2007) that enforces order yet practices Enabling Leadership to empower leaders. This empowerment allows the balance between order and presented social and professional chaos to maintain the level of complexity needed to deal with complex and unpredictable problems.

CHAPTER 1 INTRODUCTION AND STATEMENT OF THE PROBLEM

Introduction

Explaining his frustration with a previous Fire Chief, a Swanford Town firefighter complained,

A lot of decisions were made by just one individual and this is not how the fire service ran. There's chiefs in different bureaus for a reason, because they all have specialties and experiences that make them good. It was like you're just having one person making decisions for the whole thing and it's not working, it's just.. one person can't do it all.

Jacobson (2015) identified five principles of high-risk organizations that are necessary for successful operations and avoiding failures. These traits are preoccupation with failure, reluctance to simplify, sensitivity to operations, commitment to resilience, and deference to expertise. These traits and qualities show that successful high-risk organizations embrace their complexity and utilize different expertise to self-organize and respond to different critical situations as needed rather than depending on one centralized source of power. These principles are managed within the organizational culture by the collective identity that is based on shared understandings and relationships to deal with unpredictability. Constructing this culture and identity is done through the enactment of multilayered leadership practices of Complexity Leadership that allow the conditions for flexibility and adaptability to complexity.

In 2017, I conducted a pilot study that set the ground for investigating the organizational culture and collective identity of the firehouse utilizing participant observation and semi-structured interviews. The study aimed to examine the impact of spending long working hours at a fire station sharing common daily language and behaviors on creating a cohesive and reliable community and constructing a collective identity amongst firefighters. The study drew on symbolic convergence theory (Bormann, 1983), social identity theory (Tajfel, 1979), and the model of collective identity (Melucci, 1995). The results of the study

suggested that firefighters construct a collective identity based on a shared cognitive definition of the job and its various roles, active relationships that evolve through daily interactions and activities, and emotional investments that come through as strong bonds built on underlying respect, trust and communication of positive and negative emotions. The findings also suggested that firefighters share a common positive attitude towards their job and understand the deal breakers that hurt their standing in the fire station community. The sense of community and the collective identity within the organizational culture of firefighters appeared to generate commitment, motivation, and job satisfaction among crewmembers.

Observing commitment, motivation, and job satisfaction among firefighters instigated a question about the role of leadership in creating that positive organizational culture. Moreover, it sparked my curiosity to further investigate the way firefighters construct their organizational reality through their communication and interaction patterns in such a unique work environment.

Understanding the Organization

The fire service is an organization with unique social and professional conditions. While the organizational culture of the fire service follows a paramilitary structure, the day-to-day operations are usually performed in a less formal manner creating an interesting social dynamic within fire stations. In addition, fire fighting as a job entails unique circumstances such as long working hours, handling the unpredictability of the job, and dealing with constant exposure to stressful, dangerous situations. These factors create a complex organizational culture that is framed by distinctive leadership dynamics and practices. In his book *Fire Administration I*, Bruegman (2009) wrote about this distinctive leadership dynamic saying “In the fire service, leaders are often seen who do not possess the formal power by rank or some other designation to reward or sanction performance; however, the employees

will give leaders power by complying with what they request” (p. 91). Studies have linked this leadership dynamic in the fire service with group cohesion, group identification (López, Alonso, Morales' & León, 2015), job satisfaction (Bartolo & Furlonger, 2000), and organizational commitment (Lowe & Barnes, 2002). These aforementioned studies inspired the present research to investigate leadership practices and the organizational culture of the fire service.

Leadership

Throughout history, it has been evident that people have formed different kinds of groups to serve different purposes and achieve different goals. Ancient armies, religious groups, and historic architecture are some examples of this collaborative work done by human beings. Consequently, people recognized that accomplishing such big missions required effective leaders with leadership traits. There have been many cases in the history of heroic leaders that were commended and their traits were praised and looked for when trying to find potential leaders. However, according to Bruegman (2009), it was not until the Industrial Revolution (1820-1870) that people started systematic studies of leadership and organizations. This area of study evolved in response to the invention of new technologies and the development of large factories. These developments led to changes in workforce dynamics and introduced complications and challenges in workplaces that needed intervention. This era helped establish an early framework for leadership studies and research (Bruegman, 2009).

Ever since, leadership studies have grown tremendously as a multidisciplinary field that is studied by scholars from psychology, sociology, philosophy, management, communication, and many others. Many theories have been developed for the purpose of understanding the qualities and characteristics that make good leaders. However, most leadership theories focus on leaders and how to improve their ability to influence the

followers to align their preferences with the organization's to achieve predetermined objectives. These theories that grant centralized power proved their effectiveness in the Industrial Era when the focus was mostly on fixed, technical problems rather than adaptive challenges (Uhl-Bien, et al., 2007). Nowadays and in the Postindustrial Era, organizations have evolved to become more complex in nature, which makes old leadership theories not as sufficient and effective as they used to be. Therefore, Marion and Uhl-Bien (2001) introduced the concept of Complexity Leadership Theory to address some of the complex problems that are unique to the Knowledge Era, which is characterized by competitiveness because of globalization, technology, deregulation and democratization. In high-risk organizations, the complex nature of the job goes a step further as it involves life-and-death scenarios (Ishak, n.d.). This theory, along with the Communicative Constitution of Organization (CCO) theory, Discursive Leadership, and Leader–Member Exchange Theory see communication and interaction as the center of leadership and organizations rather than just a tool for transmitting information.

Organizational Culture

To understand the complex nature of organizations based on communicative practices, leadership is only one part of the equation as there are many other factors in play to construct the whole organizational culture. To further explore the organization of the fire service through communicative practices, I found it helpful to examine its organizational culture through the Organizational Culture Approach by Pacanowsky & O'Donnell-Trujillo (1982). Pacanowsky and O'Donnell-Trujillo (1982) define organizational culture as dynamic interactions and performances that form a sense of collectivity. In other words, this sense of collectivity is established through the ability to form mutual understanding and sense making amongst organizational members of their organizational reality through different forms of daily interactions and performances on the personal and professional levels. This study aims

to investigate this collective understanding and sense making to recognize its role in creating and effective and adaptable work environment that is able to deal with the complex nature of the organization.

In addition, this thesis aims to take a communicative perspective in investigating leadership practices and organizational culture performances within a fire department organization. It shifts the perception “from thinking about communication within organizations to understanding organizations as communication” (Koschmann, Isbell & Sanders, 2015, p. 214). This shift in perception allowed the examination of the fire department organization in an unconventional way by understanding the way it is organized through and around communicative practices and performances that construct the collective meaning, sense making and reality of the organizational culture rather than being organized around profession, tasks, and structure. This objective was achieved through investigating the way firefighters employ organizational communicative performances to make sense of the different interactive elements of their organizational culture. It also allowed the realization of the way this collective identity allowed firefighters to deal with the unpredictable aspects of their job by self-organization and formulation around specialization. Furthermore, it allowed the understanding of the way leadership enacted communicatively and assigned relationally on multiple layers to address the different needs of the organization. These needs are addressed by maintaining a balance between structure and order, and the occasional social and professional chaos to allow the room for flexibility and adaptability.

The following chapter introduces the theoretical framework of the present research, including Complexity Leadership Theory (Uhl-Bien et al., 2007) and the Organizational Culture Approach by Pacanowsky and O’Donnell-Trujillo (1983). It also covers a review of the relevant literature that examines leadership as a social construct in addition to the

previous work on leadership, organizational culture and teamwork in high-risk organizations. Finally, it states the research questions that will serve as a guide for the research project.

The third chapter details the research design and methodology utilized for this study. This includes an explanation of the criteria employed in choosing the research site and participants. The chapter also describes the procedures for conducting the research, key ethical considerations, and the process of data analysis. A self-disclosure section about English as a second language is also included along with strategies for ensuring ethicality, validity and accuracy of the research.

The fourth chapter explains the findings of the study and reports the way they evolved after coding and categorization. Five main themes developed that are descriptive of the main organizational culture elements. These elements are materials, hierarchy, social structure, traditions and unpredictability. These elements are the products and results of their constant interactions and the way firefighters communicate and make sense of them. In the discussion section, these five elements were organized under three main subtopics, which are organizational structure, social structure, and episodic unpredictability. Two main ways appeared to be the answer to dealing with such culture and unpredictability. The first is Enabling leadership that gives the room for adaptability and maintains the balance between order and chaos. The second is the collective identity that allows self-organization and formulation around specialization depending on the need of each complex situation. The fifth chapter provides a summary of the study's findings and results along with limitations and future research. It concludes with theoretical and practical implications for the study.

CHAPTER 2 LITERATURE REVIEW

The purpose of this study is to investigate the organizational culture of the fire department and its role in creating the collective identity of firefighters. As complex organizations, fire departments offer an interesting research site for better understanding tensions between collective identity and individual specialization when members deal with unpredictability. Of particular interest is how leadership might be enacted and valued communicatively and relationally by organizational members to create an adaptive environment with collaborative teams to deal with the complex nature of the organization. Through this view, leadership (as behavior, identity, and position) appears to be deeply intertwined with organizational culture. Drawing from theories of Complexity Leadership and Organizational Culture,

Theoretical Framework

The primary objective of this study is to investigate the leadership practices and organizational culture of the fire service in order to understand the communicative dynamics that results in effective teamwork through adaptability and flexibility. To achieve this particular purpose, I grounded my research in two theories that give a multilayered understanding of leadership and organizational dynamics from a communicative perspective. These theories are Complexity Leadership Theory (Uhl-Bien et al., 2007) and the Organizational Culture Approach (Pacanowsky and O'Donnell-Trujillo, 1983).

Complexity Leadership Theory

Communication and organizational science scholars have shown an interest in studying organizations based on Complexity theories (Gilpin & Miller, 2013; Aaron & Graetz, 2006; Muponda, 2014). However, during the process of literature review, I found no evidence that Complexity Leadership Theory (CLT) has been examined from a

communication studies perspective. Nevertheless, I found it relevant and intriguing in exploring the leadership dynamic in the fire service. The theory is based on the assumption that “leadership, however it is defined, only exists in, and is a function of, interaction” (Uhl-Bien et al., 2007, p. 302). The notion of interaction refers to the proposed model of understanding that leadership and problem solving occur within and by a structured social system rather than a group with a centralized authority (Uhl-Bien et al., 2007).

Complexity leadership theory is based on complexity science that views the world as a complex, dynamic, nonlinear system characterized by uncertainty and unpredictability (Marion & Uhl-Bien, 2001). Uhl-Bien et al. (2007) argue that traditional leadership styles are stuck in the past and were created to deal with problems that arose in the Industrial Era. However, in today’s Postindustrial Era, organizations have become more complex and the kind of problems they face cannot be solved with the perspective and control of one person (Geer-Frazier, 2014). This is specifically true in high-risk organizations where lives and assets are at stake. Therefore, the new perspective is based on “a core proposition that much of leadership thinking has failed to recognize that leadership is not merely the influential act of an individual or individuals but rather is embedded in a complex interplay of numerous interacting forces” (Uhl-Bien et al., 2007, p. 302). In other words, Arena and Uhl-Bien (2016) propose the need to shift the focus of organizations from human capital to social capital.

Uhl-Bien et al. (2007) introduced five main notions that are critical to understanding Complexity Leadership Theory. First, complex adaptive systems are the basic unit of analysis. They are defined as “neural-like networks of interacting, interdependent agents who are bonded in a cooperative dynamic by common goal, outlook, need, etc.” (p. 299). In an organization, agents include people, ideas and events that interact creating emergent properties, qualities and patterns of behavior. According to Mitleton-Kelly (2003), complex

adaptive systems have ten principles: self-organization, emergence, connectivity, interdependence, feedback, far from equilibrium, space of possibilities, co-evolution, historicity and time, and path-dependence. Second, the dynamic between agents is found in context. This context is not simply the place where interactions happen. Rather it is the ambiance of interactions and interdependencies among agents, hierarchical leadership, organizations and environments. Therefore, context is what creates the dynamic persona of a system rather than serving as “an antecedent, mediator, or moderator variable” (p. 299). Third, according to this theory, there is a distinction between the terms leaders and leadership. Leaders are considered agents that influence the dynamic and the outcome in the organizational context whereas leadership is “an emergent, interactive dynamic that is productive of adaptive outcomes” (Uhl-Bien et al. 2007, p. 299). This form of leadership is referred to as Adaptive Leadership. Fourth, this theory makes a distinction between leadership and managerial positions as the latter refer to hierarchy and bureaucratic leadership that is established to create the structure and maintain the balance in an organization. This kind of leadership is known as Administrative Leadership according to CLT. Fifth, CLT is meant to address adaptive and unpredictable challenges that require learning, adaptability and creativity rather than technical, rigid obstacles (Uhl-Bien et al. 2007).

Uhl-Bien et al. (2007) identify three types of leadership in Complexity Leadership Theory. The first is Administrative Leadership, which is formal, hierarchical leadership performed by high-ranking officers in the fire service. The second is Adaptive Leadership, which is an emergent, interactive dynamic that results in a creative, adaptive change. Adaptive Leadership is manifested within fire stations where the interactive, social dynamic influences the practices of firefighters despite their position. The third is Enabling Leadership that facilitates adaptability and creativity by fostering the needed environment for

Adaptive Leadership through promoting interactions, interdependencies, and tension. This kind of leadership can be performed at all levels of the hierarchy. Officers at fire stations usually adopt this type of leadership as they are expected to foster the needed environment for productivity, adaptability and creativity for crewmembers. The connections and interdependencies among these three types of leadership happen because:

Complexity Leadership Theory is necessarily enmeshed within a bureaucratic superstructure of planning, organizing, and missions. CLT seeks to understand how Enabling Leaders can interact with the administrative superstructure to both coordinate complex dynamics (i.e., Adaptive Leadership) and enhance the overall flexibility of the organization. (as cited by Uhl-Bien et al., 2007, p. 302)

The fact that complexity leadership is embedded in bureaucratic organizations that acknowledge the importance of adaptation and innovation at the same time is what makes it suitable for the study of the fire service organization. The fire service is a good example of that combination between a hierarchical, formal structure and an adaptable, flexible culture.

The Organizational Culture Approach

Fire departments are unique organizations on many levels. According to Brauer (2016), these organizations are known for their relatively strong culture that includes uniforms, a hierarchical command structure and a set of rituals and traditions. In addition, employees are characterized by having strong feeling of commitment and loyalty. However, employees are relatively isolated from society due to unstable working hours, demanding work tasks and constant exposure to dangerous situations (Brauer, 2016). These characteristics of the organizational culture of the fire service create a unique dynamic at the workplace socially and professionally. Firefighters construct their organizational culture through communicative practices such as stories, metaphors and humor that help them in making sense of the unique and difficult aspects of the job (Sliter, Kale & Yuan, 2014; Tracy, Myers & Scott, 2006). Hence, I decided to investigate the organizational culture of the fire

service through the Organizational Culture Approach by Pacanowsky and O'Donnell-Trujillo that sheds light on the communicative practices that form organizational cultures.

The Organizational Culture Approach and Complexity Leadership Theory share an interrelated interpretation of the concept of organizational context as being formed through the dynamic interactions and interconnections that happen among agents resulting in constant communication. The goal of the Organizational Culture Approach is understanding how organizational cultures are built communicatively as it takes into account all the activities and performances done in an organization regardless of their relationship to organizational effectiveness (Pacanowsky & O'Donnell-Trujillo, 1982).

Pacanowsky and O'Donnell-Trujillo (1983) introduce the concept of Organizational Communication Performances, which include shared languages, practices, and rituals. They define four features of Organizational Communication Performances, which are interactional, contextual, episodic and improvisational. Pacanowsky and O'Donnell-Trujillo (1983) then divide performances into five main categories including rituals, passion, sociality, politics and enculturation. These performances are especially important in creating meaning and making sense of cultural aspects within organizations. Pacanowsky and O'Donnell-Trujillo (1983) explain, "Performance brings the significance or meaning of some cultural form—be it symbol, story, metaphor, ideology, or saga—into being" (p. 129). Examining the meaning of these shared communication practices and cultural performances will help in making sense of the organizational culture at the fire service organization.

Complexity Leadership Theory and The Organizational Culture Approach served this study as the framework in investigating the organizational aspects of the fire service through a communicative lens. Complexity Leadership Theory will help in understanding the multilayered leadership practices of this organization whereas the Organizational Culture Approach will help in understanding the practices that create the communicative dynamic of

the fire service organization. Understanding the leadership practices and organizational culture of the fire service through this theoretical framework guides this research to come up with theoretical and practical implications for leadership, collaboration and adaptability in complex organizations.

Literature Overview

To establish an understanding of the current research related to leadership practices and organizational performances in the fire service, I started by investigating the concept of leadership and organizational culture as social and communicative constructs to guide the framework that this study is emphasizing in investigating these social phenomena. I, then, conducted a review of the literature examining relevant studies that investigate high-risk organizations. The communicative understanding of high-risk organizations was drawn from multiple disciplines such as applied communication, management communication, applied management, small group research, public administration, managerial psychology, organizational behavior, and fire prevention studies. Building the review on multidisciplinary literature helped in shaping a well-rounded perspective of leadership and organizational culture of high-risk organizations. The literature is organized into four main themes, which are leadership and organizational culture as communicative construct, leadership in high-risk organizations, organizational culture in high-risk organizations and teamwork and collaboration in high-risk organizations.

Leadership and Organizational Culture as Communicative Constructs

This study investigates leadership and organizational culture as social and communicative constructs. According to Allen (2004), social constructionism claims that any meanings are generated through social relationships that individuals engage in and it arises from the social system as whole rather than from individuals within that system. This model explains that “reality is created within the process of communication, using language

instruments, with each individual influencing and shaping the answers of others” (Sandu, 2016, p. 1). Taking this view to understand leadership shifts the view from a leader-centric approach to placing an emphasis on the followers’ role to “make sense of and evaluate their organizational experiences” (as cited by Fairhurst and Grant, 2010, p. 175). It also views leadership as a co-constructed reality, particularly as the processes and outcomes of the relationships and interactions among individuals in a social system (Fairhurst & Grant, 2010). To define leadership through this lens Robinson (2001) suggested, “Leadership is exercised when ideas expressed in talk or action are recognized by others as capable of progressing tasks or problems which are important to them” (p. 93). This does not mean ignoring the traditional, psychological view of leadership that focuses on leadership as inner ability to lead due to a set of characteristics, emotions and cognitive processing styles. It rather adds to it and tries to understand the social and communicative aspects of leadership (Fairhurst, 2008). Therefore, this study aims to investigate leadership and organizational culture as communicative constructs, yet keep in mind the more traditional view of leadership through assignment or personal traits to reach a multilayered understanding of the way leadership enacted in the fire department.

Leadership in High-Risk Organizations

Scholars from different disciplines have been researching and theorizing the qualities, practices and contextual factors that help in creating effective leaders. This need for effective leaders and leadership practices is specifically crucial in high-risk organizations to ensure safety, reliability and effectiveness (Heldal & Antonsen, 2014). Hence many studies have explored leadership roles and practices in high-risk organizations such as fire and rescue, law enforcement and other emergency services. A common trend throughout most of the leadership literature is a focus on leadership as being held by an individual/s who possesses or has acquired the power to influence a group of people towards achieving certain goals.

Nonetheless, there are four main themes emerged through the process of reviewing the literature of leadership in high-risk organizations: the roles and practices of effective leaders (Milby, 2013; Lowe & Barnes, 2002), the utilization of different leadership styles, the impact of leadership style on team performance and behavior (López, Alonso, Morales' & León, 2015; Muller, Maclean & Biggs, 2009; Bartolo & Furlonger, 2000; Beaton, Johnson, Infield, Ollis & Bond, 2001), and the impact of the organization's context on leadership practices (Heldal & Antonsen, 2014).

The first theme in the literature of leadership in high-risk organizations is focused on the role and practices of effective leaders. Milby (2013) explained that the main role of a fire officer is “to develop the subordinates to the best of both your and their abilities” (p. 1). He suggested two practices to achieve that goal, which are delegation and communication. Milby (2013) explained that delegating responsibilities gives a chance to crewmembers to utilize their different set of skills, encourages them to share their input and improves the crew's synergy. On the other hand, communicating needs and expectations helps crewmembers to complete tasks to meet requirements. Lowe and Barnes (2002) conducted a quantitative study to investigate the impact of leadership practices on organizational commitment in the fire service. This study identified five leadership practices, which were challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart. Through administering The Organizational Commitment Questionnaire, The Leadership Practices Inventory-Observer form and Personal Characteristic Questionnaire, the findings indicated a positive relationship between leadership practices and the organizational commitment of firefighters. The study also showed that the practice of enabling others to act had the strongest relationship with the participant's level of organizational commitment.

The second theme assesses studies that took a wider approach when examining leadership in high-risk organizations by focusing on leadership styles and their impact rather than focusing on certain leadership practices. The aim is to present the leadership styles employed in high-risk organizations to justify the need for a more comprehensive style that addresses issues arise in modern day organizations.

López et al. (2015) examined Authentic Leadership style and its impact in security and emergency teams. They conducted a quantitative study to examine the relationship among Authentic Leadership style, group cohesion and group identification. In the study, Authentic Leadership was defined according to Walumbwa, Avolio, Gardner, Wernsing and Peterson (2008) as

A pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development. (p. 94)

López et al. (2015) found a positive relationship between utilizing Authentic Leadership style in emergency teams and group cohesion and members' identification. This relationship was explained as a result of the positive and encouraging behavior of authentic leaders that inspire a constructive change and promote a positive ethical organizational climate. In this sense, Authentic Leadership suggests general guidelines for leaders in spite of their position to follow in order to evoke positive change in team members.

In investigating other leadership styles, Bartolo and Furlonger (2000) conducted a research examining the impact of Consideration Leadership, and Initiating Structure Leadership on the level of job satisfaction among firefighters in Australia. The team of Ohio State Leadership studies identified these two dimensions of leadership behaviors. They introduced Consideration Leadership as people-oriented while Initiating Structure Leadership as task oriented (Lambert, Tepper, Carr, Holt & Barelka, 2012). In this light, Bartolo and

Furlonger (2000) examined Consideration Leadership as the behavior that encourages team interaction and developing relationships among team members whereas Initiating Structure Leadership as the behavior that involves interactions between leaders and team members. The results indicated that both leadership behaviors correlate positively with job satisfaction. However, the level of team interaction was suggested to be an alternative explanation for the findings of this study rather than the implemented leadership style. Consideration and Initiating Structure Leadership behaviors encourage communication among organizational members and address the need for different behaviors in different context but their main focus is on the behavior of people who hold leadership positions.

Another leadership style that encourages communication and interactions between leaders and followers is Supportive Leadership. Muller et al. (2009) conducted a qualitative research to study the impact of utilizing Supportive Leadership in a policing organization. Supportive Leadership was implemented in the police department through a training workshop as sets of “attitudes, communication, behaviors and actions by managers and supervisors that enable staff to feel supported thereby to work effectively, productively and appropriately” (as cited by Muller et al., 2009, p. 69). The goal behind the effort to implement this leadership style was to improve the organizational culture of the police department and reduce occupational stress. Muller et al. (2009) found that the workshop had increased awareness about Supportive Leadership and resulted in some change in the relationship between leaders and team members. This change manifested itself on a personal level and on a professional level. On a personal level, leaders showed more support and recognition for individuals when they went through personal experiences such as weddings, childbirths and birthdays. On the professional level, leaders implemented four supportive strategies, which are participative decision-making, consultation meetings, open-door policy and giving feedback. The findings of the study suggested that although the process of

changing organizational culture is difficult, the implementation of these practices helps in softening the roughness of the organizational culture of the police department (Muller et al., 2009). The resulted strategies of implementing Supportive Leadership are similar in principle to Enabling Leadership practices of Complexity leadership theory that fosters interactions, interdependency and tension (Uhl-Bien et al., 2007). However, Supportive Leadership is another leadership style that focuses mainly on the behavior of people with formal status.

Another study by Beaton et al. (2001) addressed a similar issue regarding the impact of leaders training in a fire department for the purpose of reducing negative organizational outcomes such as injuries, absenteeism and occupational stress. In the study, the supervisors underwent a one-day training session that was comprised of The Leader Match training based on Fiedler Contingency Model, psycho-educational and cognitive-behavioral stress-management component, and humane approaches to management in the fire service. The participants took a pretreatment survey and then two follow-ups at three months and nine months. The findings of the study showed improvement on the supervisory rating measure on the third month and a retreat to the baseline on the ninth month follow-up. In addition, there were no significant improvements in the rate of absenteeism or job satisfaction, which contradicts the findings of Bartolo and Furlonger (2000).

The positive relations between leadership styles and teams' behaviors and performance that were evident throughout most of the literature encourages high-risk organizations to explore and adopt different leadership styles in order to achieve teamwork proficiency and effectiveness. However, most of the previously covered leadership styles focused mostly on the behavior of leaders as individuals with centralized power to influence their subordinates. In addition, those leadership styles were not designed to address the complex nature of modern day organizations that are constructed on more than performing

simple, predictable and repetitive tasks. They mostly focus on one aspect of leadership rather than covering the multilayered leadership behaviors and practices that are needed in most modern organizations to foster flexibility, adaptability and creativity in dealing with current organizational issues.

From an alternative perspective, Heldal and Antonsen (2014) conducted a qualitative study to examine the impact of high-risk context on team leadership instead of focusing on leadership as the main cause of impact within organizations. This study is one of a few that took a similar approach to the one intended for the present research, which is recognizing and examining leadership within a dynamic context. Heldal and Antonsen (2014) viewed teams as complex, adaptive, dynamic systems where contextual factors are in continuous change. The study identified four contextual factors that have an influence on leadership, which are organizational structure, management philosophy, change history and surrounding community. The organizational structure influenced leadership through affecting the informal status of leaders. Whereas the management philosophy manifested in Lean Management, which “entails a special attention to standardization of activities” (p. 383) and Rule-Based Management, which refers to the strict adherence to fixed rules, policies and procedures that were created based on the organization’s history rather than showing flexibility in addressing different situations. This kind of rigid management could lead to manipulation of rules’ interpretation to match changing needs. Lean Management and Rule-Based Management affected the time available for focusing on relationship building and the possibility to focus on other issues than rule-adherence and manipulation. The change history factor refers to the changes that the organization went through, which influenced the leadership dynamic as former leaders still held an informal influence over other team members. Lastly, the surrounding community of the small village where the organization is located made the team more prone to group thinking.

Addressing the Gap. From a communication standpoint, there are three main gaps in the literature when investigating leadership in high-risk organizations. First, most of the research addresses and investigates leadership as the role of one or a group of individuals who has the power to influence others to achieve certain organizational objectives while neglecting to focus on the role of team members as parts of the leadership communicative process. Second, with the exception of Heldal and Antonsen's (2014) qualitative study, most of the literature focused on leadership as an isolated role rather than perceiving it as a set of dynamic interactions among many factors that form a Complex System within organizations. Third, most of the studies examined one leadership style or a set of practices rather than investigating leadership as a part of a complex system that needs a multilayered leadership with different sets of practices. Moreover, it needs a strategic way of integrating all of them as Muller et al. (2009) suggested, "police managers need to be able to adopt a leadership style that is congruent with the circumstances being encountered both in an operational environment and a non-operational environment" (p. 78).

The present study examines leadership as an interactive, dynamic process that integrates three leadership styles, which are Administrative Leadership, Adaptive Leadership and Enabling Leadership (Uhl-Bien et al. 2007). Drawing from Complexity Leadership Theory, this research will take into account the role of team members, contextual factors and the need for different leadership styles to address different organizational needs.

Organizational Culture in High-Risk Organizations

High-risk organizations such as police and fire services are known as paramilitary organizations. According to Muller et al. (2009), these organizations are built on strict rules and regulations, a hierarchical structure and a strict compliance with chain of command. Therefore, Muller et al. (2009) explain that these organizations possess a unique organizational culture that is characterized by loyalty, professionalism, hard work and

devotion to the job on one hand and some negative characteristics such as “out of touch, cronyism or networking, inexperience, lack of people skills, poor communication, self-esteem” (p. 77) on the other hand. These characteristics create and at the same time are results of the unique sense of the place, which is referred to as the organizational culture (Pacanowsky & O’Donnell-Trujillo, 1983).

The present research aims to investigate the Organizational Communication Performances in high-risk organizations that bring meaning and significance to their cultures. These five communication performances are ritual, passion, sociality, politics and enculturation (Pacanowsky & O’Donnell-Trujillo, 1983). Throughout the literature, there are not many studies that examine the culture of such organizations as a whole or through focusing on the Organizational Communication Performances. Most studies only investigated individual aspects and performances of high-risk organizations that help partially in shaping the understanding these cultures.

With such limited research based on the Communication Performances in organizational cultures of high-risk organizations, I decided to base my organization of the literature on the four domains of organizations identified by Van Maanen and Barley (1985), which are ecological context, differential interaction, collective understanding, and individual domain. These four domains helped in organizing the reviewed literature into three themes. The first theme explains the way communities are built within high-risk organizations. This theme is based on the differential interaction domain of organizational culture, which refers to the networks within organizations. The second theme is about the way organizational members in high-risk organizations construct their collective identities and make sense of their organizational practices and culture. This theme is based on the collective understanding domain. The third theme covers how members of high-risk organizations manage their emotions, which is investigated within the individual domain.

Community Building (Differential Interaction). McMillan and Chavis (1986)

defined the sense of community as “a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together” (p. 9). Throughout the literature, many researchers have explained how firefighters share a strong bond that connects them with each other for life. James Ferguson, the vice-president of the International Association of Firefighters, described his experience as a firefighter and explained how the people he met and the friendships he made during his years in the fire service were the best part of his career. He further explained how firefighters were a family to him that lived close to each other, knew each other very well, ate their meals together and greatly depended upon each other (Ferguson, 2003). Although sharing place, time and activities can definitely bring people closer and establishes strong relationships, it does not explain how strong bonds built on trust, respect and dependency are established to create a unified, supportive community.

To elaborate on this idea, a qualitative research article by Myers (2005), examined what it took for newly hired firefighters “booters” to assimilate into a fire station, the qualities they had to acquire and the difficulties they had to put up with to cross the inclusionary boundary from being outsiders to being insiders in the fire community. The study went in depth about what newcomers had to go through to gain the trust and sense of inclusion from more senior firefighters. Newcomers were expected to do all the little tasks around the fire station while maintaining a positive attitude, keep their distance from senior firefighters and not speak until spoken to while paying close attention to learn from more experienced crew members. All of that did not seem to portray the family or community feeling; however, new firefighters reported that they were happy to go through that “rite of passage” that every new firefighter had to go through to display their work ethics, self-discipline, professionalism, ability to function under pressure, and their ability to follow

commands. This phase helped newcomers establish acceptance, trust and affection with other crewmembers. One firefighter stated, “It’s definitely one of the best reasons for being a firefighter, that bond, that family feeling that we get” (as cited in Myers, 2005, p. 366). This research explained the phases and steps that newcomers had to go through to become part of the family. It also briefly explained how newcomers, at a certain point, start adopting some behaviors and attitudes to assimilate to the rest of the crew; like sharing gallows humor, which can be considered disturbing if heard by outsiders.

Identity Construction (Collective Understanding). Social identity is defined as “that part of an individual’s self-concept which derives from his knowledge of his membership of a social group or (groups) together with the value and emotional significance attached to that membership” (Tajfel, 1978, p. 63). According to Ashforth and Mael (1989), building a community is closely related to organizational identification, which is the perception of oneness with or belongingness to an organization. This perception of the organization is based on a number of criteria that are distinctiveness, prestige, network size, relationship strength and density (Jones & Volpe, 2011).

A qualitative study by Tracy and Scott (2006) explained how firefighters managed taint and the undesirable aspects of their job through the use of occupational prestige and masculine heterosexuality. The study explained that most of the strong organizational cultures and identifications are associated with traditional manly traits of “strength, robustness, boldness, stoutness, bravery, and not being womanish” (as cited by Tracy & Scott, 2006, p. 10). These masculine aspects of the job allowed firefighters to reframe their work and constructed their organizational identity by using certain language to uphold a preferred identity that portrays their job as heroic despite the undesirable aspects of it that are antithesis to what masculinity entails. This was portrayed in comparison with the job of correctional officers who are referred to as “professional babysitters”, which makes it

difficult for them to reframe their job to appear desirable and heroic. The findings suggested that the ability of firefighters to manage taint more effectively than correctional officers is not because of the variance in daily tasks, rather it is because of their ability “to continually reconstruct their work and image in favored masculine terms” (p. 19). According to Alvesson (1998), this identity work allows employees to “achieve feelings of a coherent and strong self, necessary for coping with work tasks” (p. 990). This idea was supported by the quantitative study of López et al. (2015) that indicated a positive relation between group identification and cohesion within emergency teams. Another quantitative study by Lee and Olshfski (2002) emphasized this idea of how creating a preferred identity is the key motivation for firefighters to be dedicated to saving lives and supporting the society as well. The study expected to explain the organizational commitment of firefighters through identity theory. The result of the study concluded that “Individuals take jobs, they identify with the role attached to the job, they become committed to doing the job, and they behave according to the expectations attached to that job” (p. 112).

On the whole, these studies explain how firefighters construct their organizational identification and the way creating this identity functions as a motivation for them to be competent and committed to their job in addition to enhancing the sense of cohesion among their teams and team members. With the exception of the qualitative study of Tracy and Scott (2006) about sexuality, masculinity and taint management, the literature review showed that the research that investigates identification through gender roles is limited in high-reliability organizations.

Emotion Management (Individual Domain). Employees that work in high-risk organizations such as the fire service are frequently exposed to traumatic stressors such as fires, car accidents and injured people (Sliter, Kale & Yuan, 2014). Therefore, firefighters employ a set of behaviors that help in managing and deflecting stress and negative emotions.

Tracy, Myers and Scott (2006) explained how firefighters use humor to manage their identity and make sense of the circumstances of their work. They distinguished four ways in which humor serves firefighters and other human service workers, which are differentiation, superiority, role distance, and relief. In other words, the data of the study suggested that humor was connected to ambiguous and identity threatening situations, it was used to release tension and create a distance from tragic situations, and it usually was performed as a collective activity. In support of these findings, Sliter et al. (2014) found that humor tended to act as a buffer in the relationship between the exposure to traumatic stressors and PTSD and burnout symptoms. This buffer can be explained in terms of the role of humor in reappraisal, creating social bonding and combatting the physiological impact of trauma. In addition, Tracy et al. (2006) explored other communicative strategies that were employed by human service workers to make sense of their job, which are enactment, selection and retention. Enactment was described as “raw data” where employees construct and rearrange what happened by focusing on some dimensions of a situation and letting go of others. Selection is making connections and finding possible interpretations of the raw data to understand what happened. Retention is the selected interpretation that could be enforced by humor and retained as a story for future reference. The findings suggested that these three stages helped firefighters and other human service workers in making sense of their work and organizational culture for that matter. New employees learn these techniques and performances through socialization as suggested by Scott and Myers (2005). In their research, they elaborated on the idea of how firefighters learn from each other how to manage their emotions and support each other in coping with traumatic stressors. The findings indicated that because there is not enough training about emotions in the Fire Academy, new firefighters had to proactively learn how to conform to the emotion rules in a fire station by

performing the booter role and seeking information through observation, surveillance and informal lessons.

In general, studies that focus on the organizational culture of the fire service based on communication performances are limited. However, previous studies touched on some organizational domains and performances that collectively create the organizational culture of the fire service. Within the three domains of organizational culture that were mentioned above, the literature touched on four of the Organizational Communication Performances. The performance of sociality was evident through the way firefighters built their community and constructed their identity employing different social rules such as sharing meal time, talking about work, joking and negotiating their place in the workplace. The performance of passion was apparent in the way firefighters negotiated their identity and talked about their job and its different aspects. The performance of rituals appeared in the tasks and schedule that firefighters follow on a daily basis. Another example of rituals is the way new firefighters were treated as booters and the way they dealt with it until they became part of the organization. Lastly, Enculturation performances were developed socially and professionally through observing, following orders and assimilating to the cultural and formal norms. These four communicative performances play a major role in building the sense of culture within high-risk organizations. The previous section did not examine the performance of politics as a part of the organizational culture; however, the idea of negotiating power and influence was discussed in the section of leadership in high-risk organizations.

Teamwork and Collaboration in High-Risk Organizations

As organizations have become more complex and dynamic, the process of forming teams with the proper set of skills and a high degree of reliability has become more complicated (Baker, Day & Salas, 2006). Therefore, many scholars have examined the idea

of teamwork and many have theorized the qualities that create effective collaboration within a team. Burkett (2017) defined teamwork as a group of individuals with different sets of knowledge, skills and abilities working towards achieving a common goal. Burkett (2017) explained that although forming a team is achievable, collaboration is not always guaranteed. She defined collaboration as “the process governed by a set of norms and behaviors that maximize individual contribution while leveraging the collective intelligence of everyone involved” (p. 3).

To investigate the concept of team and teamwork, Webber and Klimoski (2004) conducted a quantitative study investigating a special type of teams referred to as a crew. They defined a crew as a special kind of teams that consists of a number of people who play different roles in which they are specialized, to cohesively perform brief events repeatedly in different conditions depending on technology and procedure more than on team members who can be substituted. They indicated that this characteristic is one major reason behind the effectiveness of a crew (Klimoski & Jones, 1995; Sundstrom, DeMeuse, & Futrell, 1990). In the study, firefighters from two different departments were employed to answer a developed survey consisted of twelve question about their current team. This survey was called the Crew Classification Scale. Using this measure, the findings suggested that it is possible to distinguish crews from other types teams based on its aforementioned unique characteristics. Webber and Klimoski (2004) indicated that the need for this distinction is important for “team effectiveness and when determining staffing, training and leadership needs for work teams” (p. 278).

Besides the qualities of crews, Seijtze and Gandz (2009) rationalized three other characteristics behind highly responsive teams. First, having good team leaders that understand their role in the team. Second, having prequalified and trained team members even though they still have to work on finding their place within a team. Third, having an

organizational culture that supports teamwork and encourages effective team dynamics through emphasizing the importance of working towards achieving team results over individual outcomes and the ability of team members to communicate with, learn from and support each other. To support that, López et al. (2015) conducted a study that indicated a positive relationship between Authentic Leadership style, group identification and group cohesion in the fire service. López et al. (2015) explained that group cohesion is usually an indicator and determinant of organizational performance. Moreover, a quantitative research identified these relationships in four dimensions of organizational commitment: commitment to superiors, commitment to the organization, commitment to the group based on the degree of attachment, and commitment to the person's identity as they perform their job (Lee & Olshfski, 2002).

Although the concepts of leadership, organizational culture and teamwork are connected and interrelated in high-risk, complex organizations, these studies explained what forms an effective, committed team without shedding much light on leadership practices and organizational factors that help in creating harmony among crewmembers resulting in a collective identity that motivate them to perform to the best of their ability. Therefore, the present study will address the fire service as a dynamic and complex organization that works on multiple levels and functions under extreme circumstances. The study investigates leadership practices and organizational performances from a communicative perspective in order to understand the leadership styles and different layers, the culture and the performances that promote the collective identity that promotes effective adaptability and collaboration in complex organizations.

Research Questions

RQ1: What is the role of organizational culture in creating the collective identity of the fire station?

RQ2: How do firefighters navigate the tension between collective identity, individual specialization, and fixed place in the hierarchy when dealing with unpredictability?

RQ3: What layer(s) of leadership is/are enacted and valued by organizational members to create an adaptive environment?

CHAPTER 3 RESEARCH DESIGN AND METHDOLOGY

Introduction

This case study investigated the multilayered practices of Complexity Leadership and the role of organizational culture in creating the collective identity of the fire station. It also gave a particular focus on how members navigate tensions in an unpredictable environment. Therefore, this study featured an interpretive approach to qualitative case study utilizing qualitative research methods such as participant observation and semi-structured interviews. These methods are useful in exploring and explaining the details of human behavior, emotion, and personality and it helps in making sense of them to come up with an understanding of the world, society, and organization (Tracy, 2013). This case study included ten days of participant observation and 14 semi-structured interviews that were conducted at the “Swanford Town Station” in 2017.

This qualitative case study is instrumental in nature as it offers a unique way for studying and refining Complexity Leadership Theory (Stake, 1994) from a Communication Studies point of view. While reviewing the literature, I found limited research that examined Complexity Leadership from a qualitative perspective. Most of this research focused on health care organizations (Hanson & Ford, 2010; Rose, 2015) and small business enterprises (Psychogios, & Garev, 2012). However, I found no evidence of any research that investigated Complexity Leadership qualitatively in the fire service organization. Therefore, I found the use of qualitative case study particularly helpful in capturing the unique dynamics of this complex organization and in embodying the lived experience within the studied fire station to come up with a holistic understanding of its organizational culture (Starman, 2013).

This approach served this study in two main ways: it gave an understanding of the way agents interact within the fire station to create the reality of their organizational culture and of Complexity Leadership. On the other hand, it helped in dissecting and navigating the

multilayered practices of Complexity Leadership to understand its role and impact on the organizational culture.

Setting and Participants

This study featured an interpretive approach to qualitative case study in order to understand the culture of a fire station to provide “a holistic description of the culture’s material existence and meaning systems and depicts how its members achieve, maintain, and change their status” (Lindlof & Taylor, 2011, pp. 134-135). Qualitative researchers look to identify shared meanings and understandings of the mundane practices of everyday life in order to provide a detailed description of the culture (Ehn, L. & Wilk, 2016). In other words, this approach focuses on the mundane, hidden rules, rituals and attitudes that make up the culture of the “Swanford Town station”.

This case study was conducted at “Swanford Town Station”. This research location was assigned by the administration of the fire department depending on the discussed goals of my study. It is a specialty firehouse that has an in-house Battalion Chief and firefighters with higher qualifications. On daily basis, the firehouse has seven crewmembers on duty: a Battalion Chief, a Company Officer and three crewmembers that are assigned to the fire engine including a paramedic, and a rescue unit with two firefighters on board. The observations were done over ten days period where I was able to observe each crew for three 12-hour shifts at the station and out on duty, and a final day where I toured the training center, the main office of upper management, two other fire stations and the site of a recent big fire. By the end of the tour, the Chief received a fire call that he decided to respond to in order to show me how things work on the fire ground since I had not had the chance to go on a working fire call during the time of in-house observation.

Procedures

After receiving approval on my research proposal from the thesis committee, I submitted a Request for Review to the UP IRB committee to ensure the ethicality of my proposed research project and to protect the rights of my research participants. When I received the approval from the IRB committee, I submitted the paper work required for ride-alongs and spending time at the fire station. I then talked to the Deputy Chief over the phone, the gatekeeper, to explain my research, negotiate the terms of my access and complete the rest of the paperwork necessary for my access (Lindlof & Taylor, 2011). The Deputy Chief asked me questions about my project and its requirements and explained the trickiness of my situation since they usually give permission for one-day visits only. After a couple of phone calls and a background check, he gave the initial approval and connected me with the Public Education Officer who sorted out the details of the chosen fire station, the dates of the visits, the times, the expectations, and the confidentiality of the participants. This whole process took about three weeks until I received the final approval and the assigned location and date to start the process of data collection. The data collection process started with observation and then I started infusing the semi-structured interviews whenever was appropriate, starting on the fourth day and continuing for a week after my observation time was over.

Reflexivity

Based on my experience with the pilot study, I went into the data collection process with two major concerns in mind: my identity as a researcher and my preconceived biases that I had on the fire department. My identity as a female, non-American and non-native English speaker made me question the level of change I will bring to the dynamic of the firehouse and the level of effort I will need to fit in and be accepted to the crew. In addition, having a different cultural background came as a barrier in terms of conforming to the cultural norms that are taken by granted to deal with daily interactions without going through

awkward situations. Another barrier that I brought to the situation was my English as a foreign language. This was problematic for me on three levels: the first is the ability to understand and join in the fast-paced nature of informal conversations, the second is the exhaustion I felt by the end of the day going through all that mental processing of spoken and heard language, and finally was about my ability to report, describe and rewrite the lived experiences accurately including the emotions they generated for me at the time they happened. Addressing this will unfold throughout this chapter as I talk more about data collection.

On my first day, I became more conscious about those concerns when the dynamic of the firehouse was off and awkward. Firefighters were welcoming but they were distant and seemed skeptical of my presence. I started questioning my ability to conduct the research effectively, as I could not pinpoint the aspects that made the scene far from natural. I went home and I started writing down all the things that could have gone wrong on that day. I thought, “I went without having good night sleep. I was out of it most of the time. Most memories are foggy and most conversations were forced. I maybe did not come across as genuine and interested as I really was”. The second assumption was that I explained my research in more details than I should have, which made them hold back, or maybe because I did not pick up on some of the jokes and what was said to me. Another assumption was that maybe I should have started with the interviews to set the tone and allow the later conversations to follow up on the answers to the interview questions. And finally, I questioned, “Was it because I was a female in a firehouse that is full of men?”

These questions and assumptions kept bugging me and made worry about the validity of my research. It was not until the end of the second day when Brandon picked up on the tension and explained to me that the dynamic was off because people who were on duty on

the first couple of days were assigned from different shifts and stations and they did not share much in common.

As of my concerns about my identity as a researcher, it turned out that it served me well by having an instant icebreaker as people were genuinely interested to know more about about me and my background. It also gave me the advantage of having a fresh eye in understanding the taking for granted aspects of the organizational culture that are not seen by most people who share the same cultural norms and traditions.

Secondly, because I had a chance to conduct a pilot study, I had a preconceived understanding of the organization and the way things work generally in the fire department. This was a problem because the pilot study was conducted in a different firehouse and trying to understand the way things work was the key point to most of the informal conversations that I had with firefighters. Therefore, I decided to go into the new site pretending that I know nothing about their organization and had to act surprised to some of the surprising aspects that I had already known. This allowed the conversations to flow more naturally and lead to more in-depth exploration of the way their organization functions on the macro and micro levels.

Data Collection – Observation

To learn the explicit and tacit aspects of the organizational culture of “Swanford Town Fire Station”, I spent approximately three days with each shift observing for 12 hours a day. This method is considered almost universally as the center to fieldwork as well as the starting point to ethnographic research (DeWalt K. & DeWalt B., 2011). K. DeWalt and B. DeWalt (2011) explained that when doing participant observation, there are certain aspects that should be considered as a participant and as an observer. Becoming a successful participant in a culture involves different practical, logistical and emotional processes and it entails seven steps. The first is entering the field and negotiating access, which was done

through submitting the paperwork and talking to the Deputy Chief and the Public Education Officer. The second is ensuring that first contact that usually happens with professional-stranger handlers, deviants or opportunists does not limit contact and access to the rest of the group. This was avoided through negotiating access with upper management who has limited contact with the observed firefighters. This served an advantage on one hand but caused a lot of uncertainty about my presence on the other. This uncertainty was palliated through the third step, which is establishing rapport by developing trust and cooperation that helped both parties in achieving their goals. On my first day, I was introduced informally by the officer before the roll call and then firefighters started asking me different questions about my presence and my research on the morning table and throughout the day, which I thought was a result of not giving a clear statement about my situation. On the next day, I decided to improve the situation by asking the officer to give me a moment at the end of roll call. I introduced myself, explained my research project and gave a disclaimer about my English as a second language, which was funny and served as an icebreaker. From there, firefighters asked me more targeted questions about all three aspects, which helped greatly in reducing the uncertainty around the situation. This led to the fourth step, which is breaking through and that came after developing true rapport and real involvement with the firefighters. I started to know more about them personally and professionally and that allowed me to be able to move up to the next step, which is talking the talk by using the local language and discourse of the observed culture to communicate effectively with its members. For me, the sixth step of walking the walk by behaving according to the acceptable mannerisms that allowed me to be accepted into the group took place before the fifth step and played a major part in being able to fit in the group. I was able to infer some of the adopted actions and manners from the pilot study and that helped tremendously in showing them what kind of person I am. I did my best trying to join in daily activities and insisted when they mentioned

that I was their guest and they were not supposed to put me to work. The last stage was making mistakes, recognizing their impact and dealing with them, which is almost inevitable when interacting with unfamiliar cultures. This stage did not specifically come last for me as I made many mistakes throughout my stay starting with taking the seat of the chief at the table, and ending with some awkward conversations that resulted from some misunderstandings, but those were addressed immediately.

On the other hand, developing the role of an observer requires additional skills and attention to details and clues. K. DeWalt and B. DeWalt (2011) suggest that theoretical and conceptual frameworks should serve as the key guide to what is being observed. They explain that within the organization, observers should play their role self-consciously to observe effectively by attending to details, counting and presenting some quantitative aspects for accurate descriptions, attending to conversations and informal interactions attentively, and seeing old events with new eyes by not taking anything for granted. My role as an observer was guided by the Complexity Leadership Theory and the Organizational Culture approach. These two theoretical frameworks are broad and descriptive in nature; therefore, I ended up highlighting the unique aspects of daily interactions and communication performances to set the boundaries to what is being observed and reported. I kept a scratch not of communication patterns that are specific to each shift and sometimes, each individual firefighter. These notes served as a good reference when investigating the dynamics of leadership and culture of each shift. In addition, I paid extra attention to daily rituals, behaviors, emotions and stories, their variations, any important segments and any exceptions (DeWalt K. & DeWalt B., 2011).

To record the collected data, I took head notes and typed down scratch notes every hour or so on my cellphone to ensure preserving the details of the visit. In addition, I used a recording pen to record when appropriate taking into account confidentiality concerns. This was to address the concern of English as a foreign language and help me recall and

reconstruct informal conversations accurately. The recording pen generated 38 hours of recorded files, which I listened to and transcribed the relevant parts during the process of data analysis. Because of the limited time between observation days, I wrote field notes that covered the most important events of each day based on the aforementioned criteria as soon as it ended to ensure accuracy and comprehension of the data. This resulted in a 271 pages of double spaced field notes. For the purpose of organizing the large number of participants, I started a secured spreadsheet that includes the names of the participants and their pseudonyms.

Data Collection - Interviews

This study utilized semi-structured interviews to obtain data about the organizational culture and leadership practices that is grounded in the lived experience of each participant. The interview questions were connected to the purpose of the study and guided by its conceptual and theoretical framework (Galletta, 2013). The interviews followed the three segments of semi-structured interviews identified by Galletta (2013) moving from Opening Segment with open-ended questions that elicited narratives to set the ground of the interview to Middle Segment of more specific questions related to the research questions. Some interviews ended with Concluding Segment that had more theory-driven questions to clarify and connect the answers of the first two segments.

To collect in depth data for the present study, I conducted 14 semi-structured interviews, 13 of which were fully recorded. The interviews were between 30 to 170 minutes in length to explicate subjectively the dynamic and the lived experience of organizational culture and leadership practices within the fire station (Tracy, 2013). The participants were chosen based on criterion sampling considering ranks, years of experience and job titles in addition to snowball sampling to ensure quality and diversity (Patton, 2001). The utilization of these sampling methods helped in building a holistic perception of the leadership dynamic

and organizational culture in the fire station and resulted in interviewing two Battalion Chiefs, one Captain, two Lieutenants, one Lieutenant to be, two paramedics, five firefighters in which three worked on the rescue unit. Twelve of the interviewees were white males whose ages ranged from 60 year old to 24 years old, two of which were Russian and Canadian. The other two were an African American female chief in her fifties and a white female lieutenant who was in her forties.

Due to the long working hours of firefighters, the interviews was conducted in a quiet, private room in the fire station that met the needs of comfort and confidentiality (Lindlof & Taylor, 2011). The timing of the interviews was determined by the officers and the participants based on their working schedule. Three of the interviews were interrupted by emergency calls but the participants were willing to sit and complete them at a different time.

The interviews were supposed to start by developing rapport through greetings and a self-disclosure introducing myself and my research project (Lindlof & Taylor, 2011). However, since I had the chance to meet and spend some time with the interviewees beforehand, I started by an explanation of the informed consent form. Then I discussed the possibility of interruption due to emergency calls and took permission to complete the interview in another time in that case. After that, the interview started by open-ended questions to set the ground of the interview allowing participants to speak about their experience while guiding the interview to stay focused on the purpose of the study. More specific questions related to the research question followed to clarify the narratives followed by questions with theoretical considerations to revise, connect and conclude the interview (Galletta, 2013). The interviews were recorded for transcription, data analysis, and future reference. This produced a little over 13 hours of recorded files that took over a month to fully transcribe. The transcription was a lengthy and slow process as I learned keyboarding during that process. At the end, this resulted in 270 pages of transcribed interviews.

Ethical practices

When conducting an interpretive qualitative case study that includes participant observation and interviews, there are certain ethical considerations to pay attention to in order to protect the participants of the study. These ethical considerations include informed consent, right to privacy and protection of confidentiality (DeWalt K. & DeWalt B., 2011), data security, and textual representation (Lindlof & Taylor, 2011). Informed consent is to ensure that participants are assuming their role in the study voluntarily and have an understanding of the benefits and risks of study, their role in the study, and their right to privacy, asking questions and opting out (Lindlof & Taylor, 2011). The right of participants to privacy requires protection of their confidentiality by not releasing any information that could identify them (Treadwell, 2014). In order to avoid identifying participants in textual representation, researchers must use pseudonyms, represent participants in demographic terms and avoid identifying the social setting by name (Lindlof & Taylor, 2011). Moreover, collected data must be saved in secured files/place and not shared with any unauthorized persons (Lindlof & Taylor, 2011). These strategies ensure the protection of participants from any physical, psychological, social and economic risks that are related to the conducted study.

In this study, I was committed to conducting an ethical research by guaranteeing the protection of participants' rights and keeping potential harm very minimal. When negotiating my access to each shift at the fire stations with chiefs and company officers, there was a feeling out period where I explained my research objectives and benefits. I was also open to address any questions and concerns that were raised about my research and my presence at the organization. When conducting the interviews, I took permission from officers in command about time and place to make sure that participating in my interviews did not hinder the job performance of any participant. Although the interviews took place in the fire

stations, I made sure that they were conducted in a protected, private place such as the officer's doom room, the chief's office, the watch room and the gym. I chose these areas to make sure that the participants were able to feel comfortable to speak freely about leadership and organizational culture without being heard or identified. Before conducting any interview, I handed out and explained the informed consent form that states the rights of the participants including the choice to opt out at any given time. When any participant chose to practice that right at the interview or the observation time, I made sure not to use any material that is related to them without their permission.

For further protection of the confidentiality of the participants, all records that include information that identifies the research participants for the purpose of organizing data is assigned a security code. The rest of the collected data including interview records, field notes and any footage are identified by pseudonym names of participants. Furthermore, they are saved on a computer with a security code and the access is limited to my instructor and I.

Data Analysis

The process of data analysis initially focused on three main fronts, which are data management, data reduction and conceptual development (Lindlof & Taylor, 2011). Data management started during the process of data collection, as I tried to highlight relevant pieces that emerged from interview transcripts and field notes using asides and commentaries. Data reduction and conceptual development happened during the recurring process of coding and coming up with potential themes and categories that kept evolving over a period of seven months. These three processes helped manage, organize and reduce irrelevant information from the large amount of data.

Coming up with codes and categories led to the use of Constant Comparative Method that helped in organizing and making sense of the messy, large amount of data (Glaser & Strauss, 1967). The first stage included developing as many codes as possible from the field

notes and interviews transcripts using color-coding and a spreadsheet to organize the ideas. Then I used post-it notes of codes and categories to conduct a series of comparisons and contrasts in order to determine the similarities and differences among the data for the purpose of integration and making connections among categories. A lot of possible answers emerged but none of them were comprehensive and descriptive of the entire concepts. Through contemplating these codes and themes and revisiting the main interview transcripts and field notes for months and months, I was finally able to come up with a satisfactory product that is descriptive of the organizational culture and leadership practices. That came through the ability to dimensionalize each category by identifying its properties and the logic behind its creation and the connections among these categories. Finally, when it came to the point of extracting quotes and exemplars, I found myself overwhelmed with the amount that I wanted to include in my paper. Thus, I decide to focus on the ones that convey unique aspects of leadership and organizational culture practices and arranged them under the relevant themes. This was a long and an ongoing process that kept me going back and forth until I was able to come up with a logical product that fits within the conceptual framework of the study.

CHAPTER 4 FINDINGS AND DISCUSSION

Introduction

This chapter describes the findings of this case study through offering an in-depth exploration of the organizational culture (Starman, 2013) of the fire station based on the Organizational Culture Approach (Pacanowsky & O'Donnell-Trujillo, 1982). It also builds on Complexity Leadership Theory (Uhl-bien, et al, 2007) in understanding the multilayered practices of leadership that are enacted communicatively in the fire station. Grounding the results in these two theoretical frameworks makes this a “discipline configurative” case study (Starman, 2013). However, the discussion section takes this case study a further step by providing a “building block” though explaining an additional element to Complexity Leadership Theory, which is the role of collective identity in organizing for unpredictability. It also examines the negotiation that happens through the navigation of the tension between collective identity, individual specialization, and fixed place in the hierarchy for the purpose of creating an adaptive environment that is equipped to deal with complexity and unpredictability.

For an outsider, Swanford Fire Department appears as a stable and steady organization that performs its day-to-day operations smoothly. The first look at the organization's leadership and management would show that the hierarchy never changes, the flow of top-down information never stops, and firefighters go to work every day and respond to emergency calls without any delay. However, underneath the surface, the organization is influenced by a variety of interactive elements and is constantly under far-from-equilibrium forces that keep pulling and pushing to shape the organization and give it its balanced and steady appearance. These elements are organizational structure, social structure, and unpredictability.

Findings

The complexity of the fire department is built on three main elements: the organizational structure that consists of materials and hierarchy, the social structure and all the traditions and gender heterogeneity that contribute to shaping it, and finally, the multilayered leadership practices that comes through when dealing with the unpredictable nature of daily tasks. This study takes investigating these elements of organizational culture to a different depth by exploring the symbolic meanings that construct the organizational culture and the way firefighters make sense of them. The understanding of these interactive elements that underlie the symbolic culture of the fire station helps in investigating the multilayers practices of leadership that are enacted within the organization. The interaction and interconnection amongst these elements shape the organizational culture and collective identity allowing for adaptability through self-organization and formulation around specialization.

Symbolic Culture

The symbolic culture of the fire department consists of the shared meanings that firefighters use to make sense of their organizational structure, social structure and adaptive leadership practices resulting from unpredictability. This unpredictability holds a unique stance in the symbolic culture as it plays a role in creating its reality, yet at the same time, it emerges from it. All of these interactions and collective sense making of the materialistic and communicative elements create the organizational context that is the foundation for Complexity Leadership to take place.

Organizational structure. The organizational structure of the fire department consists of the materials that create the work environment and the hierarchy that brings the organization into existence in the traditional way. These structural elements have agency in influencing the way firefighters perform their daily duties in and outside the firehouse.

Understanding the way firefighters make sense of these two elements communicatively is what creates their collective identity and organizational reality and takes the organization beyond its literal formal structure.

Materials. Swanford Fire Department consists of a collective of materials that have a high influence on the perception of its reality beyond their literal existence whether by firefighters who serve as employees and the public who serves as customers. These materials include fire stations, fire apparatus “the rig”, the fire gear “the turnout”, and the uniform.

Fire station. The fire station influences the reality of the firefighters in many ways as it is designed to suit their situational needs functionally and socially. Starting from the exterior, the fire station is designed to look like a house and more than often, I found firefighters referring to it as the firehouse or the house. This house serves a symbolic meaning to their professional family that they referred to in more than one occasion. In addition, the house’s design and layout influences firefighters through the separation between functional and daily social activities in addition to marking the distribution of formal power. The house is divided into two parts that are separated by the bay area, which has the fire equipment and apparatus. The first side that has the main entrance with the welcoming sign is implicitly assigned the functional and hierarchical power. It has the chief’s office and bedroom that connects him to his own car garage on one side and the room of the company’s officer and their bathroom on the other side. In between the two rooms is the “Watch Room” where it overlooks the bay area and has all the computers and administrative equipment. The name of the Watch Room grants it a special symbolic meaning of maintaining part of the history of the organization as it used to be the place where a dispatcher would spend their day in wait of receiving emergency calls before the utilization of Central Dispatch System. Tim explained, “There is history that they try to carry on”.

The other side of the firehouse symbolizes home and sets the tone of the social dynamics. It has two entrances from the bay area one leads to the dorm rooms, the bathrooms and the laundry area and the other leads to an open floor plan that consists of the kitchen, the dining table, and the living room with six recliners facing the big flat TV. The two parts are connected with a door.

This division of the building determines the nature of activities done on both sides. The chief and the officer do their administrative work on their side. In addition, firefighters perform their formal administrative duties such as meeting with the person in command, writing their reports, and meeting with visitors on that side too. Where as they practice the activities of their social life and have firefighters from different shifts over on the other side of the house. This allocation of different tasks to different parts of the house shows the importance of the layout of the house to its culture. Moreover, the nature of the house dictates the kind of work that needs to be done such as cleaning, cooking, lawn mowing, and taking care of laundry.

Each firehouse is assigned a unique identity, starting from the number that serves as the name of the house. Firefighters refer to each firehouse attaching a possessive 's' to its number when identified as when we went on a fire drill with 34's. When I exclaimed about that, Bob explained, "they call them 34's to identify the fire station as a whole instead of by individuals who are part of the station. If any of the crewmembers were to move anywhere else, the station's identity would stay the same." This maintains the identity of the station within the fire department as a specialty firehouse and everyone who is assigned to that station is identified with it and its status. Bob further explained the cartoon character that is assigned to his station. He said that the stickers of the character on the fire engine are a symbolic representation of another form of identity of the firehouse. It's associated with the kind of tasks they specialize at and they utilize that character's name for the Wi-Fi password

among other things. These identities provide a frame for the collective in which firefighters conform to and perform their duties within.

Fire apparatus. The fire apparatus, which is represented as the engine, the truck, the rescue unit, the squad and the foam unit, holds a certain amount of importance within the fire department and out in the eyes of the public. Different fire apparatus needs firefighters with certain training and specialties. For example, the squad unit that goes out on big emergencies and disasters needs certain type of training and a more selective process of interviewing and hiring. These apparatus are symbolic for higher status firefighters and make for a specialty firehouse, which firefighters kept referring to as an “elite firehouse”.

Seating in the fire apparatus usually dictates the tasks of a certain individual and the way they are expected to behave and perform out on calls and especially on fire calls. Brandon explained, “On the engine, it [responsibility] varies based on where you’re sitting and type of call and that’s something that we all learn in training and so it’s the same in every firehouse you go to, so if I go to station 44 and ride in the seat behind the driver, I know what I have to do.” This explains that materials have some agency in influencing the way firefighters perform their duties when out responding to emergency call.

This automatic realization of responsibility came based on the assigned role that was given by officers on morning roll calls every morning. Firefighters knew what to do on every emergency call that I went on with them. The driver always stayed by the truck on fire calls to connect the fire nozzles when needed whereas officers were always on the seat beside the driver working on the computer, giving direction, talking to dispatch and filling the chart. The two on the back were the ones who put their turnouts on when needed and were the first to be out on the scene. This realization of roles shows the importance of the cultural elements of materials in generating self-organization.

Furthermore, tools and supply are arranged similarly in all fire apparatus that are under the department of Swanford Fire. This is to ensure the ability of all firefighters who move around to perform their job efficiently without any delay while looking for things in the time of real emergencies as firefighter Peter explained. This further shows the agency that materials have in the organization of the firehouse and its importance to the culture and potentially self-organization.

In the eyes of the public, the apparatus, the siren and the bell give firefighters some status that comes with certain expectations, which holds them accountable to higher standards. Scott said when talking about their responsibilities as firefighters, “it’s not our fire engine it’s the citizens’ fire engine and we need to make sure that the fire engine is being maintained, it’s clean and functioning.” In another incident that is in alignment with what Scott said, happened on our way heading towards an emergency scene, the windows were open and a kid waved at the fire engine. Not being a firefighter, I did not feel entitled to wave back so Luke told me, “Come on, be friendly! They are not waving at you or even at me for that matter, they are waving at the engine.” This shows that firefighters are aware of what the fire apparatus symbolizes to the public and the status it grants them collectively with disregard to their individual identity.

Turnout gears. Each firefighter has their own firefighting gear with their nametag on it. When on calls, it is important that firefighter put on their own turnout to identify themselves when their faces are covered with head masks. Therefore, travelers, firefighters who are not assigned to a firehouse yet, carry their turnout gears with them to every fire station they go to. Besides, one of the first things that firefighters do when they first arrive to the fire station in the morning is to take the turnout of the firefighter from the previous shift off of the “rig” and put theirs on and that symbolizes the end of one firefighters day and the beginning of another’s. Thus it determines the person who goes out on calls during the time

of shift change. It has such powerful implications to the extent that it escalated to a fistfight in one incident as Brandon narrated,

Everybody knows I get here at 7:00 every time and a fire came out and I was putting my stuff on the rig so I had the other guy's stuff off and my stuff was half on and it was a working fire and so he got in the rig and closed the door, I said "dude, my stuff is on and your stuff is off!" He was like, "get your stuff off, I'm going" I was like, "mine is already on" He's like, "you're wasting time, let's go!" and so I had to take my stuff back off, put his back on so he can go to the fire which ticked me off that "you don't do that" and then he got back and he wouldn't clean anything because it's time for him to go home so he got back and left the rig a mess and went home.

This incident explains that firefighters mark the start of their duty by having their own turnout on the rig. Not subscribing to that symbolic meaning resulted in the frustration that happened between the two firefighters who both were excited to respond to the call. The conflict escalated to a fistfight in the kitchen as both of them thought they were right to behave the way they did.

Uniform. Firefighters have different kinds of uniforms that are symbolic to the level of importance that each occasion holds. Firefighters are provided with t-shirts, sweatshirts, caps, and workout clothes for daily functions. When out on formal visits and functions, firefighters put on their black shirts, as Lieutenant Olivia required them to when we went to visit a U.S Navy ship. For formal occasions and ceremonies, firefighters put on Class A Uniform as the orders came down from the Fire Chief for attending the Ceremony of Honor to show respect to all those servicemen and civilians who performed heroic actions on the previous year.

Firefighters realize that each uniform is symbolic of a certain level of power and holds them accountable to higher standards as I felt walking besides them wherever we went. Firefighter Scott said when he nicely greeted a group of people as we were entering the supermarket, "wearing this uniform makes us stand out and that requires us to be nice and friendly as we are a representation to the bureau not just ourselves." When in uniform,

firefighters have the power of representing the city and they are expected to behave accordingly. Furthermore, daily uniform diminishes the individual identity of a firefighter in the eyes of the public. Firefighter Peter explained,

Because we don't represent ourselves when I put on the uniform, I'm not Peter Jacobson, I'm basically a firefighter for Swanford Fire and Rescue and when we go out on calls, it might be the first interaction that the public has with us and I think that upper management wants us to portray a positive image of the fire department...

Each of these organizational materials has their own symbolic meaning and way of influencing and shaping the behavior of firefighters, and collectively, they play a major role in forming the organizational culture of the fire department in the eyes of the firefighters as well as the eyes of the public.

Hierarchy. The fire service is a paramilitary organization. It is organized based on a top-down hierarchy with high regulatory compliance. According to firefighters, upper management symbolizes stability to the organization and plays a major role in setting its tone whether positively or negatively and that majorly influences the morale of the general workforce as Lieutenant Owen, among others, indicated about the new Fire Chief who had held the position for almost a year at that time.

Ultimately, the chief sets the tone of the organization and the tone doesn't change over night but when people see the tone is the same over that year period, that's a good thing because they're getting the same message over and over and over and not somebody who's waffling and changing all the time so no matter what direction you're going in, it's clear and concise that we are going that way and it's been nice because he's empowered people below him to do the job and in turn they empower people below them to do the job so it does have a trickle down effect to where we see down at our level too.

This explains the role of upper management in setting the tone of the organization by creating a clear vision and making decisions that are consistently in alignment with that vision. Furthermore, firefighters subscribe to the meaning that this hierarchy holds as a stable structure and a resource that they need for general and macro organizational governance and

in dealing with mere chaotic incidents that need a firm and instant decision-makings. They reported that everything comes under the name of the person in command and that is why they have the final say when needed.

Training. To make the job of Chiefs and Officers easier and to make firefighters aware of the department's standards and expectations, the fire department has a very rigorous training academy in where firefighters go through immense pressure that shapes them into knowledgeable firefighters that meet the organizational standards and perform accordingly. Ethan explained,

Training was the most stressful thing in the world, it was terrible, it was awful, because for like a year, they can just decide to fire you and that's it. You're done. So you have that weighing on you and you're completely tested on every single way like without really being told, socially, physically...

That kind of training holds the role of filtering fit people that deserve the premium trust granted by the department to their new firefighters, as they can be confident that every graduate has the ability to find their role in the firehouse and perform their tasks without a lot of guidance. Neil Explained when talking about new firefighters,

You put the trust in them that they already went to the training and they made it through and you went to the same training so you know what it's like so they automatically get "I trust you" stamp of approval. From there, you then decide how much trust beyond that in their abilities and that just happens over time...

Promotion. Monitoring performance and governing behaviors of crewmembers are still vital in hierarchical, high reliability organizations. Therefore, Swanford Fire department has a difficult and competitive promotion process that allows interested and eligible firefighters to promote to the job of an officer or a chief while ensuring competence and commitment. This makes firefighters take the step of promoting very seriously. Firefighters reported that their main reason that made them decide to take the promotion test was the desire to take on new challenges that allow for personal growth. Chief James explained,

I really enjoyed the job [being a captain] but I thought I wanted to challenge myself a little bit more, I was in the specialty position, so I was a paramedic captain so there

wasn't a lot of money becoming a Battalion Chief but I wanted my brain to grow, I needed a stimulus so I took this on.

Once someone promotes, they earn the formal right to develop their own leadership style and set the tone and expectations of their own district, fire station or crew, and that was another motivation for firefighters to go through the process. Spending time with all three shifts and two other fire stations, I was able to notice the difference in tone culturally and practically based on the officer's communicative style. When Chief James gave his opinion about off-color language, he indicated his own opinion and his own expectation of the district that he supervises and the standard he holds them accountable to in spite of the formal rules. He explained,

How I really feel, and upper management may not agree with me a whole lot on this, is that the most important thing is that everybody feels comfortable and safe at work and I don't ever wanna hear of anybody that not feeling that the lines are crossed and they weren't be able to immediately remediate themselves.

This shows the management style of this specific Battalion Chief who has some flexibility in the use of language in the firehouse as long as everyone is comfortable with the situation. Whereas, some officers might be more strict and abide by the book when it comes to that matter. Therefore, officers try to make sure to state their expectations clearly at some point when holding their new position in order to avoid any confusion. Captain Jeremy, who had been a captain at the station for less than a month said,

One of my other goals is to talk about what I think is important to just good firehouse culture and then that's communication so when things start to go wrong, my expectation is that we talk about it and then if you have a problem with somebody, you need to go to that person and say "I'm having an issue" I think when we neglect to address problems and have difficult conversations, they tend to get worse.

This is the captain's idea of what makes for an ideal organizational culture and if he enforced these expectations on his crews, he would be able to cause a gradual shift towards his vision of an ideal firehouse.

Despite their leadership style, the scope of responsibilities of promoted individuals expands, as they get higher on the chain of command. They become more involved with administrative work, enforcing the rules and regulations in addition to being the conduit between the firehouse and upper management. Nonetheless, chiefs and officers stated that their number one priority is to protect and keep their crews safe emotionally and physically. This came across when there was a conflict of misunderstanding in the firehouse and the Captain looked at me saying, “you should keep this out of your paper.” Lieutenant Owen agrees by saying, “My management style is community first, crew second, everything left over, then me. And that works in every decision that I or we make as a group.”

All of these responsibilities make many firefighters hesitant to take the step of getting promoted as Chief James stated that he missed being part of the team while Lieutenant Owen said that he does not want to promote as the job satisfaction would not be there. Regardless, the ones who decided to go for it are looking to grow and challenge themselves, learn more about the job, and have influence over others. Whereas those who do not look forward to getting promoted agree that they are happy with their current assignment and need to learn more about their job before thinking about the next step. Brad elaborated,

I want to be very competent as a firefighter especially on the fire ground where I feel like the most dangerous aspect of my job is in order to manage three people underneath me or even the entire scene, I don't feel like I'm ready for that...

This formal, hierarchical power, and the collective sense making of it, where everyone understands their professional role and position, has a strong symbolic meaning of and a great influence on the organizational culture. It shows that it shapes its structure and governs its behavior and performance. It also dictates the roles and responsibilities of each position and holds people accountable for what they decided to take on.

Social Structure. The fire station is set up to serve firefighters as a house for their professional family. Firefighters spend one third of their lives at this place so they develop their own social hierarchy that distributes power amongst them, which helps in creating a harmonious, drama free environment. This social power is distributed amongst members with disregard to their formal position and status. It depends on deep understanding of each other's strengths and weaknesses that emerges through well-developed relationships.

Relationships. During my time at the firehouse, firefighters demonstrated good relationships among them that manifested in small talks, asking about families, helping each other out in daily tasks, talking about shared interests, and doing activities outside of work. Chief Walter explained that the development of these relationships goes beyond having a good time, as it is vital to know the level of trust and comfort you have in someone on emergency scenes. Chief James added, "if you think about it, they're like I have to trust these people now, so you got to know them."

This family dynamic in the firehouse is forged through strong social bonds that develop overtime because of similarities among the crew, shared understanding of the job, shared experiences, shared long work hours, shared activities outside of work, and the ability to form their own crews.

Going through the same training gives firefighters a common, solid ground to build on when it comes to relationships. It filters good candidates who fit the mold of the fire department along with giving them a shared understanding of the job and its expectations. Scott explained,

It [relationship] comes from the similar aptitude and attitudes that there's a certain type of individual I think is successful within this line of work and often times, by the time they get through training, they have or begun to develop this types of the qualities, the qualities that make them find their place in the firehouse.

Another factor that allows for the formation of the strong bonds is the shared understanding of the job, which allows firefighters to work cohesively with minimal

conflicts. Chief James made a comparison between the family at home and the family at the firehouse when he said,

Divorce rate is higher amongst firefighters than among other jobs and that I think because sometimes this family is easier. There's more structure to this than at home so this family is easier to deal with and you are drawn more to this family than the messiness at home.

He elaborated that whenever he orders that the kitchen is inspection ready, everyone in the firehouse knows how that looks like, whereas his wife does not know exactly what inspection ready indicates. This mutual understanding gives the family its structure that minimizes misunderstandings and conflicts, as everyone is aware of the expectations and their roles in meeting them.

Moreover, firefighters are people that joined the force from all walks of life; therefore, people bond over all kinds of interests and activities during their time at work. I noticed people from different crews bonding over the subject of baseball, hunting, health and fitness. They watch the game or talk about the topic of interest for hours and hours. Captain Jeremy said,

That's one of the neat things about the fire department is there is always somebody that's interested in the same things that you're interested in so it's easy to sort of find your circle of friends or people that have similar interests.

In addition, firefighters take their relationships outside of the firehouse and they enjoy a variety of activities that are important to their crew like attending a rodeo game to support on of their own or taking a biking trip as a whole team. Moreover, they involve their families when appropriate inside and outside the firehouse. On father's day, Jordan's wife and his two kids stopped by the firehouse for a couple of hours to bring him a gift and play around the firehouse. Scott took the time to explain things to the kids, which caught their interest and made Jordan thank him later. On another occasion, Lieutenant Owen's son and future daughter-in-law brought cookies and spent some time with the crew talking about personal

matters like Owen's childhood among other things. These extended relationships with families strengthen the bonds amongst firefighters and increase the level of trust in return.

In addition to these factors, firefighters have the luxury of building their own crew so they pick and choose who they want to join them in the firehouse. Lieutenant Owen explained, "We have had the fortunate ability to bring people in here too. You look for people you're not going to get along with too so you kind of get to build your crew." Firefighters realize the importance of that as one of them said during a casual discussion, "Because if you are not a good match, it's kind of like a disease. Like you're bringing cancer to the station if you bring one person that doesn't mesh with the rest, you know."

This shows the importance of these relationships on the personal and professional levels through their representation of trust and mutual dependency on each other. It creates the foundations for the social structure of this family. This social structure is organized into a powerful hierarchy of a different kind that governs the way people act and behave in the firehouse and sometimes out on calls. In this structure, formal power holds little influence until it finds its way into the social structure. On my first days at the fire station, the Captain was on leave but firefighters informed me that he was new to the station and they were still in the process of feeling him out. When I met him on my sixth day, his efforts of trying to find his social stance were quite apparent as he listened and observed more than talked, asked many questions about the way things run in that firehouse, and shared personal stories on more than one occasion to connect with the rest of his crew. He explained to me, "While I have the positional power and positional authority, that can only take you so far." Scott added,

I've seen captains come in, had very strong work ethic, very powerful presence, come in very softly and quietly and just come in and do the work and be with their crew and learn to get to know the on going and off going shifts during roll calls, during training over time and see what functions and do kind of acquire an assessment of how things are before they begin to affect change or begin to move things and I've seen that to be affective

Therefore, the informal leaders are recognized and appreciated by officers and chiefs to have an undeniable power and influence over the dynamic of the firehouse.

Informal leaders. At the top of the social hierarchy are the informal leaders who earn their place tacitly through outstanding competence, seniority and possession of unique skills or knowledge. Firefighters agreed that each fire station has at least one informal leader that is a representation of what a good firefighter should be like and they are looked up to especially by new organizational members. Lieutenant Owen said, “There’s definitely an informal leader at pretty much every fire station. Sometimes, there are more than one...” Brandon added when talking about the informal leader on his shift,

Two part of a person, there's one who's technically has been here the longest and who's the oldest and that's Jerry and then you have who is just really good at their job and really respected and that's also Jerry but it doesn't have to be the same person.

Jerry has been assigned that informal leadership role by almost everyone on his shift. He is a laid-back, mid-aged guy with a great sense of humor. At first, I did not, in anyway, expect him to be the informal leader but then I noticed that firefighters refer to him for advice, he is comfortable with his crew to say that he would not get out of the truck to respond to a non-emergency call that came after a long and exhausting day. I’ve also been told that he’s at his best on fire calls, “That’s where he really shines, there’s no way you can work harder than he does in the fire scene and he’s just always in the right spot”, Brandon explained.

Another type of informal leaders that I noticed in the firehouse was held by the ones who possess unique skillsets. For example, Brad likes to cook and fix things and everyone in the firehouse is aware of that. Once, the TV stopped working so all firefighters started shouting his name to come from his dorm room and fix it without even trying to do it themselves. When Brad started talking about his desire to move to another station with a

better opportunity for him, his crew complained, “What would we do without you? You’re like our leader, leading us with providing food and fixing stuff.”

These types of informal power play a major role in determining the dynamic and power distribution in the firehouse. Therefore, a formal leader would only be able to manage effectively when they find their own place within the social hierarchy and blend in before deciding to take any major action of changing the dynamic of the place. If not, firefighters and especially senior firefighters will face that attempt of change with resistance. Chief Walter suggested that it’s “Very important for that officer to watch and listen and figure out those dynamics at the station and if you, as a new officer, come in there and you want to fight that informal leader, you’re in for a battle.” Therefore, new members to the firehouse need to observe in order to be able to assimilate to the culture and the meanings assigned to it accordingly.

New firefighters. At the bottom of the hierarchy comes new firefighters who have just graduated from training or has just settled in a house after spending some time travelling from one station to another. Those are expected to observe and learn until they are more trusted socially by senior firefighters. Neil explained,

The idea behind the training that we have is that anybody can walk in the door that's wearing the uniform you go “I trust that person” I don't know them but I know if something serious would've happened, they've got my back and that's the basic level you give them. After that it's just a matter of can they take the joke? Are they sensitive?

They are expected to fit in socially before they are started to be recognized for their competence and unique skills. Lieutenant Olivia explained when talking about the way new recruits are treated in the firehouse,

They usually are taught to set there and be quiet until you have a little bit more time in but there’s been some new people that come in that area super smart and as long as they can communicate effectively and not come off as being know-it-alls, which is tough to do when you’re brand new, if you come in and know something more than the other people, it usually rubs people the wrong way, honestly.

These expectations are found because firefighters appreciate the importance of social bonds out on calls as much as in the firehouse. "There's nothing says that you have to get along with everybody but the difference is so much better when you do. So I don't know if that's a responsibility as much as a desire." Neil explained.

Traditions. With that social structure and family dynamic at the firehouse, firefighters develop a set of traditions that they use to distinguish their culture from other professions, stations and shifts. When I first entered into the social side of the firehouse, the first thing that caught my attention was the dynamic energy. It felt almost like of a big family in a school morning. People were coming and going, some of them were in their uniforms and some were in their daily clothes, some were having breakfast and some were chitchatting on the side, but the overall atmosphere was happy, energetic and exciting. During their time at the firehouse, firefighters develop daily rituals and communication practices that create a culture of harmony and mutual understanding of meanings.

Daily rituals. Firefighters across all three shifts enjoy some rituals that symbolize the bonds amongst them and shape their organizational culture of the firehouse in general and of their shift specifically. They also strengthen the relationships they develop among them and deepen their understanding of each other. These rituals include coming to work early as "everyone of us has family commitments like they need to pick up the kids from school and stuff like that, so their early attendance allows people from the off going shift to go about their life early", Scott explained.

In addition, firefighters agreed that morning table and the roll call are the most fun and important part of the day where stories and information are exchanged as Brandon explained,

My most favorite time is in the morning because there's that from 7 to 8 o'clock where the two crews are just around the table drinking coffee, kind of catching up, that's my favorite time in the firehouse. So I know it drives my wife crazy because I have to get

up and leave early and she's like why do you have to be at work at 7, you don't work until 8. "Well, You don't get it!"

Firefighters sit around the table for an hour or more talking about business matter, the calls of the previous shifts, personal life events and personal experiences. It starts casually with the off going crew. Then it shifts to formality as one crew leaves while the other gathers around the table to start the roll call where the officer assigns duties and go over memos and business orders. That is followed by casual conversations discussing opinions about business and people in addition to some possible solutions for whatever they are concerned about until they gradually leave to start housework while they carry on informal conversations. Rituals are carried out throughout the day in working out, cooking, playing cards, napping, watching TV shows, and doing something extra for the group.

Assimilation to these organizational rituals is important for outsiders and newcomers, as they are the representation of the foundation that trust and mutual dependency are built on. Assimilation serves to show the personality of the new person, which has great impact on the dynamic of the crew on emergency scenes. As I struggled with shuffling the cards and they did not spare the chance to make fun of me trying to do it underneath the table, Peter said to support my ignorance, "I never played cards before I got to the fire service so I had to go home after my first shift and buy a deck of cards and go on YouTube and learn how do you shuffle." Not conforming to these rituals make the person a target for gossip, criticism, which keeps them outside of the circle and eventually tarnish their reputation in the department.

Discourse. Through their time together in the firehouse, firefighters develop their own discourse and communication patterns that shape their organizational reality and their perception and sense making of it.

Firefighters have a realization of their reality as a social group with a set of unique qualities. When I explained my reasons of choosing the fire service for my study, they joked, "you basically want to know what makes us tick?" they kept revisiting the idea with

comments such as “did you see how dysfunctional communicators we are?” Despite these negative remarks, firefighters used certain language to maintain the ideal image of their organizational reality. They used terms like family to describe their job environment but then they negate that term with ideas such as “it’s one big, happy family but there are dysfunctional families.” They also explain that the intrinsic reward is what drives them to do the job but that did not usually come at the top of the list when asked about their favorite aspects of the job. Lieutenant Owen’s answer was, “it’s mostly the people I work with and I really enjoy going on fires {chuckle} I love fires, It’s like... you know I like helping people too.”

Another way of creating their reality is done through gossip, which is the way to indirectly state the expectations, and establish and maintain a reputation in the fire department. Reputation circulates through the entire department and firefighters share their good and bad experiences with others elaborately. One morning, firefighters were talking about different people in the fire department and Luke shared a story about a firefighter he previously had had a bad experience with:

You’re getting this guy and I’m like whoa whoa whoa no! So he forced him on us and the guy never had the will, the desire or the passion to learn the rigs or the equipment or nothing and the three of us weren’t really gonna throw away the company because he was forced on us and yet it was kinda awkward situation anyway.

In this situation, firefighters can infer the way laziness and indifference are not tolerated or received well by others in the department. Further, the story indicates the bad reputation of the mentioned firefighter that would prevent him from “getting in a good firehouse” as they explained to me later.

In addition, firefighters resort to categorization when making a point about their organizational reality. For example, using the term that “this is an elite firehouse” or “It is a specialty firehouse” indicating higher status over other fire stations. They also use

categorization when it comes to identifying the type of calls they respond to. We were on a visit to another fire station where I had the chance to ride along responding to two non-emergency calls for homeless people. On the way back to the main station, firefighters asked me about the calls I went on and explained that they are lucky that they do not have to deal with that kind of calls all day and night indicating superiority in some sense.

In addition to that, firefighters utilized certain communication practices to cope with their social and professional realities such as dark humor, detachment, sarcasm, complaining, teasing, and sharing personal narrative.

Dark humor is utilized by firefighters to palliate the negative emotional effects of a bad call. In one incident, we responded to a call for a dead person. The paramedic did his job and when we were about to leave, he got on the engine and said with a smile, “we got him back!” I was so happy that I jumped of excitement, “really!” Bob shooked his head and said, “They never come back.” I replied, “That’s just so dark.” He replied apologetically, “This is how we cope with stressful situations.”

Another way of dealing with tough calls is detachment. Scott said that in order for him to provide people with the needed care, he views them as customers who he is merely providing service to. Lieutenant Olivia explained her similar approach,

When I was a brand new lieutenant and we went on a call where the baby was dead. He was six months old and he was cold and we tried to revive him and the mom was freaking out and the paramedic looked at me and said done and it is my job to tell the mom. I remember giving myself a pep talk “this is your job, how you’re gonna say this?” and my heart was going fast. It was awful. I just said, “I’m sorry there isn’t anything else we can do.” I remember I had to act like I was in a movie. I had to act like I was an actress because what I wanted to do was not that. I wanted to run out of there and I had to act like I’m acting a scene in a movie. I kind of did that, because it wasn’t me. It wasn’t how I felt. That was a tough one, really sad.

Firefighters indicated the importance of this detachment in order to be helpful on scene as one explained, “it’s their emergency, not yours.”

Firefighters use sarcasm whenever dealing with the frustrating aspects of their job that they do not feel motivated to do. For example, after responding to a nonemergency call to a clinic, “great job everyone, truly a life and death experience. Amazing!” Luke said as we got back on the engine. In another incident, sarcasm demonstrated frustration with the chief’s orders when he asked lieutenant Olivia to take her crew to inspect a place that was on their way as they were running some errands. Olivia gave the order to her crew. After the inspection of an open, old train tracks. Tom said sarcastically, “Thank you chief. We wouldn’t have known what to do if we didn’t inspect the place.”

Complaining and talking about people after emergency calls is another way that firefighters use to deal with non-emergency calls and their frustration with them. When a young woman had overdosed on her medication, the firefighters had to deal with her husband who lacked the ability of good judgment. On the way out of the apartment, Ross commented that he hoped that they were never planning to start a family ever because bringing a kid into that mess would just be disastrous.

These are the communication practices that are used to palliate tough calls and the frustrating aspect of the job. However, teasing, stories and special discourse are utilized to strengthen the social bonds within the firehouse.

Teasing is adopted by firefighters to strengthen their relationships as what happened on my first day. Ben asked me about the pronunciation of my name so Bob told him to write it down phonetically as he did. I looked at Bob and said, “Oh, that’s sweet!” he replied, “don’t flatter yourself, I do that to remember anybody’s name.” And immediately explained that this is their way of interaction and expressing affection. A couple of days later, I got the hang of the game so Luke was singing loudly and everyone was making fun of his voice. I jumped in and said, “hey, excuse me! I’m a guest and I shouldn’t have an opinion but I just can’t handle it” There was a meaningful explosion of laughter that “she got it” so he said,

“You’re getting too sassy. Hey, she’s starting to fit in around here. I’m sure I liked you way more on your first day!”

For firefighters, it is important that newcomers are able to learn this practice and give as much as they take. It makes the transition into the inner circle smoother and easier as part of it shows their ability to fit in and deal with the pressure of the situation.

Teasing is also utilized among firefighters to deal with conflicts in a friendly manner without escalating it to the next level. Lieutenant Olivia explained the way firefighters deal with conflicts, “the best way that I’ve seen is to like almost go on the offensive and throw it out in a teasing way. It seems to be how people communicate around here {laugh} I don’t know how modern that is!”

Another communication practice is storytelling, which happens every morning and whenever there is a chance for that. It serves many purposes of setting the expectations, circulating reputations, building relationships and suggesting better practices. Chief James said,

At shift change, you have people that are going off work and people coming on and they share stories about their days both at home and at work and in their own lives and so there's.. The stories often were interesting, funny, sometimes sad but they were never been spirited, never hateful and people would always be a little bit kinder because I think we're on that work environment but the stories were still genuine and the relationships were genuine...

Chief James and many other firefighters emphasized the importance of storytelling, especially in the morning where the two shifts are present and about to start their days.

Finally, each shift in the firehouse developed their own unique discourse that bonds them together and create part of their unique cultures. “B shift” for example has a “boys club” culture where they had a distinctive way of addressing each other such as dude, body, bro, and homie. They also had a drink they call “work beer” and breathe mint they refer to as “snus”. They use the term “you know what I’m saying” all the time in a certain sarcastic tone.

Interestingly, when referring to the interviews during the coding stage, I would mix up participants from “B shift” on who said what as they have a very similar stylistic qualities.

Through the use of all of these discursive patterns, firefighters are aware that there are some guidelines that should be followed and everyone has to feel safe and respected. Chief James stated,

You know the rules and if you break those rules, you’re taking a risk associated with that, as a matter of fact you can’t just justify that you just broke the rule so my line is you better darn be sure you know your audience

These shared traditions and communication practices create the shared meanings that build the symbolic culture and dynamic of each shift and greatly influence the way they handle their emergency scenes as “A shift” tend to be formal an professional on the scene, “B shift” have a strictly professional attitude contrasting with the goofiness they have on truck and in the house. “C shift” are more relaxed and fun when performing their job out on scene. Through my observation, I noticed that tasks and rituals at their essence are consistent across all three shifts creating the whole organizational culture of the fire station. It was the discourse and communication patterns that gave each shift its unique nature.

Gender Roles. One of the elements that influences the social structure at the firehouse is the presence of different genders. In general, the fire service is a male dominant work environment that has been known for its masculinity and women have only recently made their way into the organization. This had the power to change many things about the fire department in general and the fire station in specific. Firefighters say that the environment was hostile and not inclusive when this transition first happened, but nowadays, things are getting better for women as Lieutenant Owen said when asked about the perception of women in the fire service, “not very good 30 years ago. Very well today, I think.” Lieutenant Olivia elaborated,

When I got hired, I was one of the first groups of the new bureau so I was 18 working with these guys who were getting ready to retire and didn't agree with women in the fire service, they had kids my age and I had to learn how to read those guys and I had to learn how to communicate with them because I was working with them for 24 hours at a time

Women presence in the fire service had the power of changing many material and symbolic aspects about that work environment for both genders. That change was not easy to be absorbed immediately by males who had the environment of a frat house and "want to come to work and be just with the dudes."

The range of change started from the layout of the firehouse. Dorm rooms used to be an open space with bunker beds but not anymore. The fire department provided separate rooms for each firefighter to meet the privacy requirements of women in the firehouse as Lieutenant Owen explained, which represented a major change in the dynamic and the need for different set of rules in the firehouse.

Another aspect that has changed since women joined the force is the standards of the physical agility test. Firefighters explained that those tests are there for a reason and they are only the minimum requirement of what actually needs to be done on the fire ground. Peter gave his opinion on an article about another fire department that was trying to be more diverse and inclusive,

They lowered the standards of the physical agility test so that more females could pass the test and I don't think that's ok because yeah you're gonna get more female firefighters but the standards are there for a reason because the job is demanding, when we go into a fire you have to be able to pull your weight and if you lower the standards then we're hiring people that aren't capable of doing this job, the physical portion of it and either if they can, they'll get hurt themselves or they can hurt their crew or if their crew is in danger, they might not be able to help them out

This shows some of the concerns that male firefighters have with the presence of females in the workforce as it has an impact on their safety not only physically but also emotionally as female presence in the firehouse changed the social dynamic. This was not easy for firefighters who are used to a certain way of living and communicating. Chief Lana

said that this made the work environment kind of intimidating for male firefighters as women blurred the social rules and men were not always able to determine how to behave in their presence. However, most male firefighters indicated that although the presence of women in the firehouse changes the dynamic of the fraternity, it's been good to hold them accountable for what they do and say in addition to bringing a different perspective into the firehouse "that's the argument for diversity, right!" Chief Walter justified.

Additionally, gender role influences the way women behave in the firehouse, as they tend to adjust their behavior and assimilate to the masculine environment. Chief Lana said, "I didn't put makeup on because that somehow threatened their masculinity." And Lieutenant Olivia added,

You have to be a little bit more like the group that you're in, not that I'm gonna be masculine but I'm not going to play up my femininity, I mean when I go out with my girlfriends, I would get totally done up but I don't do that around here, I have to play down that aspect of who I am just to try to fit in a little bit more

This means that even with female presence in the firehouse, the work environment is still masculine in nature and women have to subscribe to the unwritten norms of the group. Firefighters said that Olivia fits in just fine especially with her Tomboy personality, as she described, and her ability to fit in with the guys by toning down her femininity. This makes the guys more comfortable around her as she initiates some of their traditions. For instance, when they tried to get me to respond to the shunned person on the card game with a fart sound. When I refused, Lieutenant Owen said, "Surprisingly, who you think came up with the fart sound response idea?" Tom responded, "It was a woman, your honor!"

Gender roles also influence the way men and women are perceived differently when performing the same role. Almost all firefighters agreed that it is harder for women to be in a leadership position because of the social stereotypical judgments. Lieutenant Olivia being aware of that said,

I think also I have to manage in a different way being a female managing men. Things just come across differently you know. A man can come and say “we’re doing this at one” and a woman can come and say “we’re doing this at one” and it can kind of rub people the wrong way. I think it’s just.. it’s human nature you know so I have to be a little bit more eloquent with how I say things and how I deliver the message of us getting things done.

Interestingly, throughout the interview, Lieutenant Olivia kept giving excuses to the behavior of unwelcoming men by saying “it’s human nature”, “they weren’t used to interacting with stranger women” and “because there are still not many of us.” This apologetic language only came up during the interview when talking about previous experiences. However, I could not observe any of this language or behavior during the period of data collection.

The presence of both genders influences the culture and dynamics of the firehouse, yet it brings a positive change of having a more inclusive, diverse work environment that could function with regard to all genders’ needs and requirements in and outside the house. It also allows all firefighters to feel included, safe and respected in order to perform their job effectively. All of this explains that women presence in the fire department might symbolize diversity and inclusiveness but that does not change the fact that the nature of the workforce is still masculine in general.

Unpredictability as Adaptive Leadership. In the firehouse, unpredictability is a central element of the culture that firefighters deal with on daily basis whether socially in the firehouse or professionally outside on calls. Ben explained that he appreciates this aspect of the job when asked about the things he likes most about the job,

The randomness of the day, we’re very structured on day-to-day activities and our drills and how we operate, but at any time, you can get a call and you have no idea what that call would be. That’s exciting!

This explains the nature of the work that firefighters do which is highly random and unpredictable. At the time I spend at the firehouse, this randomness showed with the nature

of calls that we responded to. I had the chance to be on a call for a guy who was stabbed, a man who overdosed, a wife who tried to commit suicide, a kid trapped in a car, a lady with a panic attack, a family that lost their dad, and so many other calls that were different in so many ways. This unpredictability is the generator of Adaptive Leadership that thrives on the complexity of daily tasks and the need for innovative solutions that come through the ability to recognize and balance the elements of order and chaos in order to come up with the best possible course of action.

Out on calls. Firefighters are able to utilize their common understanding of each other and the job to perform their job professionally and to the highest standards. Each firefighter is aware of their formal and social roles and they act on the scene accordingly. This ability to know what to do and improvise utilizing all of their shared knowledge and strengths was evident during a chaotic incident that was highly saturated with unpredictability for a man who fell down the stairs and injured his head. His girlfriend called 911 but when we arrived, she asked us to leave, as the patient didn't want firefighters to get involved. The girlfriend and the mother met the crew by the door and explained the situation. Captain Jeremy took the lead of the situation and asked about the patient, expressed his concerns, talked to dispatch and persuaded the mother to let him in for the good of her own son. He asked, "Is this your house? Do you give me permission to go inside and check on your son? He could be injured and not in his right mind to make such a decision." The mother agreed to let us in. We went to the basement where the son was. He was bleeding pretty badly. The crew went to examine him but he wouldn't let them touch him. He even got violent and attacked the crew so Luke, who is a bodybuilder, improvised and restrained him with the help of Jeremy and Bob. The patient was shouting, "stay away from me young man." Lance, the paramedic, was trying to persuade the patient to allow him to check on the injury. He used his cellphone to take a picture of the injury and showed it to the patient but the patient was still angry and paranoid.

Gradually, the basement became filled with medics and policemen and the guy went hostile trying to tell them to go and capture the criminals outside instead of being there with him. Quietly, the police took sharp objects out of the sight and when the situation escalated they handcuffed him. Lance was able to examine the man and then asked him a couple of questions to make sure that he's aware of his surroundings and situation. They then asked him to sign a Refusal of Treatment Form to release them from any responsibility and left the scene after they emphasized the importance of taking him to a hospital to his mother and girlfriend. They went out pumped up about the situation talking to the medics and the police. They discussed what happened and the so many things that could have gone wrong. They thought that they might have overreacted and Captain Jeremy asked me to not mention that part on my study because to them it was not a textbook incident. It was chaotic yet they managed to utilize their positions and specializations to adapt to the situational needs and solve the problem with minimal risks.

This situation shows the way firefighters were able to self-organize because of the utilization of their shared meanings of different cultural elements that creates the common understanding to perform as a cohesive team. They integrated their knowledge and understanding of their roles to be flexible and adaptable to the situation and deal with it to come up with a good result that saved all parties. Such ability is empowered by formal and informal leadership that give the space for flexibility and adaptability to happen.

In the house. When in the firehouse, the kind of unpredictability resulting in adaptability that firefighters are presented with is different. Crews are presented with new firefighters and travelers on regular basis. In addition, they have to deal with the presented tensions that happen because of the constant interactions that are governed by expectations.

Firefighters deal with new firefighters and travelers coming in and not being familiar with the culture or the norms of the firehouse regularly. Officers depend on more experienced firefighters to palliate those gaps and differences. Lieutenant Owen explained,

I'm very, very much at ease and comfortable when a new person walks in the door where you might not be comfortable if you got, it never happens here but some stations, you could have two or three people working that day that are brand new then you don't have that luxury of having somebody to lean on.

This shows that some unpredictability and uncertainty is easy to deal with. However, the presence of too many unpredictable factors in the firehouse puts the officer on the edge over what could happen when presented with more unpredictability on an emergency call. With the help of more experienced firefighters, that gap could be bridged to come up with a good performance on the firehouse. Most firefighters reported that it is one of their duties to welcome and help the new guy to adjust and fit in.

Another unpredictable aspect in the firehouse comes as a result of the occasional tensions that arise among firefighters from time to time. Firefighters reported that it is usually dealt with on the lowest level before taking it up the chain of command. However, sometimes it escalates and it gets tricky as Brandon explained about the fistfight he had because of the turnout incident. He said that they kept it on the lowest level amongst them as firefighters but he acted passive aggressive by coming late to work to make the other guy go on all the medical calls that usually come in the morning until they decided to let it go and move on. "Hopefully, you can never tell because we kind of just get over it", he said.

When dealing with such incidents, firefighters try to utilize their mutual understanding of the job and its expectations to save the situation. Luck explained about these tensions and misunderstandings,

It's just stupid little things and they're never a big deal, it's usually just an easy conversation, maybe a couple of jokingly jabs at the other shift and we're pretty lucky here that everybody takes care of business but I'd say a little bit of bickering about not taking care of something that should've been.

Another way to deal with these incidents is going to the informal leaders or people with certain specialties to solve these tensions before taking them to the next level. This is suggested by people with status and enacted by firefighters. Chief James said,

I can think of an issue at a station where I suggested that they want to go to the informal leaders to get them to buy into a possible resolution of their problem. That was more important to them to buy into and sell it to other firefighters than it was if it were coming through the company officers because I think we have that collective force.

This example shows the importance of collectivity to upper management and firefighters in solving tensions and unpredictable problems utilizing the different knowledge and expertise as suggested by many firefighters. This way, firefighters can employ unpredictability to generate Adaptive Leadership on different levels to address different situations.

Discussion

The fire station is a complex organization in nature that deals with constant changes and challenges that require a high level of flexibility and adaptability. From afar, the organization appears to be stable with its paramilitary structure that ensures the ongoing flow of top-down information and orders that aim to guarantee successful and consistent day-to-day operations. However, taking a close look shows that the organization as a whole is a collective of smaller units of individuals with their own unique cultures. These cultures are formed by the continuous interactions and communications among organizational members to make sense of the existing organizational elements. This constant interaction allows the formation of the collective identity and the generation of change and adaptability. Marion (2008) explained that change and adaptability happen as a result of “interinfluence relationships, interdependent behavior, and the emergence of subsets of agents acting interdependently with one another.” (p. 5). Ishak (n.d.) suggested that the challenge for these organizations is embedded in the need for appropriate balance between structure and routine

with adaptability and flexibility to improvise when needed. Thus, this discussion aims to investigate Complexity Leadership Theory and the way it is enacted on multilayers to address the need for adaptive environment. Furthermore, this case study aims to understand the way firefighters create their collective identity through the management of the different elements of their organizational culture. It also aims to navigate the tension between the collective identity, specialization and formal power when organizing for the unpredictability.

The findings suggest that despite the formal structure of the fire department, firefighters on the low level deal with and negotiate a set of interactive organizational elements that form their unique symbolic culture. These elements are a combination of organizational structure, social structure and episodic unpredictability. These three elements range from order to chaos respectively. Therefore, firefighters are in constant interaction to make sense of these dynamic elements in order to manage them in the space of complexity that utilizes order to adapt to chaos and unpredictability without leaning towards either. This constant interaction creates a complex dynamic among the elements of the organizational culture that is managed communicatively on many levels. The first level focuses on the more traditional sense of leadership and is negotiated by individuals with formal and social powers moving the culture towards the right conditions for collaboration, flexibility and adaptation. This level is the representation of Administrative and Enabling Leadership. On the other hand, the second level adds to the theory by explaining the role that collective identity plays in the enactment of Adaptive Leadership and the way it is negotiated by firefighters to make sense of their culture and derive self-organization and formulation around specialization.

Organizational Culture

In the fire station, firefighters are in constant communication and interaction with each other and with their surroundings that allows them to create a unique culture based on their daily actions and interactions. Pacanowsky and O'Donnell-Trujillo (1983) identified

five of these communicative performances that create the organizational culture, which are politics, rituals, sociality, passion and enculturation. Through these performances, firefighters develop their unique culture and make sense of their organizational reality.

"Shared values, shared beliefs, shared meaning, shared understanding, and shared sense making are all different ways of describing culture" (Morgan, 1997, p. 138). The findings suggest that there are three main organizational elements that frame the organizational culture of the firehouse and influence its dynamic and leadership practices. These interactive elements are organizational structure, social structure, and episodic unpredictability. According to the Complexity Leadership Theory, the combination and interaction among these elements create the context in which this leadership model is best enacted (Uhl-Bien, 2007).

Organizational structure. According to Schein (1983), "an organizational culture depends for its existence on a definable organization, in the sense of a number of people interacting with each other for the purpose of accomplishing some goal in their defined environment" (p. 13). This organizational definition is drawn by the cultural element of organizational structure in the fire department. This organizational structure represents the hierarchy and environment that governs the definition of the culture and the meaning it holds in the eyes of firefighters and the eyes of the public. The findings suggest that the physical environment of the fire department includes the firehouse, the fire apparatus, the fire gear and the uniform. Each of these elements holds a symbolic meaning beyond its mere existence and governs the way firefighters behave and influence the way they are perceived by others. Van Maanen and Barley (1985) identified ecological context as one of the main domains of organizational culture analysis. O'Toole (2001) argued that "the physical environment, however, may hold significant messages for organizational members in relation to what they need to know about the culture, structure and roles and routines of the organization." This

comes in alignment with the findings of this study that highlights the agency of the physical environment and its importance to the culture of the fire station and the way they learn to enact their roles to perform their daily task efficiently.

In the fire department, this environment is the product of and governed by the formal hierarchy that consists of individuals with assigned ranks and a set of responsibilities accordingly. Based on the findings, this formal hierarchy serves four main functions: providing the structure of the organization, creating and enforcing rules and regulations, setting the tone of the organization, and developing a competent workforce that is in alignment with the organizational needs and expectations. In the fire department, having this disproportionate power that the formal hierarchy grants to some individuals over others is vital to solving three main problems that arise in teamwork. These problems are making collective decisions, motivating members and coordinating individual behaviors (Anderson & Brown, 2010).

Administrative Leadership. The formal hierarchy is part of the interactive elements that creates the context of Complexity Leadership and it is enacted through the roles of Administrative leadership that is responsible for coordinating the organizational structure and its goals, rules and regulations. The findings suggest that firefighters are aware of the paramilitary nature of their work environment and they acknowledge the need for the top-down management to bring the organization into existence in the first place and guide its way by creating the boundaries and setting the rules and expectations. Most of the literature focuses on improving this centralized power by examining the roles and practices of effective leaders (Milby, 2013; Lowe & Barnes, 2002), the utilization of different leadership styles, the impact of leadership style on team performance and behavior (López, Alonso, Morales' & León, 2015; Muller, Maclean & Biggs, 2009; Bartolo & Furlonger, 2000; Beaton, Johnson,

Infield, Ollis & Bond, 2001), and the impact of the organization's context on centralized leadership practices (Heldal & Antonsen, 2014).

Supporting this, firefighters believe that the role of setting the formal tone of the organization is granted to the centralized and hierarchical power as well. Muller et al. (2009) explained that although the process of changing organizational culture is difficult, the implementation of good leadership practices that improve the Administrative Leadership helps in softening the roughness of the organizational culture. The findings suggest that this Administrative Leadership influences the fire department through establishing a culture that revolves around an organizational vision and mission that are governed by organizational values, rules and regulations. Yet, it allows the evolution of the proper adaptive conditions through fostering adaptive pressures and tensions, a degree of freedom or interaction, interdependency, conflicting constraints, heterogeneity, and catalysts (Uhl-Bien & Arena, 2013).

Moreover, the hierarchy coordinates the fire-training program that exposes candidates to the formal organizational rules and expectations. It also filters the types of individuals that are able to successfully carry on the performance of organizational mission and adjust to the organizational culture. This training process is governed by the Administrative Leadership because it carries a lot of critical value to the daily operations that cannot rely completely on the ability to adapt and adjust without the formal, structured knowledge. Ishak (n.d.) suggested that team members need to be trained to learn to incorporate both structure and improvisation when dealing with the unpredictability of their job. Hence the need for formal structure before expecting crewmembers to deal with tensions and uncertainty effectively.

Social Structure. The findings indicate that the social structure evolves over the time firefighters spend together as a crew in the firehouse. It is established with the shared understanding of the job and its requirement, which develops shared rituals and social

activities that strengthen the emotional bonds amongst them. Through these emotional bonds, firefighters develop an understanding of each other's strengths and weaknesses that leads to the evolvement of informal leaders.

Firefighters create their own social structure in the firehouse through developing daily rituals. The findings propose that firefighters perform some of the formal tasks informally and "create ... what could be called a paradigmatic human events" (as cited by Pacanowsky & O'Donnell-Trujillo, 1983, p. 137). These rituals include coming to work early, the morning table, working out, cooking, playing cards, taking naps, watching TV shows, and giving back to the team. Firefighters subscribe to these rituals knowing that it is at the core of what develops trust amongst them and makes them fit into the organizational culture. These rituals serve as an emotional binding amongst firefighters (Baumeister & Leary, 1995) and it is vital for newcomers to assimilate to these social norms in order to fit in (Myers, 2005).

In the fire department, shared activities, experiences and understanding of the job create the solid ground that relationships are built on. This encourages further emotional bonds that firefighters invest in through organizing around shared interests and activities. They also further their relationships through joint activities outside the firehouse that involves their families.

Constant interactions that are represented through developed rituals and personal relationships give firefighters a deeper understanding of each other's personalities that allow them to accomplish two main things. The first is building their own crews based on the personality that they find in alignment with their culture and ways of performing tasks and activities. The second is assigning informal leaders through the understanding of strengths and specializations. The findings suggest that the social structure grants power to certain firefighters who "display their personal strength by demonstrating another's dependence on

them” (Pacanowsky & O’Donnell-Trujillo, 1983, p. 142). The findings indicate that this display of personal strength occurs in the form of the evolvement of informal leaders due to three main qualities, which are competence at the job, seniority based on years of experience, and the possession of a unique knowledge and skillset. Each of these qualities awards its holder an informal power that allows him to act on it when needed. Pescosolido (2001) conducted a study explaining that group efficacy is greatly influenced by their informal leaders.

Unpredictability. Firefighters deal with uncertainty and unpredictability on a regular basis. However, managing these situations socially and professionally is vital to the effectiveness of their performances as they deal with high stake situations. On the social level, firefighters have to negotiate their way with the often introduction of new members, the need to deal with different gender roles, and the negotiations around tensions and conflicts. Myers (2005) explained that firefighters put newcomers into testing until they earn the trust of the group and move into the inclusionary boundaries by proving their good qualities and assimilating to the culture. This tension of navigating the place of newcomers put a lot of pressure on the dynamic of the firehouse as the findings suggest. Tension in the firehouse does not only arise because of new firefighters. Firefighters deal with conflicts amongst them every now and then because of not meeting the requirements of the job and the expectations of each other. These kinds of unpredictability require immediate remediation to make sure not to affect their performance on the fire ground and emergency scenes.

When it comes to gender roles and its representation of diversity and inclusiveness, the findings suggest women firefighters brought change to the structure and dynamic of the fire department. However, the nature of the department remained masculine in its essence and the way they go about their daily communication and interactions. Although male firefighters reported some reservation to the entrance of women due to the physical requirements of the

job, they explained that it brought positive aspects as well like new perspective and held them more accountable to their language and actions. Women, on the other hand, negotiated their entrance by toning down their femininity to fit in and reduce the uncertainty around them. This uncertainty is reduced by achieving two kinds of homogeneity, which are similarities in social backgrounds and similarities in professional expertise (Kanter, 2008). This came across in the findings when firefighters reported their perception of Lieutenant Olivia who managed to earn their trusts in both respects. However, there is some sort of tension that is in constant negotiation when it comes to dealing with the presence of gender roles.

Professionally, firefighters are presented with chaotic and unpredictable situations on daily basis. The importance of dealing with these situations comes from the fact that they involve life and death situations and the error margin is very limited. Firefighters respond to highly chaotic and unanticipated emergency calls that require them to have the ability to improvise and adjust according to the need of each situation (Ishak, n.d.).

Managing Unpredictability

According to Complexity Leadership, unpredictability is managed through Enabling Leadership that create the right conditions for emergence of creative and adaptive solutions, and Adaptive leadership that “occurs in emergent, informal adaptive dynamics throughout the organization (Uhl-Bien, 2007, p. 300). This study focuses on the role of emergent collective identity in generating self-organization and formulation around specialization. The findings suggest that the collective identity of firefighters evolves as the result of the constant interaction amongst organizational elements and the communication patterns that firefighters utilize to make sense of them separately and collectively.

The findings indicate that in order to reduce the uncertainty of unpredictable situations, firefighters deal with them on two main levels. On the macro level, Enabling leadership empowers the formal leaders who empower the informal leaders to manage the

three organizational elements in the area between strict order and mere chaos. They guide the culture through the organizational structure to deal with the element of uncertainty through the development of a social structure that holds the area in between. This area produces the level of complexity that is flexible and adaptive enough to make sense of order and chaos and respond accordingly.

Enabling leadership. Enabling leadership plays a major role in empowering middle management, which Company Officers suggested that it has a trickle-down effect for them to empower their teams as well to create the right conditions for creativity and adaptability. According to Complexity Leadership, Enabling Leadership aims to “directly foster and maneuver the conditions (e.g., context) that catalyze adaptive leadership and allow for emergence” (Uhl-Bien et.al, 2007, p. 309). This form of leadership overlaps with the role of Administrative Leadership that provides the organizational structure and it is enacted in the fire department on all levels of the hierarchy. Fire Chiefs enables Company Officers to set the tone of their stations and different crews through fostering interactions and communication conditions among all members and elements of organizational culture. This is partially done by enabling officers and crews to evolve through self-selected work groups that allow for effective and productive communication behaviors (Uhl-Bien et al., 2007). These conditions foster interaction, interdependence and tension. Fostering interaction happens through the open communication among firefighters and with upper management. The findings suggest that firefighters believe in the importance of open communication and mutual understanding for organizational effectiveness. Moreover, middle management, Battalion Chiefs and Company officers, reported their roles as the conduit and crossroads between companies (crews) and upper management. Interdependence, on the other hand, is a result of interconnected relationships among firefighters that are established through shared culture and identity. When comes to fostering tension, middle management are expected to deal with

presented tensions such the unpredictability of the job and the presence of different gender roles. Furthermore, they are expected to disrupt the balance of the culture whenever it happens by inserting tensions such as fire drills, discussions, and circulation of employees. This allows for the presentation of new ideas and potential scenarios and prepares crews for the better enactment of Adaptive Leadership around possible future tensions. When Enabling Leadership doesn't play its role effectively, it results in rigidity in the system and chaos in relationships and performance. This creates a culture that is not able to handle uncertainty and is far from adaptability. Heldal and Antonsen (2014) explained that this kind of rigid management could lead to manipulation of rules' interpretation to match changing needs of organizations.

On the micro level, firefighters employ their collective identity that is built on the cognitive definition of the job, active relationships, and emotional investment (Melucci, 1989) to make sense of their unpredictable realities. This "collective identity is an interactive and shared definition produced by several individuals and concerned with the orientations of actions and the field of opportunities and constraints in which the action takes place." (Melucci, 1989, p. 44) This collective identity helps firefighters navigate complexity and unpredictability that they deal with on regular basis. Participant firefighters demonstrated their collective identity through a shared cognitive definition of their roles as firefighters and as community members within the fire station. They demonstrated an understanding of the importance of teamwork results over individual outcomes, the importance of creating a supportive community where members communicate with each other in positive and negative situations and the importance of helping each other as members to enforce an effective team dynamics (Seijtz & Gandz, 2009). Although participants take pride in their job and identify with the expectations that held by society (Lee & Olshafski, 2002), they have a realistic perception and understanding of it. This realistic perception and identification with the job

contrast what Tracy and Scott (2006) suggested in their study. This common understanding of the job and its different roles creates an underlying harmony when performing daily tasks in the fire station or when going out on calls.

The second part of the collective identity of firefighters is built on active relationships through daily interactions and activities. These relationships are enhanced by everyday communications such as sharing personal stories and experiences, humor, teasing and sarcasm which are employed sometimes to lighten things up (Sliter & Yuan, 2013) or as a mechanism that help firefighters make sense of difficult and emotional situations (Tracy, Myers & Scott, 2006). In addition, categorization shows the pride that firefighters take in their profession and it might show some prejudice against the other professions or groups. This comparison at some level serves as identity assertion and self-evaluation (Festinger, 1954). Firefighters also enforce the relationships and camaraderie amongst them through enjoying daily rituals as a group that signifies mutual trust and dependency. They also work on putting in some extra efforts as individuals for the purpose of the betterment of the community at the fire station and its dynamics. The participants reported that the daily activities they share such as cleaning, cooking, and going out on calls and performing them as a crew in addition to their act of communication and sharing personal stories, common experiences, jokes and humor and in some occasions their upsetting feelings create strong bonds among them and enhance their relationships.

The third way firefighters enforce their collective identity is through emotional investment. Firefighters indicated that working as a crew and going through the same training, having shared understanding of the job, shared interests and activities, and doing joint activities outside of the firehouse with and without their families form strong bonds and underlying trust and respect among them. It helps them deal with the undesirable aspects of the job as it helps firefighters identify with some formal and informal leaders over others.

Firefighters negotiate their sense making of their collective identity through episodic and improvisational communicative performances depending on the context that allows the creation of shared understanding of the interactive organizational elements of their culture. Pacanowsky and O'Donnell-Trujillo (1983) recognized interactional, contextual, episodic and improvisational as the main features of the organizational communicative performances. These communicative performances help firefighters to make sense of their messy culture by allowing them to realize their reality and deal with it as the findings indicate. These patterns include gossip, categorization and the development of unique discourse. It also includes highlighting the ideal concepts associated with their profession "to frame their work in preferred, privileged terms" (Tracy & Scott, 2006, p. 6). However, the findings suggest that this frame does not blind firefighters to the less glamorous aspects of their job such as the occasional conflicts in the firehouse, dealing with non-emergency calls, and the occasional tensions caused by dealing with the unique requirements of the job that they mentioned in more than one occasion.

To cope with these difficult aspects of their social and professional realities, Firefighters utilized a set of discursive patterns. These patterns include dark humor, detachment, sarcasm, complaining, teasing, and sharing personal narrative. Sliter et al. (2014) found that humor acts as a buffer from burnout and PTSD symptoms among firefighters. Storytelling, on the other hand, could serve the same purpose while reaffirming a particular emotion management technique that is automatically adopted by newcomers (Scott & Myers, 2005). Storytelling also serves the organizational culture as a communicative performance of expressing passion (Pacanowsky & O'Donnell-Trujillo, 1983). Firefighters circulated stories to highlight the heroic aspects of their job that makes them feel passionate about. Some of these stories served to spread organizational ideology, reputation of colleagues, and personal experiences. All of which increase the understanding amongst

firefighters and shape their collective identity and their sense making of it. Categorization and distinguishing self from other individuals and organizations is another discursive act that firefighters utilize to identify themselves and express their passion towards their profession. This communicative act is particularly important as “it adds much-needed specificity to leadership as the management of meaning because much sense making is acted out conversationally through category work” (Fairhurst, 2007, p. 72). In addition, firefighters develop an internal language that is representative of their crew’s identity on their daily rituals and collective practices as crews. These languages highlight the aspects of the collective identity of each group like the one used by B shift that embodies a fraternal identification.

In addition, these patterns allow firefighters to organize around their informal leaders to palliate the randomness of a certain chaotic incident. Firefighters highlight the strengths of each other and are able to self-organize through formulation around specializations depending on the situation. Melucci (2013) explained that “collective identity implies a constructivist view of collective action” (p. 43) and “the actors produce the collective action because they are able to define themselves and their relationship with the environment” (p. 43), including other organizational members.

Adaptive Leadership. Through managing chaos and unpredictability socially by utilizing the collective identity and formally by employing Enabling leadership, the right conditions are created for what Complexity Leadership Theory refers to as Adaptive leadership. Adaptive Leadership “is a collaborative change movement that emerges nonlinearly from interactive exchanges, or, more specifically, from the “spaces between” agents” (Uhl-Bien et al. 2007, p. 306). This Adaptive Leadership is not performed by individuals in management positions. Rather it is enacted collectively resulting in being the main source of change in an organization (Uhl-Bien, 2007). Firefighters with all of their

differences and heterogeneities in education, gender, age, and years of experience, interact and communicate creating the culture that allows for the exchange of knowledge that results in adaptive outcomes. Adaptive Leadership allows firefighters to deal with unpredictability and tensions inside the firehouse such as dealing with the presence of different gender roles. In addition, it allows them to evolve and reorganize themselves to deal with the unpredictable aspects of the job they encounter on daily basis. The intentional or unintentional presence of these kinds of tensions and unpredictability enables firefighters to make the most of each situation through formulation and self-organization. When it comes to formulation, the findings suggest that firefighter follow the lead of a formal and informal leader when presented with unpredictable situation depending on the situation such as a hectic fire call. Firefighters indicated that it takes only one firefighter that has the calming effect to settle the nerves of others and allow an effective performance of the job. On the other hand, self-organization happens when firefighters are aware of what to do and evolve according to the needs of a given situation. For example, in dealing with gender difference, firefighters are aware of what is appropriate and what is not in the presence of the other gender and behave accordingly. In addition, when out on calls, firefighters utilize their knowledge, their relationships and their mutual understanding of the problem at hand to self-organize based on the requirement of the situation, which allows them to come up with the best possible solutions.

In conclusion, applying Complexity Leadership Theory in governing the organizational culture of the fire station that firefighters are able to identify with through these multilayered leadership practices create the conditions for effective, collaborative and adaptable teams. Burkett (2107) defined collaboration as “the process governed by a set of norms and behaviors that maximize individual contribution while leveraging the collective

intelligence of everyone involved” (p. 3). In addition, the findings suggest that it provides administrative trust, job satisfaction, professionalism and adaptability.

The three levels of Complexity Leadership aim to do that by providing a complex model for leadership that is equipped to deal with the complexity of the organization and the problems of high-risk organization. Uhl-Bien et. Al. (2007) suggested, “it takes complexity to defeat complexity” (p. 301). This model allows the understanding of the way firefighters are organized within their organization to be able to come up with the needed creativity and adaptability to solve daily problems. While Administrative Leadership plays the role of formal organization and coordination, Enabling Leadership empowers firefighters to create the right conditions that facilitate effective communication and interaction among them. These right conditions give firefighters the required background and conditions to be effectively adaptive and responsive to any tension or unpredictable situations through the enactment of Adaptive Leadership. Seijtz and Gandz (2009) explained that good team leaders, highly trained members and effective organizational culture are the main qualities of highly responsive teams.

CHAPTER 5 SUMMARY AND CONCLUSIONS

Summary

This case study investigated the organizational culture of the fire department and the way firefighters negotiate their collective identity and make sense of it. It also addressed the way firefighters navigate the tension between collective identity, specialization and formal power. In addition, it investigated the multilayers of Complexity Leadership practices that are enacted communicatively and developed relationally to address the need of adaptation for complexity. The findings suggest that firefighters manage three main elements to make sense of their organizational culture, which are organizational structure, social structure and episodic unpredictability. Addressing the third element of unpredictability happens on the macro and micro levels of the organization. On the macro level, Enabling leadership is enacted by formal leaders to empower their employees to build their own culture and manage its elements to create the right balance between providing order and dealing with the unpredictability of the job. This balance puts the organization in its complex state that is equipped to deal with complex problems.

On the micro level, firefighters capitalize on their collective identity that is a result of shared cognitive definition, active relationships and emotional investments. This collective identity allows a mutual understanding of the strengths and weaknesses of each other, which in turn helps in self-organization and formulation around specialization to come up with the best possible solutions that fit the situation and mitigate potential harm.

Limitations

My study has been primarily concerned with the communicative construct of the organizational culture in the fire department and the multilayered enactment of Complexity Leadership practices that allow for collaborative work and adaptive outcome. The nature of the goal to explore such dynamic phenomena and the amount data allow for more than one

interpretation and organization that make sense to answer the same set of questions differently. In addition, the nature of this qualitative case study is descriptive and it does not provide findings that could be generalized to the wide public. It, however, provides suggestions to the way leadership and organizational culture could be enacted communicatively in complex organizations to produce adaptive outcomes collaboratively.

In addition, collecting data over a ten days period of time gave a well rounded but still limited perception of the fire station as firefighters rotated on regular basis. This presented me with new participants on every shift. On one hand, that was beneficial to the study to investigate the tension that such rotation triggers. On the other hand, it hindered a full examination of the culture of each shift with its regular crews. To mitigate this limitation, a full ethnographic study could have the chance to examine the regular cultures and have a more vivid understanding of the impact of rotation on those cultures.

Another limitation was posed because of my role as a mere observer on emergency scenes, and sometimes from a relatively long distance. Therefore, I was not able to have a complete sense of the way firefighters interacted on extremely critical incidents. A study conducted by a member of the organization could help bridge that gap of investigating the language in extreme circumstances.

Finally, based on my experience from the pilot study, I think that starting my research by conducting the interviews could have had set the tone for the participant's observation time. This became a concern as some members were skeptical of my presence at first and it took them some times to open up and behave in an unreserved manner. On the other hand, starting with the observation time helped me construct my interview questions in a more targeted manner and avoid asking questions that I had figured the answers to.

Theoretical and Practical Implications

The use of Complexity Leadership Theory allows the understanding of the multilayered leadership practices that are equipped to deal with the complex nature of modern day organizations that appear to be stable and balanced yet they deal with many dynamic variables from within. Therefore, the need for understanding such a multilayered leadership model communicatively arise in order to come up with adaptive solutions that meet the needs and requirements of different situations. This model does not ignore traditional leadership styles; it takes it a step further by recognizing the importance of enacting empowerment and enabling leadership as a practice that could be adopted by leaders of all levels within an organization formally and informally. The main responsibility of this kind of leadership is to manage the space between order and chaos by enabling the right conditions for employees to come up with their organizational culture. This culture should be governed by the organizational structure yet have the room to navigate tension and unpredictability based on collective sense making of the structure, the culture and the situations. This results in collaboration, self-organization and formulation around specialization to come up with collective decisions that are adaptive to the different needs of each situation. High-risk organizations, in particular, and other organizations whose members deal with high levels of unpredictability will benefit from an intertwined understanding of culture and leadership that both honors existing hierarchies but offers a deeper understanding of adaptability *as* leadership. This study offers a view of leadership that aligns with existing research that focuses on collaboration and organizational culture as important to effectiveness and satisfaction (Lowe and Barnes, 2002; Seijtze and Gandz, 2009). And it also suggests that management of unpredictability in high-risk organizations as well as in other complex organizations must attend to the centrality of organizational culture, especially

by focusing on collective identity as deeply intertwined with self-organized responses to unpredictability.

Future Research

I think possible areas for future research might benefit from a more targeted investigation into Enabling Leadership and the way it is enacted communicatively on all levels of the hierarchy in a fire station. It would be beneficial to the literature to understand the way this kind of leadership is used to manage the randomness of daily tasks and the tensions that arise from extreme working conditions to come up with a work environment that is adaptive to unpredictability and change.

Another area of future study could investigate a more diverse firehouse in terms of gender. It could include the way female firefighters negotiate their identity to fit into the masculine environment. It could also address the way male firefighters negotiate their masculine identity when performing some of the tasks that are typically assigned to females such as cooking and expressing emotion.

As mentioned above, an ethnographic study conducted by an organizational member could take this study to the next level by being able to examine the nuances of the organizational culture beyond the technical and stereotypical judgment of an outsider.

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